

AMRH/PHARM/P&P/006/Vers.02 Effective Date: July 2022 Review Date: July 2025

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Document Title: Policy and Procedure of Medication Ordering and Review									
	F	Approval Process							
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### **Acronyms:**

ID	Identity
CDs	Controlled Drugs
PRN	When ÷ p g e gont to ceputg {g of g f o
ОР	Out-Patient
IP	In-Patient



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#### Policy and Procedure of Medication Ordering and Review

#### 1. Introduction

Medication order review is one of the important aspects of pharmacist patient care. All health- system pharmacies have an obligation to provide a review of medication orders that ensures safe o g f k e c v k q p " w u g 0 " O g f k e c v k q p " q t f g t " aspec v u " q h " cm'edication languagement to optimize patient outcomes. It covers the review of all inpatient medication charts, ideally on a daily basis, medication reconciliation on admission ideally within 24 hours of admission for high-risk patients and during discharge process as well as outpatient prescriptions. Medication order review is a composite of multiple tasks, including verifying information, applying critical thinking skills, and making appropriate decisions. The effective Inter-professional collaboration allows the pharmacists to make all necessary interventions in the medication-use process to identify and solve medication issue and increase patient safety.

#### 2. Scope

This document is applicable to all the Doctors/Pharmacy professionals/Nurses dealing with clinical area procedures in the Al Masarra Hospital.

#### 3. Purpose

- 3.1 To ensure the safe prescribing and ordering of medications.
- 3.2 To ensure that the medications prescribed are evaluated and monitored and the medication therapy is appropriate and thereby reducing the potential for preventable medication errors or adverse events.



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#### 4. Definitions

- 4.1 **Medication Order:** A written order by a Psychiatrist/Physician, Dentist (or any Prescriber) for a medication to be dispensed by a pharmacy for administration to the patient.
- 4.2 **Authorized Prescribers:** Those physicians permitted by the hospital admin level and byrelevant licensure, laws, and regulations to prescribe or order medications.
- 4.3 **PRN:** Cddtgxkcvkqp" ogcpkpi" ÷ Yjgp" pign pehgasæuct { prore nata).
- 4.4 **Stat order:** Abbreviation from the Latin word ÷ U v cwhidh megans ÷ k o o g f k c v g ø

#### 5. Policy

- 5.1 C n n " r c v k g p v " k p h q t o c v k q p . " k p e n w f k p i " v j g date, sex, pertinent problems/diagnosis, lab values, height, weight, pregnancy/lactation status, allergies, and sensitivities will be available to all appropriate healthcare providers, including pharmacists.
- 5.2 The Pharmacy shall dispense medications only upon the receipt of complete, appropriate medication orders entered by authorized members of the medical staff. The order to be completed must include complete drug information, complete patient specific information, and complete prescriber information.
- 5.3 The pharmacy will review medication orders for availability, dose, route, frequency, drugs are prescribed and dispensed for their approved indications, or any other incomplete/incorrect prescribing information.
- 5.4 It is within acceptable professional Pharmacy practice for Pharmacist not to dispense medication based on clinical scientific knowledge and/or standards or practice until the matter is verified, provided that the physician and the immediate pharmacy supervisor involved in the care of the patient are informed.
- 5.5 The r j c t o dintertventionømade seeking verification of f q e vorpletr must be documented in the system.
- 5.6 Verbal orders for any medication are not acceptable, except under critical circumstances such as emergent care and life-threatening situation.
- 5.7 Where such verbal orders are necessary, the nurse, or other qualified practitioner,



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must repeat the verbal order back to the prescriber for verification. The prescribing physician will countersign the medication order before leaving the patient care area.

- 5.8 Telephone orders for medications are allowable if the prescriber cannot reasonably attendthe patient care area to write the order (or enter using an offsite electronic method) within an appropriate time frame for care.
- 5.9 Where such telephone orders are necessary, the nurse, or other qualified practitioner, must repeat the medication order back to the prescriber for verification, unless the situation urgency does not allow for such verification. The concerned doctor, or designated replacement doctor, will sign the telephone order as soon as possible, and in all circumstances within 24 hours of the order time.
- 5.10 Prescribing specialized medications beyond own specialty is not allowed as per the Central Drug Committee decisions and approved protocols, prescribing to be restricted for each item based on the Specialty and Health care level.
- 5.11 Prescriptions for medications prescribed by doctors for themselves is permitted only in certain occasions i.e., to save a life or to avoid serious deterioration in health, where no other person with legal right to prescribe.
- 5.12 For high risk medications and high-risk patients (child, geriatric or patients with renal or hepatic impairment) there should be systems in place to minimize adverse drug events.
- 5.13 Medication prescribing and ordering is done by authorized physicians only. Electronic prescriptions are sent to pharmacy through the computer system.
- 5.14 The prescriptions will be automatically transcribed (for both OP and IP patients) through the Al Shifa 3+ Hospital Information system to the Medication Administration system of Nursing and also to the Pharmacy information system.

