1.0 PURPOSE

1.1 To describe the dispensing mechanism of medications for hospitalized patients, in order to provide safe medication administration to reduce the incidence of medication errors and to improve the overall medication safety control.

2.0 DEFINITION

2.1 Unit-Dose System: A single unit package containing one dosage form, i.e. one tab, one cap, one 2 ml quantity of a liquid, etc. The package should be identifiable by at least the drug name and strength. In-patient medications are prepared, packaged, labeled and dispensed as a unit-dose that reflects the dose of drug ordered for a patient for 24 hours and delivered in a predetermined time.

2.2 STAT Medications: Are those medications that should be administered immediately to the patient and should be dispensed from the pharmacy within 30 minutes.

2.3 Automatic Stop Order: Is a mechanism which ensures the patient’s medications are being reviewed by the physician. Failure to renew a medication prior to the predetermined stop date will cause the medication to be automatically discontinued.

2.4 Generic Equivalence: Is a generic drug that has the same active ingredients as its brand-name counterpart.

3.0 RESPONSIBILITY

3.1 Nurse:

3.1.1 Hand-deliver the STAT medications which do not exist as floor stock medication & receive all new orders as well as the prepared medication trolleys.

3.1.2 To follow the in-patient policy and procedure for processing medication orders, drug storage, dispensing and administration, to achieve optimal patient care and positive treatment outcomes.

3.2 Pharmacist:

3.2.1 Processes medication orders.
3.2.2 Uses Patient Drug Profile for all patients.
3.2.3 Labels all medications prepared for dispensing with all necessary information in a standardized format.
3.2.4 Issues the STAT medication which does not exist as floor stock immediately to the nurse

4.0 CROSS REFERENCES POLICY

4.1 N/A.

5.0 POLICY

5.1 The inpatient pharmacy will process medication orders using a unified and defined procedure and utilize the unit-dose system for drug distribution, to ensure safe and accurate dispensing of medications to all admitted patients.

5.2 The in-patient pharmacist will monitor patients’ profiles to evaluate the drug regimen, including detection of potential interactions, unintended dosage changes, drug duplications and overlapping therapies, and to prevent the administration of drugs that are contraindicated to the patient.

5.3 Medications prepared but not intended for immediate administration are labeled

6.0 PROCEDURE

6.1 Medication Orders:

6.1.1 A copy of the Physician’s Order Sheet (yellow or blue slip) is the only authorized form used for filling inpatient drug orders, which is sent to the pharmacy and should include the Patient name and file number, Bed & ward number, date, time, drug name, strength, dosage form, route of administration, frequency, and doctor’s signature and stamp as well as patient allergy for newly admitted patients.

6.1.2 Any new physician order, reorder or changing order should be made in writing and will be entered in the patient's profile. All physician orders are valid for 7 days unless a shorter period of time is specified and should be ready for dispensing (Routine order) within 2 hours from the time received. Now orders will be dispensed immediately.

6.1.3 The pharmacist dispensing the new order should apply all dispensing procedure to the prescription using the unit-dose system (e.g. Verify the order, make sure all required information is in the prescription, verify the order with medications in the patient profile, record the order in the patient profile in the system, generate a label, put the ordered medication in the plastic bag, and put the pharmacist name or initials on the prescription).

6.1.4 Double checking by another pharmacist during preparation and before dispensing of all high-alert medications. The pharmacist will dispense the medication to the nurse and she will check and sign that she
received the medication on the same prescription or the medication trolley receiving sheet.

6.2 STAT Orders:

6.2.1 Are put in a separate cassette labeled “STAT ORDERS” away from regular prescriptions

6.2.2 Some of the STAT medications are present as floor stock in each ward for easy accessibility. They are used for life threatening situations.

6.2.3 Those which are not present as floor stock should be hand-delivered by the nurse and the pharmacist will issue the STAT medication immediately to the nurse within 30 minutes from the time received.

6.2.4 The nurse should not delay sending the STAT Orders to the pharmacy and should not leave the pharmacy area before taking the STAT order with her.

