WHO IS YOUR CONSULTANT PHARMACIST?

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WHO IS YOUR CONSULTANT PHARMACIST?

MEDICATION MANAGEMENT

Formulary Management
Medication Storage
Regulatory Issues
Policies
Drug Cost Control
Quality Assurance

IDENTIFYING A CONSULTANT PHARMACIST WHO WILL OPTIMIZE MEDICATION MANAGEMENT

Finding a Pharmacist
Interviewing candidates
How to maximize services
UNDERSTANDING DRUG DIVERSION AND TOOLS TO IDENTIFY AND MINIMIZE DIVERSION

Narcotic Control
Non-Narcotic Control
Drug Audits
What to do When Diversion is Found

WHERE DO WE START?

3 GOALS

• Enhanced Patient Safety!

• Maintain Regulatory Compliance!

• Reduce Cost!
## DRUG FORMULARY

- All drugs/medications which are approved for use at the facility are approved by the Governing Body at least annually, or more often as necessary.

## APPROVAL IS BASED ON CRITERIA INCLUDING, BUT NOT LIMITED TO:

- indications for use
- effectiveness
- risk
- cost
- patient population
- current formulary

## TO ADD A DRUG TO THE FORMULARY, THE CONSULTANT PHARMACIST MUST BE CONTACTED AND THE REQUEST MUST BE SUBMITTED TO THE MEDICAL DIRECTOR FOR INITIAL APPROVAL.

All new drug requests must be approved by the Governing Body.
ADDITIONAL THOUGHTS TO CONSIDER:

- Patients Own Medications
- Non-formulary Medication process
- Off-label Indications
  - Off-label use
  - Off-label documented use
- Off-label undocumented use
- Samples

STORAGE AND SECURITY

- Internals vs. Externals
- Refrigerated Meds
- Succinycholine and Zemuron
- Emergency Medications/ MH Cart
- Hazardous drugs
- Expiration dates
- Dispensing

MH CART DRUG CONTENTS

DRUGS
Dantrolene sodium for injection – 36 vials (each able to be diluted at the time of use with 60 ml sterile water)
Sterile water for injection USP (without a bacteriostatic agent) to reconstitute dantrolene – 1,000 ml x 2
Sodium bicarbonate (8.4%) – 50 ml x 5
Furosemide 40 mg/amp x 4 ampules
Dextrose 50% – 50 ml vials x 2
Calcium chloride (10%) 10 ml vial x 2
Regular insulin 100 units/ml x 1 (refrigerated)
Lidocaine for injection, 100 mg/5 ml or 100 mg/10 ml in preloaded syringes (3)
Amiodarone is also acceptable. ACLS protocols, as prescribed by the AHA, would be followed when treating all cardiac dearrangements caused by MH.

GENERAL EQUIPMENT
Syringes (60 ml x 5) to dilute dantrolene
Mini-spikes® IV additive pins x 2 and Multi-Ad fluid transfer sets x 2 (to reconstitute dantrolene). Call MHAUS for ordering info.
PROPER DISPOSAL OF PRESCRIPTION DRUGS  
OFFICE OF NATIONAL DRUG CONTROL POLICY  
FEBRUARY 2007

Federal Guidelines:
Take unused, unneeded, or expired prescription drugs out of their original containers and throw them in the trash.
Mixing prescription drugs with an undesirable substance, such as used coffee grounds or kitty litter, and putting them in impermeable, non-descript containers such as empty, used or sealable bags, will further ensure the drugs cannot be diverted.
Flush prescription drugs down the toilet only if the label or accompanying patient information specifically instructs doing so (see box).

Take advantage of community pharmaceutical take-back programs that allow the public to bring unused drugs to a central location for proper disposal. Some communities have pharmaceutical take-back programs or community solid-waste programs that allow the public to bring unused drugs to a central location for proper disposal. Where these exist, they are a good way to dispose of unused pharmaceuticals.
The FDA advises that the following drugs be flushed down the toilet instead of thrown in the trash:

- Actiq (fentanyl citrate)
- Daytrana Transdermal Patch (methylphenidate)
- Duragesic Transdermal System (fentanyl)
- OxyContin Tablets (oxycodone)
- Avinza Capsules (morphine sulfate)
- Baraclude Tablets (entecavir)
- Reyataz Capsules (atazanavir sulfate)
- Tequin Tablets (gatifloxacin)
- Zerit for Oral Solution (stavudine)
- Meperidine HCl Tablets
- Percocet (Oxycodone and Acetaminophen)
- Xyrem (Sodium Oxybate)
- Fentora (fentanyl buccal tablet)

