11 MEDICATION MANAGEMENT

OVERVIEW OF MEDICATION MANAGEMENT

Depending on the size, structure and functions of the health facility, there may be a pharmacy with qualified pharmacists to dispense medication, or medical and nursing personnel may issue certain medications within the service. Whatever the system, the health facility implements systems to ensure, that all pharmaceutical practices are in accordance with current legislation.

Medication management is not only the responsibility of the pharmaceutical service but also of managers and clinical care providers. Medical, nursing, pharmaceutical and administrative personnel participate in a collaborative process to develop and monitor the policies and procedures.

Each health facility has the responsibility of identifying the individuals with the requisite knowledge and experience, who are permitted by laws, regulations or registration to prescribe or order medications. The health facility also identifies any additional individuals, who are permitted to prescribe or order medications in emergency situations. Policies and procedures define the documentation required for medications ordered or prescribed and for verbal medication orders.

Medications depend on suitable storage for their potency. In particular, vaccines which are exposed to high ambient temperatures and/or freezing will quickly lose their potency. The cold chain is the system of transporting and storing vaccines within the safe temperature range of 2 - 8°C. For vaccines to be effective, the cold chain must be maintained from the place of manufacture to the point of administration. Each time that vaccines are exposed to the wrong temperature, their potency is reduced. To know if vaccines are potent at the time of administration, it is important that they be monitored for exposure to heat and cold as they pass through the cold chain.

While domestic refrigerators are not designed to meet the requirements of vaccine storage, safe storage is possible if healthcare facilities follow simple guidelines. Guidelines may be obtained from the Health authorities or from the manufacturers and distributors of vaccines. Foodstuffs must not be stored in the medication refrigerator. Patient care units store medications in a clean and safe environment, which complies with laws, regulations and professional practice standards.

The safe administration of medications requires a strict and comprehensive protocol. The patient, physician, nurse and other care providers work together to monitor patients on medications. The purposes of monitoring are to evaluate the response to medication, to adjust the dosage or type of medication, when needed, and to evaluate the patient for adverse effects.

The health facility identifies the adverse effects to be recorded and those that must be reported; it establishes the mechanism for reporting adverse events. The reporting process is part of the health facility's performance improvement programme. The programme is focused on preventing medication errors through understanding the types of errors that occur. Improvements in medication processes and staff training are used to prevent errors in the future. The pharmaceutical service participates in such staff training, where appropriate.
Standards

11.1 Management of the service

11.1.1 Medication use is organised throughout the facility to meet the needs of patients.

Intent of 11.1.1
As an important resource in patient care, the use of medication is managed effectively and efficiently throughout the organisation.
Applicable laws and regulations are incorporated into the organisational structure and the operations of the medication management system used in the organisation.
Where the organisation dispenses medication it must be an approved licensed site with the relevant personnel having approved licences issued for that site in accordance with country-specific legislation.
A registered pharmacist directly supervises the activities of the pharmacy or pharmaceutical service.

11.1.1 Criteria

11.1.1.1 A designated individual, who is suitably qualified, has clearly defined responsibilities and accountability for all aspects of the pharmaceutical service.

11.1.1.2 Individuals who dispense medications act in accordance with legislation affecting pharmacy practice and current pharmaceutical, medical and nursing guidelines.

11.1.1.3 The scope of and limitations to the responsibilities and activities of the personnel who manage medications are clearly defined.

11.1.1.4 The name of the responsible pharmacist is clearly displayed.

11.1.1.5 The pharmaceutical service is co-ordinated with other related services within the health facility.

11.2 Facilities and equipment

11.2.1 Adequate facilities are available for the safe storage and dispensing of medications.

Intent of 11.2.1
Secure storage systems ensure that pharmaceuticals and related substances are held under conditions that conform to statutory requirements and the manufacturer's requirements.
There are arrangements for ensuring the security of medicines, including alarm systems, door access controls, and safes/vaults for storing controlled medicines.
Medications stored and dispensed from areas outside the pharmacy, for example patient care units, comply with the same safety measures.
There is a registry, log or other mechanism to monitor and account for controlled substances.
Deep freeze, refrigeration, cold room and cool area facilities are provided for safe storage of certain medications. There is a mechanism for ensuring that the correct temperature is maintained throughout the life of the medications. Deep freezers and refrigerators are defrosted when necessary. Doors, hinges and seals are all functional.
11.2.1 Criteria

11.2.1.1 The design and layout of the pharmacy must permit a logical, safe flow of work, adequate storage space, effective communication and supervision, and ensure effective cleaning and maintenance.

