



## Pharmacy Department Policy DoseEdge System

**A. EFFECTIVE DATE :**

August 17, 2021

**B. PURPOSE :**

To define the procedures for the:

- Maintenance of the DoseEdge formulary by system administrators
- Preparation and verification of sterile compounded sterile products
- Downtime process

**C. POLICY :**

All pharmacy staff will adhere to the standards and procedures outlined below as it relates to the preparation and documentation of sterile compounded products within the application of the DoseEdge system.

**D. SCOPE :**

This policy applies to all sterile compounded medications distributed from the Department of Pharmacy at John Dempsey Hospital

**E. MATERIAL(S) NEEDED :**

- DoseEdge PrepStation Windows Application
- Tangent Touchscreen
- Honeywell Scanner
- DoseEdge Camera
- Epson Printer
- Labels
- Supplies/Drugs

**F. PROCEDURE :**

**Preparation Workflow/Set-Up**

1. The technician monitors the Dose Queue continuously in coordination with the pharmacist covering Central Pharmacy
2. Dose types are processed in the following order:
  - a. STAT and First Doses
  - b. Patient-specific doses by administration time
  - c. Stock doses

- d. If a STAT dose arrives in the queue while non-stat doses are being prepared, finish the current dose, and then proceed to prepare the STAT dose
3. Non-hazardous intravenous compounding of pharmaceuticals will be prepared in a horizontal laminar flow hood
4. Hazardous intravenous compounding of pharmaceuticals will be prepared in a vertical biological safety cabinet
5. All ingredients required to prepare the doses listed on the DoseEdge® 'Manage Dose Queue' shall be gathered and provided to the personnel working in the cleanroom
  - a. Some products may be classified as multi-dose:
    - i. Multi-dose products will generate a Work-in Progress (WIP) label
    - ii. Affix the WIP label to the multi-dose product over the barcode
    - iii. Utilize and scan "WIP" label once affixed for subsequent preparation scanning prompts
6. The technician shall follow the onscreen instructions to prepare the dose, unless otherwise instructed by the pharmacist
  - a. During image capture steps, the technician will make sure that the medication name, concentration, and manufacturer lot number/expiration date is clearly visible
  - b. If active ingredient volume is more than 10% of total volume, DoseEdge® will prompt the person compounding to remove volume from the diluent bag prior to injecting medication
  - c. Inline verification by a pharmacist for hazardous doses shall be required before any drug is injected into the carrier bag

#### **Pharmacist Verification**

1. Sterile compounding of intravenous hazardous products and products for neonates will require an inline verification
  - a. The pharmacist shall verify that the correct drug volume has been drawn up
2. The pharmacist will go into the DoseEdge® Management Site to perform verification.
  - a. To complete verification, the pharmacist must select a Disposition reason
    - i. The pharmacist shall never select the "Accept and Sort" option
    - ii. If the pharmacist selects any of the Reject or Rework options, the pharmacist shall give a reason and comment describing the rationale for not selecting the Accept option

#### **Sorting/Distribution**

1. Central Technician will monitor the status board continuously for newly released verified doses by the pharmacist
2. At the PrepStation or Sort Station, the technician shall scan the dose for distribution and a verification label is printed
3. The technician sorting places this verification label over the "Not Checked" portion of the preparation label immediately
4. After the dose is sorted, it is ready for distribution

#### **Unknown Doses**

1. Pharmacy technicians and the pharmacist covering the Central Pharmacy shall monitor the Unknown Queue continuously
2. Pharmacy IT must be notified immediately if a request appears in the Unknown Queue
3. If a product is needed for the care of patients, the technician, with approval from the pharmacist, will bypass preparation through the DoseEdge system
  - a. A paper log of the preparation will be maintained, and include the following:

- i. A copy of the label affixed to the compounded sterile product
- ii. Name of drug and/or diluent used with the lot number and expiration date
- iii. The initials and/or name of the technician who prepared the product
- iv. The initials and/or name of the pharmacist who verified the product

### **Formulary Maintenance**

Only users who have been trained in the maintenance of the DoseEdge® FormularyPlus are permitted to add or edit formulary records. Formulary revisions require a secondary verification.

