



# Calvert Health System Provider Orientation



# Module 4:

Clinical Preparedness

**Section 3 -**Patient Care

#### **Section 3 - Patient Care**

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## Pharmacy

 The Pharmacy Department is the sole medication fulfillment entity within the hospital, providing services in all inpatient and outpatient settings for all patient ages and for all hospital departments

#### **Ages Supported**

- Neonatal
- Pediatric
- Adolescent
- Adult
- Geriatric

#### **Departments Served**

- ED, UCC
- MedSurg floors 2 and 3
- ICU
- Surgery
- L&D, FBC
- TCU
- Behavioral Health

## Pharmacy Services for Medical Staff

- Procures, labels, stores all medications used at CHMC
- Provides guidance for dose modification based on age, weight
- Provides clinical pharmacokinetic dosing service to the medical staff
- Provides therapeutic drug monitoring programs
- Monitors prescribing and use of all non-formulary drugs, with particular emphasis on antibiotics
  - Reviews chart and laboratory analysis
  - Contacts physician
  - Offers therapeutic alternatives
- Provides drug information to physicians, nurses and other health professionals
- Monitors Food and Drug, Drug and Drug Interaction.
- Ensures medication safety



#### Pharmacy Services (con't)

- Supplies floor stock and patient medications in Automated Dispensing Machine (ADM)
- Ensure all IV fluids are made under Aseptic 797 regulations
- Distributes all pharmacy items to appropriate departments
- Manages unit dose distribution program
- Monitors TPN therapy
- Providing consulting services for patients receiving home IV therapy
- Providing pharmacy department representation for various hospital committees
- Providing drug information service to professionals practicing in Calvert Health System.
  - Written and verbal communication pertaining to specific information requested

## Additional Clinical Pharmacy Functions

- Provides Clinical Pharmacy consultation service to all hospitalists
- Oversees outpatient anticoagulation clinic
- Supplies floor stock and patient medications in automated dispensing Machine (ADM) duplicate on previous slide
- Performs Medication Utilization Evaluation (MUE) to assure appropriate and effective use of drugs.
- Oversees Antimicrobial Stewardship Program

## **Working With the Pharmacy**

- Pharmacy Hours: 24/7
  - Clinical staff generally available 8-5 with some evening hours
  - Clinical Pharmacist on call 24 hours a day
- Pharmacy extension: 8305.
  - Director of Pharmacy; Kara Harrer ext. 4678
  - Clinical Coordinator; Merideth Moody ext. 8309
  - Clinical Pharmacists extensions: 4624, 4886, 2776

#### **Formulary**

- Hospital formulary determined by our Medication Usage and Safety Team (MUST)
  - All new requests must be made through this committee
    - Will be evaluated for efficacy, safety, and pharmacoeconomic impact
- Patients on non-formulary agents may use their own medications
  - Order must be written
  - Medication will be verified in pharmacy and labeled with a CMH label for safe administration by nursing
- MUST has approved therapeutic interchanges for medications in the same class
  - List is available on the Intranet page under pharmacy resources
  - Substitutions will be made automatically in pharmacy unless the provider includes "DO NOT SUBSTITUTE" on the order

## **Additional Pharmacy Duties**

- Order review: All orders for inpatients must be prospectively reviewed by pharmacy prior to administration by nursing with the exception of emergency treatments
  - This occurs electronically as orders are entered
  - Calls will be made to providers for clarification as needed
- Renal dose adjustments can be made automatically in pharmacy as needed
- Pharmacy will review patients at high risk for falls and make recommendations as needed

## **Clinical Pharmacy Services**

- Oncology/Infusion staffed by pharmacist M-F 8-4
- Outpatient Anticoagulation clinic Pharmacist managed patients seen M-F 8-4, requires referral
- Discharge Pharmacy Pharmacist participates in discharge clinic, homes visits and other transition of care activities
- CHMC pharmacy is responsible for consultant work on TCU. They will review patients within 7 days of admission and every 30 days to provide clinical recommendations as needed.

#### **Inpatient Consults**

- FOR ALL CONSULTS: pharmacy has 24 hours to see patient, therefore initial orders must be placed
- Communication about the goals for each patient is helpful in successful management
- For observation patients, generally a consult is not needed unless the patient is expected to become an inpatient

## **Types of Consult**

- Warfarin management Pharmacist will order labs and adjust doses and clinically appropriate
  - Provider must manage bridge therapy as needed
- Vancomycin/Aminoglycoside pharmacokinetic dosing pharmacist will order labs and doses as clinically appropriate
- TPN management Pharmacist will work with clinical dietician to order and manage parenteral nutrition
  - Orders for consult must be entered by 11am for TPN to start that day
- Pain management Pharmacy will help manage acute pain while patient is admitted, including PCAs, oral analgesics, and palliative and comfort care orders
  - Initial orders must be written by provider