11.2.1.2 Secure facilities for the storage of medications include, but are not limited to, lockable storage facilities, ceiling cages, burglar guards and alarm systems with keypads.

11.2.1.3 The storage area is easily accessible from the dispensing room.

11.2.1.4 Medication storage areas are protected from heat and light and are effectively ventilated.

11.2.1.5 A dedicated refrigerator is available for those medications requiring storage at low temperatures.

11.2.1.6 A monitoring log is kept of the temperature within the refrigerator and/or cold-chain monitors; any remedial action taken is recorded.

11.2.1.7 The work bench for preparing medicines for dispensing should be clean, tidy and well organised.

11.2.1.8 The area where medicines are dispensed to the patients is easily accessible, adequately furnished and allows for reasonable privacy when advice is given.

11.3 Policies and procedures

11.3.1 There is a collaborative effort to develop and monitor policies and procedures for the pharmaceutical service.

Intent of 11.3.1
Safe pharmaceutical practices are guided by organisational policies and procedures. Medical, nursing, pharmacy and administrative personnel participate in a collaborative process to develop and monitor the policies and procedures. The clinical and managerial leaders use a collaborative process to develop policies and procedures and training the personnel to implement them correctly. It is particularly important that the policies or procedures indicate:
- how planning will occur;
- the documentation required for the care team to work effectively;
- special consent considerations;
- monitoring requirements;
- special qualifications or skills of personnel involved in the care process; and
- the availability and use of resuscitation equipment.

Clinical guidelines are frequently helpful and may be incorporated in the process. Monitoring provides the information needed to ensure that the policies and procedures are adequately implemented and followed for all relevant patients and services. Policies and procedures should focus on high risk procedures, e.g.

a) safe prescribing, ordering, transcribing and administering medications in the organisation;
b) documentation requirements;
c) the use of verbal medication orders;
d) the availability and use of medication samples;
e) documentation and management of any medications, brought into the organisation for or by the patient;
f) self-administration of medication by the patient;
g) dispensing of medications at the time of the patient's discharge;
h) preparing, handling, storing and distributing parenteral and enteral nutrition products;
i) storing, handling, distributing and dispensing hazardous medications;
j) storing, handling, distributing and dispensing of investigational medications;
k) managing medications used in clinical trials;
l) the security of staff, equipment and stock.

11.3.1 Criteria

11.3.1.1 Policies and procedures are developed and implemented for identified processes, which include at least those from a) to l) in the intent above.

11.3.1.2 Policies and procedures are implemented to ensure that medications are procured according to country-specific guidelines regarding specific agents and approved suppliers.

11.3.1.3 Policies and procedures are implemented to ensure that medications are transported to the facility in accordance with manufacturers' guidelines, with specific emphasis on maintaining cold chain requirements.

11.3.1.4 Policies and procedures are implemented to ensure that medications are dispensed on the written instructions/prescription of a designated healthcare worker who is qualified and/or experienced in their use.

11.4 Access to appropriate medication

11.4.1 An appropriate selection of medications for prescribing or ordering is stocked or readily available.

Intent of 11.4.1
Every organisation must decide which medications to make available for prescribing and ordering by the care providers. This decision is based on the organisation's mission, patient needs, and the types of services provided. The organisation develops a list of all the medications it stocks or that are readily available from outside sources. In some cases, laws or regulations may determine the medications on the list or the source of those medications. Medication selection is a collaborative process, which considers patient needs and safety as well as economics. The organisation has a method, such as a committee, for monitoring and maintaining this medication list and for monitoring the use of medication within the organisation.
Managing medication use in an organisation requires an understanding of the sources and uses of medications not prescribed or ordered within the organisation.
On occasion, medications not readily available to the organisation are needed. There are also occasions where medications are needed at times when pharmacies are closed. Each organisation needs to plan for these situations and to educate the personnel regarding the procedures to follow should they occur. When patient emergencies occur, quick access to appropriate emergency medications is critical. Each organisation plans the location of emergency medications, and the medications to be supplied in these locations. To ensure access to emergency medications when needed, the organisation establishes a procedure or process to prevent theft or loss of the medications, and to ensure that medications are replaced when used, or when damaged or out of date. Each organisation also needs to determine its role in providing medications to patients at discharge. Those who prescribe or order medication know what medications, if any, are available and how to obtain them.
11.4.1 Criteria

11.4.1.1 There is a list of the medications stocked in the organisation or readily available from outside sources.

11.4.1.2 Priority essential drugs are in stock.

11.4.1.3 There is a process for obtaining required medications that are not stocked, or normally available to the organisation.