6.3 Monitoring the Patient Drug Profile:

6.3.1 Monitoring drug profile is procedures for maintaining patient medication profiles.

6.3.2 It also enables individual medication doses to be scheduled, prepared, distributed and administered in a timely manner.

6.3.3 The patient medication profile must be reviewed by the pharmacist before dispensing the medication ordered for the patient. This patient profile should reflect the following information:

6.3.3.1 Patient name, file number, bed number, ward name, admission date, diagnosis, MRP, age, sex, weight, height, and allergies.

6.3.3.2 All active and inactive medication orders during current admission (drug name, strength, dose, frequency, route, special instructions for use, starting date, stoppage date, number of doses dispensed, and initials of pharmacist verifying the transcription of the medication order into the medication profile).

6.3.3.3 Any STAT, single dose, PRN, controlled or narcotic drugs, and floor stock medications used.

6.3.3.4 IV fluids and TPN.

6.4 Dispensing of Medications:

6.4.1 The Inpatient Pharmacies are quiet, adequately illuminated with low-noise working environment that does not permit interruption of work.

6.4.2 Since there is no unit-dose pre-packaging system available in the hospital; doses of each drug are placed in plastic “Ziploc” bags and properly labeled. Some medications are repackaged in a unit-dose form by the manufacturer.
6.4.3 The inpatient pharmacy dispenses quantities of medications using the unit-dose system for **24 hours only**, except for bulk medications such as syrups and suspensions are dispensed by bottles due to lack of pre-packaged unit-doses (the pharmacy has guidelines for ensuring stability of medications available in multi-dose vials, oral liquids, and other multi-dose medications, e.g. eye, ear, and nose drops, creams, ointments, nebulization solutions, etc.) refer to IPP of Stability of Multi-dose Vials.

6.4.4 The nurse will bring the trolley to pharmacy by 9.00 am. The cassettes in each trolley should contain the ward name, bed number, patient name and record number.

6.4.5 The medication trolley will be filled by a pharmacist or technician according to the computer generated (dispensing list) pick-list.

6.4.6 The pharmacist will check the prepared medications for each patient after making sure that all the information is correct, and place the medications in separate plastic bags labeled with the Drug name, strength, directions for use, amount dispensed, patient file number, name, ward, bed number, expiration date, and name of preparing pharmacist or technician as well as the signature of the checking pharmacist.

6.4.7 The pharmacist will also check if the drugs prescribed and dispensed for their approved indications as evidenced by the given diagnosis.

6.4.8 Unused drugs for reason of discontinued orders or patients discharged will be returned back to pharmacy stock.

6.4.9 Once the trolley is ready the nurse will come to check the medications, make sure that the medicines are complete, everything is in order, and sign for receiving.

6.5 **Dispensing Generic or Therapeutic Equivalents:**

6.5.1 When physician prescribe drug by brand name and the medicine is not available in the pharmacy, the pharmacist will dispense the generic equivalent of the drug.

6.5.2 When physician prescribe drug which is not available in the pharmacy neither its generic equivalent, but its therapeutic equivalent is available, the following should be done:

6.5.2.1 Pharmacist firstly phones the physician to tell him about the availability of the therapeutically equivalent medication.

6.5.2.2 If the physician accepted this equivalent, he must write an order for the medication and the pharmacist will dispense it accordingly.
6.5.2.3 If the physician refused the alternative drug (therapeutically equivalent), the chief pharmacist will provide the needed medicine by direct purchase or from other MOH hospitals.

6.5.2.4 If the drug is non-formulary one, the physician will follow the procedure of adding and requesting a non-formulary drug.

6.6 Clarification:

6.6.1 Any change in an order by the pharmacist must be done with the acknowledgement of the MRP:
   6.6.1.1 A notice of Medication Clarification is completed by the pharmacist.
   6.6.1.2 The Medication Order plus the Clarification Form are sent to the unit.
   6.6.1.3 The physician reviews the order to be clarified and complete the Clarification Form.
   6.6.1.4 The Medication Order and Clarification Form is sent to the pharmacy for processing.
   6.6.1.5 The nurse shall receive the order and administer the medication.
   6.6.1.6 The pharmacist will keep all Clarifications of Medication Orders to be given to the Medication Safety Officer for processing and analysis.

