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**Purpose:** To describe the use of the Pyxis system for use by Nursing and Pharmacy as an inventory and information system for the control, distribution and documentation of medications removed from the Pyxis system.

**Procedure: Note:** The Pyxis system is a drug distribution system separate from the EPIC documentation system. Medications that are ordered and put into the EPIC system will immediately transfer into the Pyxis system prior to verification. It is vital that medications be put into the EPIC system correctly and verified.

## **1 Removal of Medications**

- 1.1 Medications are removed from the Med Station by selecting the “Remove Medication” option from the main menu, using the patient profile. The user must remove only those medications that were ordered for the patient. Removal of medications not ordered for the patient will result in an override and inventory discrepancies will require investigation.

\*\*\* If the patient is not in PYXIS, add patient using last name, first name, and location (i.e. *Smith, John, ERI*).

\*\*\* Under **NO** circumstances will medications be removed using another patient’s profile and without a physician’s order.

- 1.2 Note that the user should stand clear of the medication drawers/doors when they open to prevent a failure of the drawer/door.
- 1.3 Prior to removal of designated medications and controlled substances the user will be asked to verify the inventory count. If the count on the Med Station screen is not the same as the count found in the pocket, the nurse will correct the count and proceed with the removal of the medication. Correcting the inventory count for any medication will create a discrepancy, which will be researched and resolved (refer below to: Discrepancy reporting and documentation).
- 1.4 If an event would arise when the medications were not available for access from the Pyxis system then the nurse should obtain the medication by one of two methods.
  - 1.4.1 If the medication need is not immediate the House Supervisor should access the medication from the pharmacy per established policies and procedures.



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1.4.2 Medications needed for emergency situations are kept on the Crash Carts. PYXIS Global Search may assist the House Supervisor in locating a needed medication from a different PYXIS cabinet.

1.5 **Note:** Medications that have been premixed or made for a specific patient by the Pharmacy (i.e. IV antibiotics, or IV solutions), will be placed in the refrigerator or on the Med Room counter. These medications **are not** signed out from the Pyxis system. The medication will appear in Pyxis as gray. If selected, a ‘med not loaded’ message will appear. Multi –dose/use products or patient specific medications not stocked in Pyxis are to be kept in individual patient drawers in the designated location. These medications are obtained either from Pyxis at the time of the initial order or from the pharmacy.

1.6 **Override - Note:** An override function is available for use in times when medications are needed immediately, and the medication order has not been processed into the computer. The nurse removing the medications must have Override privileges to perform this procedure.

1.6.1 Press **Override** on the *Remove Meds* screen and select the medication to be removed from the override list.

## **2 Returning of Medications to the Med Station**

2.1 Non-controlled and controlled medications removed from the Med Station that reside in their original tamper-evident packaging are not to be returned to the Pyxis station. These meds are to be returned to the designated locked return bin in each area. The printed receipt from the Pyxis machine is to be attached to the med that is returned and put in the return bin in that unit (ER, Med/Surg) with the medication being returned. Pharmacy will collect the returned medications and printed receipts per pharmacy policy and procedures. Any medication that does not reside in the original tamper-evident packaging must be documented as wasted.

2.2 Medications that require refrigeration are to be placed in a sealed plastic bag (bags located in the refrigerator of each unit), and then placed with the printed return slip in the return bin inside the Unit’s refrigerator.

## **3 Documentation of Waste**

3.1 Medications require the documentation of waste, if applicable. The waste slip is placed in the return bin for pharmacy.

3.2 Documentation of waste is required when:

3.2.1 A partial dose of controlled medication is given. In this case, the wastage amount must also be documented on the patients’ e-MAR.

3.2.2 A patient refuses the medication whose tamper-evident seal is broken.

3.3 A witness is required to sign-in to the station to document waste of a controlled medication. “Witness-only” privileges have been granted to designated persons who do not have medication removal privileges to aid in waste documentation or other situations requiring a witness.

3.4 A nurse may document medication waste in two different manners.

3.4.1 During the removal of medications called the “Remove Med” process. The Med Station will prompt the nurse if they plan to administer a full dose (yes or no) at which point the nurse will press the NO button and enter the dose to be given. The Med Station will then ask for a witness to sign-in after which the amount of the medication waste is documented.

3.4.2 A nurse may return to the Med Station after removal and administration of the medication. The nurse selects Waste from the procedures menu, selects the patient and medication, then the station will ask for a witness to sign-in after which the amount of medication waste is documented.



#### **4 Refilling of Medications**

- 4.1 Medication usage and needs will be checked each scheduled pharmacy day and will be refilled into the Med Station by the pharmacy technician using the Pyxis “pick-delivery report” as a guide per the pharmacy policies and procedures.

