

Pharmacy formulary and therapeutic committee

Dr Tahani Alwidyan

Assistant Professor In Clinical Pharmacy and Therapeutics.

Department of Clinical Pharmacy and Pharmacy Practice

Faculty of Pharmaceutical Sciences

The Hashemite University

Outline

- **Pharmacy formulary and therapeutic committee:**
 - ✓ **General Principles and guidelines to develop formulary format.**
 - ✓ **Preparation of the Formulary.**
 - ✓ **Role of Pharmacist.**
 - ✓ **Benefits and problems.**
 - ✓ **Keeping up to date Formulary.**

Pharmacy and therapeutic committee.

- The **multiplicity of drugs** available and the **complexities surrounding their safe and effective use** make it necessary for hospitals to have an organized, sound program for maximizing rational drug use.
- **The pharmacy and therapeutics committee** is an advisory group of the medical staff and serves as the organizational line of communication between the medical staff and pharmacy department.
- This committee is composed of physicians, pharmacists, and other health professionals selected with the guidance of the medical staff.
- It is a **policy recommending body** to the medical staff and the administration of the hospital on matters related to the therapeutic use of drugs.

Pharmacy and therapeutic committee.

The primary purposes of the pharmacy and therapeutics committee are:

1. Advisory. The committee recommends the adoption of, or assists in the formulation of, policies regarding evaluation, selection, and therapeutic use of drugs in hospitals.

2. Educational. The committee recommends or assists in the formulation of programs designed to meet the needs of the professional staff (physicians, nurses, pharmacists, and other health-care practitioners) for complete current knowledge on matters related to drugs and drug use.

Pharmacy and therapeutic committee.

Organization and Operation

- While the composition and operation of the pharmacy and therapeutics committee might vary from hospital to hospital, the following generally will apply:
 1. The pharmacy and therapeutics committee should be composed of at least **three physicians, a pharmacist, a nurse, and an administrator**. Committee members are appointed by a governing unit or elected official of the organized medical staff.
 2. A chairman from among the physician representatives should be appointed. A pharmacist usually is designated as secretary.
 3. The committee should meet regularly, at least six times per year, and more often when necessary.
 4. The committee should invite to its meetings persons within or outside the hospital who can contribute specialized or unique knowledge, skills, and judgments.

Pharmacy and therapeutic committee.

5. An agenda and supplementary materials (including minutes of the previous meeting) should be prepared by the secretary and submitted to the committee member's insufficient time before the meeting for them to properly review the material.
6. Minutes of the committee meetings should be prepared by the secretary and maintained in the **permanent records** of the hospital.
7. Recommendations of the committee shall be presented to the medical staff or its appropriate committee for adoption or recommendation.
8. Liaison with other hospital committees concerned with drug use (e.g., infection control, medical audit) shall be maintained.

Pharmacy and therapeutic committee.

Functions and Scope

1. To service in an advisory capacity to the medical staff and hospital administration in all matters pertaining to the use of drugs (including investigational drugs).
2. To develop a **formulary of drugs** accepted for use in the hospital and provide for its constant revision.
 - The selection of items to be included in the formulary will be based on objective evaluation of their relative therapeutic merits, safety, and cost.
 - The committee should minimize duplication of the same basic drug type drug entity, or drug product.
3. To establish programs and procedures that help ensure cost-effective drug therapy.

Pharmacy and therapeutic committee.

4. To establish or plan suitable educational programs for the hospital's professional staff on matters related to drug use.
5. To participate in quality-assurance activities related to the distribution, administration, and use of medications.
6. To review adverse drug reaction occurring the hospital (pharmacovigilance).
7. To initiate drug-use review programs and studies and review the results of such activities.
8. To advise the pharmacy in the implementation of effective drug distribution and control procedures.
9. To make recommendations concerning drugs to be stocked in hospital patient-care areas.

The hospital formulary.

The hospital formulary

- The formulary is a continually revised compilation of pharmaceuticals (plus important ancillary information) that reflects the current clinical judgment of the medical staff.
- The formulary system is a method whereby the medical staff of an institution, working through the pharmacy and therapeutics committee, evaluates, appraises, and selects from among the numerous available drug entities and drug products those that are considered most useful in patient care (routinely available from the pharmacy).
- The formulary system is thus an important tool for assuring the quality of drug use and controlling its cost.
- The formulary system provides for the procuring, prescribing, dispensing, and administering of drugs under either their non-proprietary or proprietary names in instances where drugs have both names.

The hospital formulary.

Benefits of the formulary system

(1) Therapeutic. (2) Economic. (3) Educational.