#### 6. Procedure

- 6. 1 Review process
  - 6. 1. 1 The pharmacist reviews the order for completeness and appropriateness. If the order is complete and appropriate, the pharmacist will process the order.



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- 6. 1. 2 Orders which are unclear, lacking the necessary elements of a medication order, or not appropriate for the patient, the pharmacist should consult with a more senior pharmacist for a second opinion, where possible to discuss the concerns.
  - If the order is still not acceptable, the Pharmacist must call the physician who is responsible for the care of the patient for clarification.
- 6. 1. 3 In the event of conflict between the prescriber and the pharmacist, the issueshall be escalated to the pharmacy Head of the Department/Section Incharge.
- 6. 1. 4 If the pharmacy HoD/Section In-charge feels it is not appropriate to dispense the order after discussions with the prescribing and/or staff physician in charge, he/she should contact the appropriate consultant physician to discuss the situation and take the next step in the process.
- 6. 1. 5 The pharmacist will review and monitor medication orders for the following:
  - 6.1.5.1 Patient allergies and sensitivities.
  - 6.1.5.2 Approved indications for use.
  - 6.1.5.3 Prescriber authority for restricted drugs.
  - 6.1.5.4 Therapeutic duplications.
  - 6.1.5.5 Any serious or potential Drug-Drug interactions and Drug-Food interactions that might affect the patient drug therapy outcome.
  - 6.1.5.6 Appropriateness of the medication dose, frequency, and route of administration.
  - 6.1.5.7 Contraindications.
- 6. 1. 6 For newly admitted patients, the pharmacist will compare the initial medication order with the list of medication taken prior to admission as per õ O g f k Reconchiațion R q n k e { ö 0
- 6. 1. 7 The Pharmacy department should have a multidisciplinary program system (Al Shifa 3+ system) whereby significant drug interactions are identified, resolved and communicated to physicians, nurses and/or dietitians, and r c v kcarquivers, thereby providing a mechanism for effective drug-drug and drug food interaction management.



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- 6. 1. 8 For Child and Geriatric patients: The weight of the patient should be on the order form or entered in the patient's electronic medical record.
- 6. 1. 9 Healthcare professionals must comply with the proper use of approved and prohibited prescribing abbreviations.
- 6.2 Necessary elements of a complete order:
  - 6.1 Patient Data (ID no. name, age, gender, weight, bed no./ward/Clinic).
  - 6.2 Diagnosis
  - 6.3 Allergy
  - 6.4 Drug name in generic, dose, route, frequency and duration of treatment.
  - 6.5 Name of the Physician, stamp and signature.
  - 6.6 Date and time of prescription
  - 6.7 For Controlled Drugs (CDs), prescription with as per the CDs regulations.
- 6.3 For PRN protocol, this will include:
  - 6.3.1 The PRN protocol should give additional information about the medication order and helps to understand the Pharmacy professionals/Nurses when and how much of the medication to give.
  - 6.3.2 The prescriber must check what regular medication the patient may be takingdaily before prescribing PRN order, to safe guard from receiving excessive amounts of other drug with similar therapeutic effect or a combination of medications that are contra indicated.
  - 6.3.3 The specific signs and symptoms (indication for use) that the medication shouldbe given or administered.
  - 6.3.4 A maximum daily dosage/duration.
  - 6.3.5 PRN medications will be supplied in its original package, blisters or appropriately labeled repacked containers as this enables to maintain quality, stability, reduces unnecessary medication wastage.
  - 6.3.6 The PRN orders must be entered in the computer system by the treating physician and shall be dispensed from the wards/units floor stock or from through daily/unitdose system.
  - 6.3.7 Watch to see if the PRN medication has taken care of the signs or symptoms of illness and physician/nurse must document the effect of the PRN



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medication on the individual.