11.4.1.4 There is a process for healthcare workers to obtain medicines within the facility when the pharmacy is closed.

11.4.1.5 There is a list of medications available in the emergency cupboard, where relevant.

11.4.1.6 There is a system for recalling drugs, when required.

11.5 Control and storage of medication

11.5.1 Medications are stored in a secure and clean environment.

Intent of 11.5.1
The pharmacy or pharmaceutical service stores and dispenses medications in a clean and secure environment, which complies with laws, regulations and professional practice standards. In particular, medications are clearly labelled, which includes the following (P5.24):
- generic name and strength of medicine;
- dose, frequency and duration of course;
- date of dispensing and expiry date;
- name of patient;
- name/address of supplier;
- child safety warning;
- batch number.
Medications stored and dispensed from areas outside the pharmacy, for example patient care units, comply with the same safety measures. PA (P5.24)

There is a registry, log or other mechanism for monitoring and accounting for controlled substances.

11.5.1 Criteria

11.5.1.1 Medications are stored in a locked storage device or cabinet, which is accessible only to authorised personnel.

11.5.1.2 There is a system for ensuring that maximum and minimum stock levels are maintained.

11.5.1.3 Medications are legibly marked and securely labelled.

11.5.1.4 Medications controlled by law or organisational policy are stored in a cabinet of substantial construction, for which only authorised personnel have the keys.

11.5.1.5 Medications controlled by law or organisational policy are accurately accounted for in a specific register.

11.5.1.6 Hazardous and flammable materials are stored, in accordance with relevant regulations.
11.5.1.7 All pharmaceuticals, vaccines or medical consumables are regularly checked for expiry dates and checks are recorded.

11.5.1.8 An inventory management system, manual (stock cards) or automated, is in place and functioning appropriately, e.g. to monitor and control stock losses.

11.5.1.9 Separate designated storage areas are provided for materials under quarantine, e.g. expired stock, compounded products.

11.6 Prescribing of medication

11.6.1 There is a process to ensure the safe and legal prescribing of medication.

11.6.1 Criteria

11.6.1.1 Only those permitted by the health facility and by relevant laws and regulations prescribe medication.

11.6.1.2 Prescriptions conform to legal requirements.

11.6.1.3 Prescription pads and order books are accessible to authorised persons only.

11.6.1.4 There is a process for placing limits, when appropriate, on the prescribing or ordering practices of individuals.

11.6.1.5 The use of verbal/telephonic medication orders is documented.

11.7 Dispensing Medication

11.7.1 The organisation adheres to laws, regulations and professional standards of practice when dispensing medications.

Intent of 11.7.1
A registered pharmacist reviews each prescription or order for medication. When questions arise, the individual who prescribed or ordered the medication is contacted. The dispenser signs the prescription. When pharmacist assistants or interns dispense, they are supervised, and their signatures, as dispensers, are countersigned by a registered pharmacist. The organisation dispenses medications in the most ready-to-administer form possible, to minimise opportunities for error during distribution and administration. The central pharmacy and other medication distribution points throughout the organisation use the same system. The system supports accurate dispensing of medications in a timely manner.

11.7.1 Criteria

11.7.1.1 Pharmacy personnel act in accordance with legislation and current pharmaceutical, medical and nursing guidelines.
11.7.1.2 Medications are prepared and dispensed in a safe and clean environment.

11.7.1.3 There is a uniform medication dispensing and distribution system in the organisation.

11.7.1.4 The system supports accurate and timely dispensing.

11.7.1.5 Medications are securely and legibly labelled with relevant information as required by organisational policy.

11.7.1.6 A register is maintained of all medicines dispensed.

11.7.1.7 The person prescribing and dispensing the medicine has access to patient information that would contra-indicate particular medicines.

11.7.1.8 The person dispensing the medicine informs the patient of available generic equivalents.

11.7.1.9 There is a mechanism for facilitating communication between the doctor and the pharmacy regarding drug reactions.

11.7.1.10 Prescriptions are securely stored in accordance with legislation or organisational policy.

11.8 Administration of medication

11.8.1 Medications are administered in a manner that ensures safety and effectiveness.

11.8.1 Criteria

11.8.1.1 Only those permitted by the health facility and by relevant laws and regulations administer medications.

11.8.1.2 Medications are verified against the prescription or order, including the dosage and route of administration.

11.8.1.3 Patients are identified before medications are administered.

11.8.1.4 Medications are administered as prescribed.

11.8.1.5 The therapeutic results of medication are monitored.

11.8.1.6 Adverse drug reactions are observed, monitored and reported.

11.8.1.7 Medication errors are reported in accordance with policy.