Note: Patients should always refer to printed material accompanying their medication for specific instructions.

www.WhiteHouseDrugPolicy.gov

Regulatory Issues

DRUG PREPARATION
USP CHAPTER 797
COMPOUNDED DRUGS

USP Chapter 797
The United States Pharmacopeia (USP) is the official public standards-setting authority for all prescription and over-the-counter medicines, dietary supplements, and other healthcare products manufactured and sold in the United States. USP sets standards for the quality of these products and works with healthcare providers to help them reach the standards. USP's standards are also recognized and used in more than 130 countries. These standards have been helping to ensure good pharmaceutical care for people throughout the world for more than 185 years.
CAUTION WITH COMPOUNDING

Outbreak of Serratia marcescens Infections following Injection of Betamethasone Compounded at a Community Pharmacy

Clinical Infectious Diseases 2006; 43:831–7
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TYPICAL REQUIRED POLICIES

- Drug References
- Formulary
- Pts own meds
- Medication storage
- Refrigerated meds
- Syringe labeling
- Concentrated Electrolytes
- Medication Administration
- Investigational Drugs
- Self Administration
- Stop orders
- IV admixtures
- Dangerous drugs
- Combination locks
- Adverse Reactions
- Med errors
- Samples
- Controlled substances
- Outdated Meds
- High Alert Meds
- Sound alike look alike
- Verbal orders
- Emergency meds
- Purchasing
- Drug Defect
- Recall

ABC INVENTORY CONTROL

- 20% of your drugs account for 80% of your costs.
- Focus on the top 5 drugs.
- Maintain inventory levels at the lowest levels possible.
- Look for cost savings opportunities through contract pricing and generic alternatives
BRAND VS. GENERIC

- Zofran $18 and up for a 4mg IV dose
- Ondansetron less than $5.00 per dose
- Brand name Diprivan is sulfite free as is propofol from Bedford labs and Hospira. Pricing can vary dramatically.

HOMEWORK ASSIGNMENT:
zofran usage over the last 12 months and calculate future savings over the next year anticipating the reduced price.

CONTRACT MANAGEMENT

- Compare Drug Wholesalers
- Diprivan (propofol) contracts can vary dramatically.
- Review invoice prices vs. contract price
- Back-up vendors are recommended
NATIONAL PATIENT SAFETY GOALS

- Non-approved Abbreviations
- Sound alike look alike drugs
- High alert medications
- Medication reconciliation

ANTIBIOTIC PROPHYLAXIS

- Selection
- Timing
- Duration

American Academy of Orthopaedic Surgeons, May, 2008
“Prophylactic Antibiotics in Orthopaedic Surgery”

PONV

- Patient Selection
- Prophylaxis regimen
- Treatment regimen

The Institute for Safe Medication Practices recently warned that administering promethazine parenterally may cause more severe tissue injuries than previously recognized. Promethazine, which is commonly sold under the trade name Phenergan, has many uses including as an antihistamine, a sedative and an antiemetic.
DRUG ALLERGY VS. SENSITIVITY

• Ask questions and document

CEPHALOSPORINS CAN BE PRESCRIBED SAFELY FOR PENICILLIN-ALLERGIC PATIENTS

Practice recommendations

■ The widely quoted cross-allergy risk of 10% between penicillin and cephalosporins is a myth (A).
■ Cephalothin, cephalaxin, cefadroxil, and cefazolin confer an increased risk of allergic reaction among patients with penicillin allergy (B).
■ Cefpodoxim, cefuroxime, cefpodoxime, cefazidime, and ceftriaxone do not increase risk of an allergic reaction

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ADVERSE DRUG REACTIONS

DEFINITION

An ADR will be defined as a “detrimental response in association to a given FDA approved or investigational medication that is undesired, unintended, or unexpected on doses recognized in accepted medical practice.”

