

<b>Department:</b>	Pharmaceutical Care Department		
<b>Document:</b>	Multidisciplinary Policy And Procedure (MPP)		
<b>Title:</b>	Medication Management		
<b>Applies To:</b>	Pharmacists, Physicians & Nurses		
<b>Preparation Date:</b>	December 15, 2024	<b>Index No:</b>	MM-MPP-001
<b>Approval Date:</b>	December 29, 2024	<b>Version :</b>	2
<b>Effective Date:</b>	January 29, 2025	<b>Replacement No.:</b>	MM-MPP-001 (1)
<b>Review Date:</b>	January 29, 2028	<b>No. of Pages:</b>	07

## 1. PURPOSE:

- 1.1 To establish a process for medications, use in the organization that complies with applicable laws and regulations and organized to meet patient needs
- 1.2 To ensure efficient and effective medication management and use throughout the organization

## 2. DEFINITONS:

- 2.1 Medication: Any prescription medications; sample medications; herbal remedies; vitamins; nutraceuticals; over-the-counter drugs; vaccines; or diagnostic and contrast agents used on or administered to persons to diagnose, to treat, or to prevent disease or other abnormal conditions; radioactive medications; respiratory therapy treatments; parenteral nutrition; blood derivatives; and intravenous solutions (plain, with electrolytes and/or drugs)
- 2.2 Medication Error: Any preventable event that may cause inappropriate medication use or jeopardize patient safety. Such events may be related to professional practice, health care products, procedures, and systems, including prescribing, order communication, product labelling, packaging and nomenclature, compounding, dispensing, distribution, administration, education, monitoring, and use.
- 2.3 Non Formulary drug: is one other than those classified as MOH formulary drugs and is not on Hospital Formulary List
- 2.4 Near Misses: Circumstances or events that the capacity to cause medication error, and include any process variation that did not affect an outcome but for which a recurrence carries a significant chance of a serious adverse outcome
- 2.5 Look-Alike and Sound- Alike (LASA) Drug: Medications with generic or proprietary names that look or sound like other medication names. Confusing medication names may lead to potentially harmful medication error.
- 2.6 High Alert Medication: Are drugs that bear a heightened risk of causing significant patient harm when they are used in error.
- 2.7 Adverse Drug Reaction (ADR): A response to a product which is noxious and unintended, and which occurs at doses normally used in man for the prophylaxis, diagnosis or therapy of a disease or for the modification of physiological function. Any significant hazards to patients, such as lack of efficacy with contraceptives, vaccines and products used in life-threatening diseases may also be included as an adverse reaction.
- 2.8 Adverse Drug Event: Any untoward medical occurrence that may present during treatment with a product but which does not necessarily have a causal relationship with this treatment.
- 2.9 Side Effect: Any unintended effect occurring at doses used in man which is related to the pharmacological properties of the product.
- 2.10 Patient's Own Medication: Medications brought into the hospital by the patient or family member which the patient currently or had taken prior to admission.

## 3. POLICY:

- 3.1 Organization and Management:

- 3.1.1 Medication use in the organization complies with applicable laws and regulations, the hospital Policies and is efficiently organized to meet patients' needs.
- 3.1.2 An appropriately licensed pharmacist supervises the pharmaceutical services.
- 3.2 Selection and Procurement
  - 3.2.1 An appropriate selection of medications for prescribing or ordering is stocked or readily available:
  - 3.2.2 There is a method for overseeing the organization's medication list and medication use.
  - 3.2.3 The organization can readily obtain medications not stocked or normally available to the organization
- 3.3 Storage
  - 3.3.1 Medications are properly and safely stored
  - 3.3.2 Organization policy supports appropriate storage of medications and applicable nutrition products
  - 3.3.3 Emergency medications are available, monitored, and safe when stored out of the pharmacy.
  - 3.3.4 The organization has a medication recall system.
- 3.4 Prescribing and Ordering
  - 3.4.1 Prescribing and ordering are guided by policies and procedures
  - 3.4.2 The organization defines the elements of a complex order or prescription and the types of orders that are acceptable for use
  - 3.4.3 The organization identifies those qualified individuals permitted to prescribe or order medications.
  - 3.4.4 Medications prescribed and administered are written in the patient's record
- 3.5 Preparing and Dispensing
  - 3.5.1 Medications are prepared and dispensed in a safe and clean environment
  - 3.5.2 Medication prescriptions or orders are reviewed for appropriateness.
  - 3.5.3 A system is used to dispense medications in the right dose to the right patient at the right time.
- 3.6 Administration
  - 3.6.1 The organization identifies those qualified individuals permitted to administer medications
  - 3.6.2 Medication administration includes a process to verify the medication is Correct based on the medication order
  - 3.6.3 Policies and Procedures govern medications brought into the organization for the patient
- 3.7 Monitoring
  - 3.7.1 Medication effects on patients are monitored
  - 3.7.2 Medication errors and near misses are reported through a process and time frame defined by the organization.
  - 3.7.3 Appropriate sources of drug information are available in the pharmacy department such as: BNF, Lexcomp Drug Information Handbook, and online sources to all healthcare professionals.
  - 3.7.4 The pharmaceutical care services are provided 24/7 for inpatients and emergency patients.