6.7 Labeling of Medications:

6.7.1 Computer generated labels are printed for any dispensed medication whether oral, compounded I.V. admixtures or parenteral nutrition solutions.

6.7.2 All medications prepared but not intended for immediate administration must be labeled, and this includes all injectable medications drawn into syringes or mixed with intravenous fluids for use inside the operating rooms or procedure areas.

6.7.3 The pharmacist will make sure that label components and directions are complete and securely fastened to the plastic bag or container before dispensing medication to inpatients. The label must contain the following information:
   6.7.3.1 Patient MRN #.
   6.7.3.2 Patient location (Ward No., Bed No.).
   6.7.3.3 Patients name.
   6.7.3.4 Medication name.
   6.7.3.5 Dosage form and strength.
   6.7.3.6 Direction and duration for use.
   6.7.3.7 Expiration date.
   6.7.3.8 Pharmacist’s name or initials, date of preparation and time.
   6.7.3.9 Specific precautionary label (auxiliary) relating to the medication whenever necessary.

6.7.4 Outpatient medications must be labeled with the following:
6.7.4.1 Patient Name.
6.7.4.2 Medical record number.
6.7.4.3 Medication name.
6.7.4.4 Dosage form.
6.7.4.5 Strength.
6.7.4.6 Direction and duration for use.
6.7.4.7 Cautions in a simple language to the patient (e.g. refrigerate, shake well before use, and may cause drowsiness).

6.8 Narcotic & Controlled Drugs Replacement:
6.8.1 The nurse should replace floor stock Narcotic and Controlled Medications from the pharmacist in charge of these medications in the controlled medications room according to the provided schedule. Any items needed outside of the above mentioned schedule requires a nurse to call the pharmacist in charge before coming to the controlled medications room to pick them up.

6.8.2 If the item is floor stock and the ward stock runs out before the dispensing date, the head nurse should borrow from another ward or floor.

6.9 Discharge Medications:
6.9.1 A nursing staff or patient/relative may take the prescription directly to the in-patient pharmacy for non-controlled medications. Only a nurse may pick up controlled medications.

6.9.2 The nurse must record both her name and sign on the discharge medication prescription at the time of receiving.

6.9.3 The in-patient pharmacy will dispense medications for one month or less depending on the patient’s next appointment. If the appointment of the discharged patient is after more than one month, the refill of the prescription will be from the out-patient pharmacy.

6.10 Inspection:
6.10.1 Performing documented monthly inspection, for the inpatient pharmacy stocks, Crash-cart medications, and approved floor-stocks of each ward, which are supplied in limited quantities for certain medications as well as maintaining records in the pharmacy.

6.10.2 The monthly work-load is reported according to IPP (unit-dose and/or I.V. admixtures).

6.10.3 Monthly statistics are also reported for inpatient services.

6.11 Working Hours of In-patient Pharmacy:
6.11.1 The inpatient pharmacy is open 24 hours a day seven days a week. All evening and night prescriptions orders will be dispensed by the inpatient pharmacist on-duty. In case the inpatient pharmacy is not open in the evening or night time for any untoward reason (pharmacist did not show up due to sickness, etc.) prescriptions will be dispensed from ER Pharmacy
until further notice. The nurse supervisor will notify the Hospital Director on Duty who in turn will notify the pharmacy director or his deputy.

6.11.2 The pharmacy has a qualified on-call pharmacist available to answer questions, and one on-call staff from the pharmacy store to provide medications.

7.0 FORMS
7.1 Nursing Unit Inspection Guide.
7.2 Physician’s Order Sheet.
7.3 Computer generated (dispensing list) pick-list.
7.4 Electronic Patient Profile Page.

8.0 EQUIPMENT
8.1 Computer software.
8.2 Medication trolleys.
8.3 Computers, printers, labels

9.0 REFERENCES
9.1 CBAHI resource manual.