This adverse drug reaction may result in one or a combination of the following:

• Hospital Admission
• Change in drug therapy
• Discontinuation of the drug
• Prolongation of the stay at the Center
ADVERSE DRUG REACTIONS

- Vancomycin
- TASS
- Bupivacaine Toxicity
- Methemoglobinemia
- Aseptic Technique

TREATMENT PROTOCOL FOR TREATMENT OF BUPIVACAINE TOXICITY

1. Cardiac arrest: Antidote can be given in case of anaphylaxis or anaphylactoid reaction
2. IV administration of 0.9% sodium chloride (normal saline) at a slow rate
3. Inhalation of 100% oxygen
4. Intravenous administration of aminophylline (phosphodiesterase inhibitor)
5. Preparations such as epinephrine or isoproterenol may be beneficial
6. Hyperalimentation and antibiotic therapy

UNSAFE INJECTION

- Use of a needleless system can reduce the risk of infection
- Always use aseptic technique when preparing and administering medications
- Avoid sharing needles or syringes
- Proper disposal of used needles and syringes
MEDICATION ERRORS

DEFINITION

• A medication error shall be defined as any deviation from the following:
  • correct medication;
  • correct route;
  • correct time;
  • correct dose;
  • correct patient; or
  • failure to administer medication.

Near Miss, High Alert Meds, Sound a like- Look a like

CHART DOCUMENTATION

• Complete Medication order

PAIN MANAGEMENT GUIDELINES

On December 22, 2003, the Department adopted rules governing pain management procedures for all health care facilities licensed by the Department. These rules were published in the New Jersey Register on January 20, 2004 (see: 36 N.J.R. 426).

All licensed healthcare facilities are required to comply with the new rules at N.J.A.C. 8:43E-6. For your convenience, a copy of the new rules is enclosed herein.

If you have any questions, you may contact the Long Term Care Licensing Program at (609) 633-8942 or the Long Term Care Assessment and Survey Program at (609) 633-8981.

Enclosure
IDENTIFYING A CONSULTANT PHARMACIST WHO WILL OPTIMIZE MEDICATION MANAGEMENT

Finding a Pharmacist
Interviewing candidates
How to maximize services

A PHARMACIST IS A PHARMACIST IS A PHARMACIST!

• Retail
• Hospital
• Pharm D
• Industry
• Clinical

• Drug store
• Nursing home
• Staff pharmacist
• Management
• Consultant

Maybe we should drop the 'leaps tall buildings in a single bound' requirement...
QUESTIONS TO ASK

- Clinical background
- Training
- References
- Availability
- Fees
- Scope of services

EXPECTATIONS

- Quarterly Inspections
- Staff In-services
- Newsletters
- Narcotic Audits
- Availability
- Formulary reviews
- Being part of the team. Good fit!
- Chart reviews
EXAMPLES

- Malignant Hyperthermia Drill
- Practice mixing Dantrium
- Pharmacy question of the month
- Newsletter
- Narcotic audits
- ISMP
- JCAHO
- Committee activity
- Pharmacy binder
- Web site

TEAMWORK. USE EVERYONE’S EXPERTISE.

UNDERSTANDING DRUG DIVERSION AND TOOLS TO IDENTIFY AND MINIMIZE DIVERSION

Narcotic Control
Drug Audits
What to do When Diversion is Found
THE SCOPE OF THE PROBLEM

THE IMPACT ON PATIENT SAFETY

KEY ELEMENTS TO PREVENTING DIVERSION

- Employee education: know the signs
- Monitoring policy and procedures
- Drug testing policy
- Reporting process
FDA - DEA

- Label
- CII, CIII, CIV
- www.deadiversion.usdoj
BIENNIAL COUNT
DEA 222
DEA FORM 41
DEA FORM 106

DEA REGULATIONS DO NOT SPECIFICALLY ADDRESS CONTROLLED SUBSTANCES USED BY ANESTHESIA. THE FOLLOWING ARE IMPORTANT ELEMENTS IN THE ANESTHESIA ACCOUNTABILITY PROCESS:

• Maintain complete and accurate records for every controlled substance activity (including wastage).
• Develop effective controls and procedures to guard against theft and diversion.
• All controlled substances should be secured at all times.
REFRACTOMETER

NON-NARCOTIC DIVERSION
- High Dollar: i.e. Diprivan, Zofran

BE ALERT!!

LEGAL AND ETHICAL DUTY TO REPORT
LARGE DIVERSION MEANS SELLING

BETTER EMPLOYEES AT BETTER FACILITIES

IN SUMMARY
- SAFETY
- REGULATORY COMPLIANCE
- REDUCED COST