#### **4. PROCEDURE:**

- 4.1 **Organization and Management**
  - 4.1.1 Pharmaceutical services is managed and supervised by licensed pharmacist
  - 4.1.2 There is a policy and procedure within the hospital that addresses all phases of medication management
- 4.2 Selection and Procurement of Medications
  - 4.2.1 Approved drug formulary is available to all medical staffs, nursing areas/units and to all ambulatory patient care areas
  - 4.2.2 Workflow and request form for medical staffs to use when need to request for an addition or deletion of medication from hospital formulary.
  - 4.2.3 Medication selection process is guided by criteria specified on the request form.

- 4.3 Drug Shortages: (Out-of-Stock Medications)
- 4.3.1 Finance department and/or store supervisor to arrange the drug from other sources e.g. medical representatives, other hospitals, direct purchase.
  - 4.3.2 Finance department and/or store supervisor to arrange the drug from other sources e.g. medical representatives, other hospitals, direct purchase.
  - 4.3.3 Pharmacist to advice purchaser to purchase the drug from other resources.
  - 4.3.4 Pharmacy provides notification to all concerned for long term shortage.
  - 4.3.5 Pharmacist to select available formulary drugs as alternative, with its generic equivalent drug, when the prescribed drugs is out of stock then advice the prescriber on the substitution.
  - 4.3.6 Non-formulary drugs: (Non-Formulary Drug Requests)
  - 4.3.7 The request to add (or delete) Non-Formulary medications based on approved process flow and using approved form with predefined criteria.
  - 4.3.8 The requesting doctor completely fills all section or criteria stated in the form.
  - 4.3.9 Pharmacist to review and evaluates the requested non-formulary drug based on patient's need and availability of equivalent formulary drug
  - 4.3.10 Patient's Own Medications: (Patient's Own Medication)
  - 4.3.11 Educate doctors, patients and family member about hospital policy on the use medication brought from home.
  - 4.3.12 Include in the initial assessment requirement prior to admitting to the hospital as part of Screening of patient's current medication.
- 4.4 Storage of Medications: (Storage of Medications)
- 4.4.1 Receipt of medications:
  - 4.4.2 At point of receiving from MOH Medical Supply, all medications are matched with the delivery documents, which later cross matched with items order
  - 4.4.3 All medications are matched with corresponding records
  - 4.4.4 Medication storage areas are properly safeguarded. Placed in proper location -locked cabinet, locked room, locked medication trolley, medication refrigerator, and in controlled inventory areas for pharmaceutical products
  - 4.4.5 Controlled drugs stored in double locked areas or cabinets.
  - 4.4.6 A well-maintained temperature and/or humidity, adequate space, facilities, shelves for drugs
  - 4.4.7 Key person responsible for medication storage is identified in each storage location
  - 4.4.8 Safe handling and security of medications comply with policy and procedure.
  - 4.4.9 Look-Alike and Sound-Alike Medications:
    - 4.4.9.1 P&T Committee establishes and review the list of look-alike and sound-alike medications in formulary list on annual basis.
    - 4.4.9.2 Implement safety strategies to properly safeguard look-alike and sound-alike medications
    - 4.4.9.3 Physical separation
    - 4.4.9.4 Use tall man lettering
    - 4.4.9.5 Use alert sticker (light blue colour)
    - 4.4.9.6 Emergency Medications
    - 4.4.9.7 Pharmacist and/or Pharmacy Technician to check and inspect emergency trolley every month
    - 4.4.9.8 Nurses to check emergency medications on weekly basis.
    - 4.4.9.9 Nurse to request and pharmacist or pharmacy technician to replenish and deliver emergency medication within 1-hour.
    - 4.4.9.10 Properly maintained standard list of emergency medication.
  - 4.4.10 Limiting the availability
    - 4.4.10.1 Properly maintained standard list of medications stored to approve areas/units.
    - 4.4.10.2 Designates personnel to access on medication for safe handling and proper storage.
    - 4.4.10.3 Limited stocks of high risk medications to ensure safety use.
    - 4.4.10.4 Medications issued to all care delivery areas shall adhere to set standards that is based on physical, regulatory and safety constraints.