- 6.4 Stat order will include:
  - 6.4.1 All necessary elements of a complete prescription (Refer to procedure 6.2).
  - 6.4.2 In the r t g u e tStatrQv tk fq gBhanhaey will proceed it fast) should be stated.
  - 6.4.3 A maximum daily dosage/duration.
- 6.5 Weight based orders For Child/Adolescent/Geriatric patients
  - 6.5.1 Weight of the patient
  - 6.5.2 Age of the patient
  - 6.5.3 Use milligram/kilograms (per kg body weight) dosing.
- 6.6 Look-alike/Sound-Alike Medications
  - 6.6.1 It should be differentiated by color code as a precaution to prevent potentialmistakes.
  - 6.6.2 Light blue for Look-alike (with the support of IT).
  - 6.6.3 TALL-MAN letters (in prescriptions or in remarks column if applicable) forsound-alike medications.
- 6. 7 Authorized Prescribers
  - 6.7.1 Pharmacy dispensing areas shall have a list containing the Prescribers names, signature, ID number, Specialty and stamp that are authorized to prescribe or order medications in the hospital and the list is to be updated timely.
  - 6.7.2 The Pharmacy staff should be aware of this list it is available in each drug dispensing area.
  - 5.7.3 The Pharmacy professionals are responsible for verifying with the Medical ugtxkegu"cp{"rtguetkdgt"yjqøu"pqv"tgdatabase.
  - 6.7.4 All medications prescribed and each dose administered to the patient must be written/entered in the system and kept/saved and finalized in the r c v k g p v g record.



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#### 7. Responsibility

#### 7.1 Pharmacy Professionals Shall:

7.1.1 Fkurgpug "ogfkecvkqpkt"| ggpf n ft t gq ë x kg d kg ht ka ø medications within their privileges, and enquire about any prescription or order v j comsødered unclear or incomplete.

#### 7.2 Nursing Care Staff Shall:

- 7.2.1 Ensure they can clearly read and understand the orders before administering anymedicine.
- 7.2.2 Contact the prescriber/pharmacy professionals for incomplete or unclear orders/doubts.
- 7.2.3 Never make any assumptions about the r t g u e intentibrg t  $\phi$  u
- 7.2.4 Write/enter in the system and keep/save and finalize in the r c v krecoprdv ø u theadministration of medications to the patients.

#### 7.3 Admin Level Section In-charge Shall:

- 7.3.1 Allocate resources in coordination with the hospital admin to support the implementation of the medication policies.
- 7.3.2 Deal with higher authorities of the hospital regarding any series of concernsduring the policy implementation.
- 7.3.3 Coordinate with the section focal points confirming all the staff are fully informed of their role in maintaining the required standard practice.
- 7.3.4 Lead to strategies and innovations to improve current practice.



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#### 8. Document History and Version Control Table

<b>Document History and Version Control</b>							
Version	Description of Amendment	Author	Review Date				
1	Initial Release	Policy and Procedure team (P&MS)  July 2					
2	Update and Review	Policy and Procedure team (P&MS)	July 2025				
Written by	Reviewed by	Approved by					
Policy and Procedure team (P&MS)	Najla Al Zadjali	Dr. Bader Al Habsi					

#### 9. Related Documents

- **9.1** Dispensing Guidelines óPharmacy Department, Al Masarra Hospital.
- **9.2** General Policies and Procedures of Controlled Drugs Substances Pharmacy Department, Al Masarra Hospital.
- **9.3** Al Masarra Hospital, Nursing Department -Medication Administration Policy and Procedure. (*Hospital Local Site*).



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#### 10. References

Title of book/Journal/Website	Author	Year of publication	Page
Medication order review	DGMS, MoH, Muscat	MoH/DGM S/PH-18	
PRN Medication orders	DGMS, MoH, Muscat	MoH/DGM S/PH-19	
Prescribing Medications and Authorized Prescribers (https://www.moh.gov.sa/depts/Pharma cy)	General Pharmaceutical Care Administration, MoH, Kingdom of Saudi Arabia.	-	
Medication administration curriculum ( <u>www.dhhs.nh.gov</u> )	New Hampshire, England.	-	