#### **5 Discrepancy reporting and documentation**

- 5.1 Whenever a pocket opens on a med designated for count, the Med Station will ask the user to verify the inventory count. If the Med Station count is found to be different than the users count, then the user must correct the inventory count before the medication is removed, refilled, etc. Anytime that a count is corrected a discrepancy is flagged.
- 5.2 Resolution of any controlled medication discrepancy would occur *immediately* upon discovery by the discovering nurse in conjunction with the House Supervisor. The nurse with “prior access” to the medication in question would be contacted immediately. The selection of the activity report for medication dose by user/time may be used to assist in tracking.
- 5.3 A discrepancy report is to be run at end of each shift by the House Supervisor. The discrepancy report lists:
  - 5.3.1 Medications for which a discrepancy has been flagged.
  - 5.3.2 The patient for whom the medication was removed.
  - 5.3.3 The user who discovered the discrepancy with the time and date.
  - 5.3.4 The user who had prior access to the medication with the time and date.
- 5.4 A discrepancy will remain in the Med Station and display on the discrepancy report for a period of 7 days until it is documented in the Med Station. Once documented, discrepancy will remain on the discrepancy report for 24 hours.
- 5.5 Any un-resolvable medication discrepancy will be documented in the Med Station as “Follow-up required-unresolved”.
- 5.6 Any un-resolvable medication discrepancy at the end of a shift will require the filing of a Help Chain Alert by the user who discovered the discrepancy and the user who had “prior access” to the medication in question. The Director of Nursing or designee will be notified for any unresolved discrepancy that is related to a controlled medication prior to the staff on shift leaving. The error report will be given to the Director of Nursing or designee with a copy to the pharmacy for filing with discrepancy system documentation. Hospital wide policies related to substance abuse will be utilized when there is indication for their execution.
- 5.7 The pharmacy will monitor via the system’s “Open Discrepancy” report that all controlled medication discrepancies are being documented in a timely manner. The Director of Nursing or designee will be notified by the pharmacist when a controlled medication discrepancy has gone undocumented.
- 5.8 The Director of Nursing or designee will notify the Chief Clinical Officer if a controlled medication discrepancy is unresolved in a timely manner.
- 5.9 It is the responsibility of the pharmacist to notify the Chief Clinical Officer and the DEA in the event of a discrepancy that has not been resolved within 7 days.

#### **6 Inventory of Medications**

- 6.1 All Med Stations will be inventoried two (2) times per week on Mondays and Thursdays.
- 6.2 The pharmacy personnel may inventory the medications at their discretion at any time.



## **7 Medication Outdating**

- 7.1 Each Med Station will be audited monthly by the pharmacy staff, and medications due to expire in the next month will be replaced.

## **8 Patient Census Changes**

- 8.1 Through the electronic interface with the facility or pharmacy system, patient admission and discharge information will be passed automatically to the Pyxis system.
- 8.2 Procedures in the ER for Unknown Trauma and Chest Pain Patients will be used per protocols for admission of these patients.
- 8.3 In the case of EPIC downtime, a charge nurse may admit a temporary patient to the Pyxis MedStation. When EPIC is active, the patient account number must be updated in Pyxis.

## **9 Medication Inventory Management**

- 9.1 Medications in station inventory and par levels will be adjusted by the pharmacy department on an as needed basis.

## **10 Support and training for RNs, LPNs, and respiratory therapists in the use of the Pyxis system**

- 10.1 New employees (RNs, LPNs and respiratory therapists) will have training to the Pyxis system and EPIC order entry included in their general orientation. Competency assessments for Pyxis will be completed prior to access being activated in Pyxis.
- 10.2 A Pyxis procedure manual will be readily available to all staff. The manual will contain:
  - 10.2.1 The Pyxis Procedures
  - 10.2.2 A description of the Discrepancy Resolution/ Documentation function.
  - 10.2.3 Miscellaneous forms that will serve as originals for copying.

## **11 Problem-Solving and Emergency Access**

- 11.1 In the event of a system malfunction the following steps will be taken:
  - 11.1.1 The quick reference guide will be consulted in an attempt to resolve the problem.
  - 11.1.2 The House Supervisor will be utilized in the problem resolution.
  - 11.1.3 Pyxis customer support will be telephoned at 1-800-727-6102. This number is located on each Pyxis machine and by the phone in each unit (ER, ICU, Med/Surg, Surgery). The model, location and account number will need to be provided.
  - 11.1.4 Pyxis technical support will work toward problem resolution with the nurse at the station and/or electronically.
  - 11.1.5 If necessary, Pyxis customer support will dispatch technical support to assist in the resolution.
  - 11.1.6 The Director of Nursing or designee and the Pharmacist will be made aware of any unresolved system malfunction in a timely manner.
  - 11.1.7 During prolonged station downtime, medications may be accessed at functioning Pyxis stations or via the pharmacy per after hours access policies if pharmacy closed.



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## **12 Ad hoc Reports**

The Director of Nursing or designee, CCO or the Risk Manager may request various activity reports from the pharmacist. These reports can include all nursing removals returns, waste, etc. while using the system within the capabilities of the system. Data is available at the station for 7 days and at the console for 31 days.

Pyxis MedStation 4000 system, Console User Guide, May 2011, CareFusion