#### **Bedside Rounding**

- Bedside rounding is performed by hospitalists for the purpose of:
  - Assessing and reassessing patient condition
    - Efficacy of treatment plan
    - Identifying need for additional testing or treatment
    - Assessing effectiveness of medication
    - Assessing patient's viability for discharge
- On-duty hospitalists round on patients regularly, but at a minimum at start of shift and at end of shift
  - Appropriate hand off protocols are to be adhered to during shift change

#### **ICU Admissions**

- CHMC ICU has 6 staffed beds plus additional ecare monitored beds
  - E-Care monitoring is available 24/7
- Decision to accept patients into ICU is at the discretion of the Director of ICU, Intensivist and admitting hospitalist
  - Availability of bed
  - Ability of staff to provide appropriate care
- Stabilized patients will be moved to MedSurg bed as soon as medically advisable

#### **STAT Team**

- Purpose: to prevent Code Blue situations outside the ICU
  - Recognize potentially life threatening conditions early
  - Uses a proactive systems approach to obtain clinical data, communicate with attending physician and provide appropriate treatment
- Team consists of:
  - Hospitalist
  - Respiratory therapist
  - Clinical coordinator
  - Primary care nurse

#### **STAT Situations**

- May include but NOT be limited to:
  - Acute respiratory distress
  - Chest pain
  - Altered mental status
  - Stroke symptoms
  - Seizure activity
  - Symptomatic change in blood pressure or heart rate
  - Sepsis indicators

#### **STAT Process**

- Patient's primary care nurse (PCN) recognizes a potential problem
- PCN calls x8222 to request STAT Team mobilization
- PCN calls attending physician and gives summary of situation
  - Additional treatment orders may be taken then
- PCN provides STAT team with situation overview, any extenuating circumstances and medication list
- STAT Team performs assessment, initiates appropriate CHMC STAT Team Protocol/Standing Order Sets (in absence of Hospitalist)
- Hospitalist STAT Team responder orders treatment/intervention
- Entire STAT Team documents events in 'STAT Team Record'

#### **STAT Team Protocols**

- STAT Team protocols are documented for:
  - Acute Respiratory Distress
  - Emergency Pre-arrest Protocol For Acute Allergic Reaction
  - Emergency Pre-arrest Protocol, Symptomatic Drop In PB, Adult
  - Emergency Pre-arrest, Loss Of Consciousness
  - Emergency Pre-arrest, Hematemesis Adult
  - Emergency Pre-arrest Protocol For Seizures
  - Emergency Pre-arrest Symptomatic Bradycardia, Adult
  - Emergency Pre-arrest, Symptomatic Tachycardia Adult
  - Stroke
  - Sepsis



#### **Biohazardous Waste**

- Protective Equipment is to be worn by all personnel, including LIPs, when in the presence of any biohazardous materials and waste
  - Regulated medical waste
  - Anatomical waste
  - Blood and other biomedical fluids
  - Infectious agents
  - Microbiological waste
  - Sharps
- Dispose Biohazardous waste into appropriate vehicles using appropriate handling procedures
- Waste will be disposed of by properly trained and qualified personnel

## Personal Protective Equipment

- Standard Personal Protective Equipment (PPE) includes:
  - Gloves, gowns, goggles, face masks, face guards
    - Part of Standard Precautions procedures
    - Contact Precautions
    - Droplet Precautions
- Specialized PPE includes:
  - Impervious gowns, face mask/glasses, sterile gloves, N-95 Respirator Masks, Powered Air-Purifying Respirator (PAPR)
    - Used during invasive surgical procedures
    - Airborne Precautions, i.e. Suspected TB

## Airborne Agents Require Special Care

- Airborne infections pose significant risk to staff and other patients and are managed under Respiratory Protection Program
- Special respiratory masks
  - N-95 Respirator masks must be personally fitted and refitted annually
    - See Employee Health for fit testing
  - PAPR for those who are unable to fit test on N-95

## Wear the Right Mask for the Situation

Hazard	Job Task	Respiratory Protection
<ul> <li>Diseases requiring airborne precautions:</li> <li>TB Suspected or confirmed</li> <li>MERS-CoV, Ebola, SARS</li> <li>Novel pathogenic/pandemic influenza; Measles; herpes zoster</li> </ul>	Routine patient care and support operations, including aerosolgenerating procedures	N95 Mask (minimum requirement) PAPR Airborne Infection Isolation (AII) patient rooms
Diseases requiring droplet precautions:  • Seasonal Influenza, meningitis, pertussis	Routine patient care and support Operations, including aerosolgenerating procedures	Surgical Mask
Bronchoscopy, Deep Suctioning, Intubation and Extubation	Aerosol-generating procedures	Surgical Mask (minimum requirement) N95 Mask
Novel Pathogens/pandemic influenza	Routine patient care and support operations, including aerosolgenerating procedures	Follow current public health guidance.