- 4.4.10.5 Main distribution mode for stocked medication is via nurse. Controlled drugs are collected by qualified nurses.
- 4.5 Ordering of Medications: (Refer to: Prescribing Medications & Authorized Prescribers).
- 4.5.1 Details of medication ordered or prescribed for patient recorded in the patient's record under medication sheet card.
- 4.5.2 Adhere to approved policy on writing medication orders.
- 4.5.3 Adhere policy on the use abbreviations and avoidance of dangerous abbreviations
- 4.5.3.1 Properly safeguard use of identified unacceptable abbreviations for security and safe prescribing and ordering.
- 4.5.3.2 Educate physicians, nurses; pharmacists and other health Professionals on policy on do not use abbreviations.
- 4.5.4 Observe to established guidelines policy on receiving verbal and telephone and countersigned by the prescriber within 24 hour
- 4.5.4.1 Telephone orders
- 4.5.4.1.1 Nurses, pharmacists and any other health professional apply 'write down, read back and confirm process.
- 4.5.4.1.2 When the doctor physically outside the hospital premise
- 4.5.4.2 Verbal orders
- 4.5.4.2.1 In emergency situation only.
- 4.5.4.2.2 Require to confirm the given order (repeat back).
- 4.6 Preparation and Dispensing of Medications: (Verification of Prescriptions, Prescription Evaluation & Monitoring, Handling OPD Prescriptions and Drug Labelling and Handling inpatient Prescriptions and Drug Profile)
- 4.6.1 Pharmacy receives medication order manually via a blue-slip physician order.
- 4.6.2 Pharmacist and trained technician to double check prepared drug prior to dispensing, for accuracy and to prevent potential error in dispensing
- 4.6.3 Availability of some medications to care units in the form of floor stocks to improve timeliness and security of dispense drug.
- 4.6.4 Provide precautionary instruction and parameters for use on medication label.
- 4.6.5 Package medication in a manner to promote a safe and efficient medication administration system.
- 4.6.6 Comply with established protocols for timely, safe delivery and receipt of medication.
- 4.6.7 Pharmacist or trained technician to review all orders for appropriateness and completeness
- 4.6.8 Supply of inpatient medications is packaged in unit dose bag and supplied on daily basis for 24-hour doses.
- 4.6.8.1 Chairs and boxes will not be used for step ladders.
- 4.6.8.2 Corridors and rooms should be entered cautiously, watching for other people and objects in the hallways
- 4.6.8.3 Hands should be kept free of oil and grease
- 4.6.8.4 Sharp tools should be put away when not in use.
- 4.6.8.5 Running will not be permitted in the pharmacy.
- 4.7 Administration of Medications (Refer to: Nursing Role in Medication Administration, and Drugs given by I.V. push)
- 4.7.1 Nurses to focus on the Eight (10) Rights of Medication Administration:
- 4.7.1.1 Right Patient: Use of two patient identifiers
- 4.7.1.2 Right Medication:
- 4.7.1.2.1 Examine the drug and label with the original order of drug
- 4.7.1.2.2 Label medication up to the time of administration
- 4.7.1.2.3 Identify contraindications prior to administration.
- 4.7.1.3 Right Dose: Nurse to check the order and the MAR before administration.
- 4.7.1.4 Right Route
- 4.7.1.4.1 Conduct risk assessment on existing and new tubing and catheters.