- The therapeutic aspect of a formulary system provides the greatest benefit to the patient and physician in that only the most efficient products are listed and available.
- The economic merit also has a double benefit in that the formulary eliminates duplication thus reducing inventory duplication and the opportunity for volume purchasing means lower charges to the patient.
- The educational benefit is also significant for the resident staff, nurses and medical students because many good formularies contain various prescribing tips and additional drug information of educational value.

The hospital formulary.

Drawbacks of the formulary system

1. The hospital formulary system deprives the physician of his right to prescribing and obtained the brand of his choice.
2. The hospital formulary system in many instances, permit the pharmacist to act as the sole judge of which brands of drugs are to purchased and dispensed.
3. The system allow for the purchase of inferior quality of drugs.
4. The system does not reduce the cost of drug to the patient or the third-party payer because most institution purchase large volume of drug at reduce rate but do not pass on the patient any reduction in their cost.

The hospital formulary.

Format and appearance of the formulary

- The physical appearance and structure of the formulary is an important influence on its use.
- The formulary should be visually pleasing, easily readable, and professional in appearance.
- The need for proper grammar, punctuation, correct spelling, and neatness is obvious.
- There is no one single format or arrangement.

The hospital formulary.

A typical formulary must have the following composition:

1. Title page	2. Names and titles of the members of the pharmacy and therapeutics committee	3. Table of contents
4. Information on hospital policies and procedures concerning drugs 4.1 The pharmacy and therapeutics committee of hospital 4.2 Objectives and operation of the formulary system 4.3 Hospital regulations and procedures for prescribing and dispensing drugs 4.4 Hospital pharmacy services and procedures 4.5 How to use the formulary	5. Products accepted for use at hospital 5.1 Items added and deleted since the previous edition 5.2 Generic-brand name cross reference list 5.3 Pharmacological/therapeutic index with relative cost codes. 5.4 Descriptions of formulary drug products by pharmacology therapeutic class	6. Appendix 6.1 Central service equipment and supply list 6.2 Rules for calculating pediatric doses 6.3 Nomogram for estimating body surface area 6-4 Schedule of standard drug administration times

The hospital formulary.

Several techniques can be used to improve the appearance and ease of use of the formulary:

1. Using a different colour paper for each section of the formulary.
2. Using an edge index.
3. Printing the generic name heading of each drug entry in boldface type or using some other methods for making it stand out from the rest of the entry.

Seven rights for correct drug administration.

The **seven rights** for correct drug administration: that offer useful guidelines when filling prescriptions for patient medications.

- to avoid medication errors.

- 1) **Right Patient:** Always verify the patient's name before dispensing medicines.
- 2) **Right Drug:** Always check the medication against the original prescription and the patient's disease state. The medication label contains important information about the drug that will be dispensed to the patient.
- 3) **Right Strength (dose):** Check the original prescription for this information and pay attention to the age of the patient. Paediatric or elderly patient can easily get the wrong dose.
- 4) **Right Route:** Check that the physician's order agrees with the drug's specified route of administration. Many medications can be given by a variety of routes and the route of administration can affect the medication's absorption.

Seven rights for correct drug administration.

- 5) **Right Time:** Check the prescription to determine the appropriate time for the medication to be administered. Some medications must be taken on an empty stomach (one hour before or two hours after a meal) while others should be taken with food. Sometimes, a certain time span is needed between doses to maintain a therapeutically effective blood level.
- 6) **Right administration (procedure) (sometimes right response) (sometimes right reason/diagnosis).**
- 7) **Right documentation.**

Activity

You are a new member of the DTC for your hospital. A new antimicrobial has been requested by one of your physicians. This antimicrobial has a broad spectrum of activity that includes activity against most common gram-positive and many gram-negative bacteria. The drug is a suspension that is given four times daily for 10 days. The drug is heavily promoted, by a pharmacy company representative, for treating many different paediatric infections. The cost is high, \$2.00/day, but it is required (according to the requesting physician) because of a high incidence of antimicrobial resistance in the hospital. This antibiotic is typically used for children with acute otitis media, sinusitis, and bronchitis. Safety of this drug has not been fully evaluated. Other drugs for these problems that are available on the formulary include amoxicillin, cotrimoxazole, and cephalexin. Typically the DTC has provided very little evaluation of new drugs; a physician's recommendation was enough for approval by the committee

Activity

- What are some important considerations when adding a drug such as this to the formulary?
- What are some obvious potential drug use problems that are depicted in this activity?
- What responsibility does the DTC have to the health care system concerning the addition of drugs, especially antibiotics, to the formulary?
- What functions of the DTC are needed to fully address the antibiotic request?

Thank you

Dr Tahani Alwidyan

alwidyantahani@hu.edu.jo

alwidyantahani@staff.hu.edu.jo

<http://staff.hu.edu.jo/tahaniaalwidyan>