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### **Appendices**

### **Appendix 1: The seven important Questions:**

	The Seven Important Questions						
When	Whenever a medication is ordered for an individual, must get the answers to the Seven						
Quest	Questions before give the medication.						
1	What is the name of the medication?						
2	What is the purpose of the medication?						
	What is the medication supposed to do?						
3	What effect will the medication have on the individual?						
	How will I know that it is working?						
4	How long will it take the medication to work?						
	Will it take hours, days or weeks to work?						
5	What are the side effects, adverse reactions and / or signs of over dose of this						
	medication?						
	What are the signs and symptoms of these?						
	Are blood levels or other blood tests needed to monitor the effects of this drug?						
6	Are there any interactions with the medications that the individual is taking?						
	Based on review of the $k p f k x$ the floations, are there any medications that						
	will interact with this medications?						
7	Are there any special administration or storage instructions for this medication?						
	Does this medication need to be given with meals, before meals, with water, with						
	milk, juice etc?						
	Is this medication a controlled medication?						
	Does this medication need to be refrigerated?						



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### **Appendix 2: Audit Tool**

	Pharmacy and Medical Stores, Al Masarra Hospital, MoH						
		Medication Ordering an	nd Revi	iew - Audi	t Tool		
S.N	Audit Process	Standard / Criteria	Yes	Partial	No	N/A	Comment
1	Observation Interview Document Review	Is the dispensing area holding an updated list of authorized prescribers in the institution?					
2	Observation  Document Review	All prescriptions are with necessary elements of a complete order.  (Patient data, Drug name in generic, dose, route, diagnosis, allergy etc.)					
3	Observation Interview Document Review	Is there a proper documentation/evidence written in the patient record after the administration of medications to the patient?					
4	Observation Interview Document Review	Are there documents/evidences for the medication review and monitoring by the Pharmacist?					
5	Observation  Document Review	Is there weight of the patient marked in the patient record especially Child and Geriatric patients for the proper calculation of weight based prescription orders?					
Checl	ked by ( <i>Name d</i>	and Signature):		Date:			



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### **Appendix 3. Document Request Form**

		Documen	t Reque	est Form		
ompleted by	y Docui	nent Requester				
ster Details						
Najla Al Z	adlaji	aji		of Request	July 2022	
Institute Al Masarra Hosp		tal	Mobi	le	9588 5771	
QMPSD			Email		_	
f Request					• •	
☐ Develop New Documer			Modification of Document		☐ Cancelling of Document	
ent Informa	tion					
•	Polic	icy and Procedure of Medication Ordering and Review				
e	AMR	AMRH/PHARM/P&P/006/Vers.02				
npleted by	Docum	ent Controller				
Approved		☐ Cancelled ☐ Forw		□ Forv	ward To:	
ecommenda	ition:					
Name Kund		oz Al Balushi	Al Balushi Date		July 2022	
Signature {		062	Stamp			
	Najla Al Z Al Masarra QMPSD f Request p New Document Information	Najla Al Zadlaji Al Masarra Hospi QMPSD  f Request  New Document  ent Information  AMR  appleted by Docum  d  ecommendation:  Kunoo	ster Details  Najla Al Zadlaji  Al Masarra Hospital  QMPSD  Request  New Document  Policy and Procedure  AMRH/PHARM/P&I  appleted by Document Controller  Cancelled	ster Details  Najla Al Zadlaji  Al Masarra Hospital  QMPSD  Frequest  New Document  Policy and Procedure of Medication of Management American American Cancelled  Cancelled  Ecommendation:  Kunooz Al Balushi  Date	Najla Al Zadlaji  Al Masarra Hospital  QMPSD  Email  Request  New Document  Modification of Document  ent Information  Policy and Procedure of Medication Order  AMRH/PHARM/P&P/006/Vers.02  Inpleted by Document Controller  d  Cancelled  Forv  ecommendation:  Kunooz Al Balushi  Date	

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### Appendix 4. Document Validation Checklist

	Document Validati	ion Checklis	st			
Doc	Policy and Procedure of Medication Ordering and Review	<b>Document Code:</b> AMRH/PHARM/P&P/006/Vers.02				
No	Criteria	Meet	Comments			
		Yes	No	N/A	4	
1.	Approved format used					
1.1	Clear title - Clear Applicability					
1.2	Index number stated	<u></u>				
1.3	Header/ Footer complete					
1.4	Accurate page numbering	-				
1.5	Involved departments contributed	-				
1.6	Involved personnel signature /approval					
1.7	Clear Stamp	V				
2.	Document Content					
2.1	Clear purpose and scope					
2.2	Clear definitions	<u></u>				
2.3	Clear policy statements (if any)					
3.	Well defined procedures and steps					
3.1	Procedures in orderly manner					
3.2	Procedure define personnel to carry out sten	1				