- 4.7.1.4.2 Properly label all tubes and catheters with special emphasis on epidural, intra-thecal and arterial access.
  - 4.7.1.4.3 Rechecks connection entries tubes and catheters from the point of origin.
  - 4.7.1.5 Right Time
    - 4.7.1.5.1 Comply with established protocols on standard times of administration and identify time parameters that go beyond a reasonable situation.
  - 4.7.1.6 Right Reason
    - 4.7.1.6.1 Nurse to check whether the medication was prescribed for the right indication
  - 4.7.1.7 Right Response
    - 4.7.1.7.1 General response for all medication e.g. allergic reaction
    - 4.7.1.7.2 4.7.1.7.2 Specific response for PRN Medications, Pain Medications and Insulin
  - 4.7.1.8 Right Documentation
  - 4.7.1.9 Right Education
  - 4.7.1.10 Right Evaluation
- 4.8 Monitoring of Medication Effects: (Refer to: Management of Adverse Drug Reactions, and Medication Errors Reporting)
- 4.8.1 Monitor medication effects on patient's symptoms or illness as well as blood count, liver function, renal function and any applicable monitoring parameters
  - 4.8.2 Monitor adverse drug reaction and document it in the patient's record.
  - 4.8.3 Use standardize format for reporting of adverse drug reaction and medication error and educate staff on the process and importance of reporting
  - 4.8.4 Encourage reporting of medication error including near misses
  - 4.8.5 Improve error detection, reporting, and use of information to improve patient's safety.
  - 4.8.6 Establish a blame free environment and non-punitive approach for responding to errors and educate staff regarding the benefits of such approach.
  - 4.8.7 Analyses root causes of medication error / near misses and recommend improvement plan to prevent errors in the future.
  - 4.8.8 Organize process to improve safe selection, storage and dispensing of high risk medications.
- 4.9 The pharmacy department provides sources of drug information to healthcare professionals involved in medication use:
- 4.9.1 Current British National Formulary
  - 4.9.2 Current Drug Information Handbook (Lexi-comp).
  - 4.9.3 The Hospital Drug Formulary.
  - 4.9.4 Online Medscape.
  - 4.9.5 Other References
- 4.10 The pharmacy department provides pharmaceutical services twenty four hours a day, seven days a week for inpatients and emergency patients.
- 4.11 There is also a pharmacist on-call whenever the inpatient pharmacy is closed, or there's a drug information inquiry
- 4.12 Oxytocic are available in operating room only for cases referred from maternity and children hospital (no L&D room in our hospital scope of service).
- 4.13 An aesthesia reversal agents are available in operating rooms and areas where moderate or deep sedation is performed.
- 4.14 Benzodiazepine and narcotics antagonists (e.g. Flumazenil and Naloxone) are available in all patient care areas where benzodiazepines and narcotics are stocked.

## **5. MATERIALS AND EQUIPMENT:**

- 5.1 Medications Error form
- 5.2 ADR form
- 5.3 Non formulary Form
- 5.4 OVR form

## **6. RESPONSIBILITIES:**

- 6.1 Pharmacy and Therapeutics Committee:
  - 6.1.1 The committee serve in an oversight capacity in all matters pertaining to the use of drugs
  - 6.1.2 Formulation of policies regarding evaluation, selection, procurement, storage, distribution, therapeutic use, safety procedures relating to drugs and drug related devices
  - 6.1.3 Establishment and Management of the hospital Drug Formulary
  - 6.1.4 The committee recommend or assist in the formulation of training and development programs designed to meets the needs of professional staff of hospital - physicians, pharmacists, nurses, other healthcare members on matter related to drugs and therapeutic use of drugs.
  - 6.1.5 To serve in an evaluative, educational and advisory capacity to the hospital medical staffs and hospital management in all matters pertaining to the use of drugs and including samples investigational drugs
  - 6.1.6 To develop, manage and constantly (at least annually) review the hospital Formulary of Drugs that meets patient's needs.
  - 6.1.7 To assist in the formulation of professional practices and policies regarding medicine management, selection and procurement, storage, prescribing and ordering, preparing and dispensing, administration and monitoring of medication effects
- 6.2 Assigned or Delegated Responsibility: There is a specific assigned or delegated responsibility according to each situation and available resources within the hospital that adheres to Saudi Arabian MOH Laws and Regulations, and the hospital policies and Procedures: Responsibility for:
  - 6.2.1 Selection of Medication -shared between doctors, pharmacists and Pharmacy & Therapeutics Committee
  - 6.2.2 Procurement of Medication - shared between pharmacies and purchasing department.
  - 6.2.3 Prescribing and/or Ordering Medications - assigned to doctors, according to their privileges and hospital policy and procedures

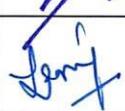
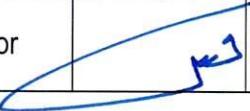
## **7. APPENDICES:**

- 7.1 N/A

## **8. REFERENCES:**

- 8.1 MOH General administration of pharmaceutical care, organization & management of medication use policy and procedures, 2014.

**9. APPROVALS:**

	Name	Title	Signature	Date
<b>Prepared by:</b>	Ph. Mohammad Al Mutairi	Pharmacy QI Facilitator		December 15, 2024
<b>Reviewed by:</b>	Ph. Mutlaq Al Dhafeeri	Pharmaceutical Care Director		December 16, 2024
<b>Reviewed by:</b>	Mr. Sabah Turayhib Al Harbi	Nursing Director		December 17, 2024
<b>Reviewed by:</b>	Dr. Tamer Mohamed Naguib	Medical Director		December 18, 2024
<b>Reviewed by:</b>	Mr. Abdulelah Ayed Al Mutairi	QM & PS Director		December 19, 2024
<b>Reviewed by:</b>	Mr. Thamer Nasser Al Anizi	Assistant for Administrative and Operating Service		December 22, 2024
<b>Approved by:</b>	Mr. Fahad Hazam Alshammari	Hospital Director		December 29, 2024