### **Maintenance and Upgrade**

1. All upgrades and changes to DoseEdge® must be scheduled through the Pharmacy IT
  - a. Upon receipt of notification of the release of a software upgrade, the Pharmacy IT Administrative Coordinator shall review the changes associated with the release and prepare and issue a notification to the staff of the new release with a summary of changes and an announced implementation schedule
    - i. That schedule shall include a schedule of individual training as may be required by the release
2. All upgrades and changes to DoseEdge® must be tested and certified to be acceptable by Pharmacy IT
  - a. Testing shall first be performed on a test server before being loaded onto the production server
3. All users shall be trained to new or changed features in any software upgrade or system change
  - a. Upon receipt of notification of the release of a software upgrade, Pharmacy IT shall review the changes associated with the release against current practices and determine what training, if any, is required
4. Policy and procedures must be reviewed, changed as necessary, and approved whenever there is a software upgrade or system change
  - a. Upon receipt of notification of the release of a software upgrade, Pharmacy IT shall review the changes associated with the release against current policies and procedures and determine what changes, if any, are required

### **Downtime**

1. In the event of an electrical, hardware, and/or software failure, the Pharmacy Department should call the HelpDesk and/or the IT Pharmacy On-Call person to determine how long the network/electrical/internet will be down
  - a. In the event of an electrical or UConn Health network failure, the Pharmacy Department will notify the HelpDesk at extension 4400 to determine the length of the outage
  - b. For DoseEdge® system failures, the Pharmacy Department will need to notify the vendor at 1-866-448-2529
    - i. The Baxter Technician will then be sent or remote access to the appropriate location to troubleshoot the DoseEdge® system
  - c. In the event of a Foot Pedal failure/outage pharmacy staff will need to contact the vendor at 1-866-448-2529 to report this issue and use the touchscreen function on the Prep Station until this issue is resolved
  - d. In the event of a Prep Station, Scanner, and/or Camera failure and/or outage pharmacy staff may utilize the Sort Station equipment located outside the IV Room
2. For outages lasting LESS THAN 30 minutes, if an emergent and/or STAT order is received, labels for IV orders will be handwritten using the Downtime Labels also stored in the JDH Downtime Manual located in central pharmacy

- a. The pharmacy staff shall keep a manual log of all orders prepared during the downtime
- 3. For outages lasting or expected to last GREATER THAN 30 minutes and if the:
  - a. Epic EMR is up, the Pharmacy Department will re-route the Epic EMR IV labels to the Zebra printer in central pharmacy to prepare IV doses
  - b. Epic EMR is down, labels for IV orders will be handwritten using the Downtime Labels also stored in the JDH Downtime Manual located in central pharmacy
    - i. The pharmacy staff shall keep a manual log of all orders prepared during the downtime
- 4. In the event the UConn Health network is down for an extended amount of time, the Pharmacy Department will need to follow appropriate Pharmacy Downtime Procedures.

**G. ATTACHMENTS :**

None

**H. REFERENCES :**

None

**I. SEARCH WORDS :**

DoseEdge, Compounded sterile products, Pharmacy IV preparation

**J. ENFORCEMENT:**

Violations of this policy or associated procedures may result in appropriate disciplinary measures in accordance with University By-Laws, General Rules of Conduct for All University Employees, applicable collective bargaining agreements, the University of Connecticut Student Code, other applicable University Policies, or as outlined in any procedures document related to this policy.

**K. STAKEHOLDER APPROVALS :**

On File

**L. COMMITTEE APPROVALS :**

None

**M. FINAL APPROVAL :**

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| <p>1. <u>Andrew Agwunobi, MD (Signed)</u><br/>         Andrew Agwunobi, MD, MBA<br/> <b>UConn Health Chief Executive Officer</b></p>   | <p><u>09/25/2021</u><br/>         Date</p> |
| <p>2. <u>Anne D. Horbatuck, (Signed)</u><br/>         Anne D. Horbatuck, RN, BSN, MBA<br/> <b>Clinical Policy Committee Co-Chair</b></p>   | <p><u>09/25/2021</u><br/>         Date</p> |
| <p>3. <u>Scott Allen, MD (Signed)</u><br/>         Scott Allen, MD<br/> <b>Clinical Policy Committee Co-Chair</b></p>  | <p><u>09/21/2021</u><br/>         Date</p> |
| <p>4. <u>Caryl Ryan (Signed)</u><br/>         Caryl Ryan, MS, BSN, RN<br/> <b>Interim Chief Operating Officer, JDH</b><br/> <b>VP Quality and Patient Services &amp; Chief Nursing Officer</b></p> | <p><u>09/15/2021</u><br/>         Date</p> |

**N. REVISION HISTORY :**

Date Issued:10/29/13

Date Revised: 10/29/13, 11/15/17, 8/31/20, 8/17/21

Date Reviewed: 10/29/13, 11/14/15, 11/15/17, 8/31/20