

Hospital Pharmacy

Pharmacy and Therapeutic Committee (PTC)

Definition

- The Pharmacy and Therapeutics Committee (PTC) is a governing and decision-making body within the hospital that ensures scientific and evidence-based decisions are made regarding the use of medicines and therapeutic interventions.
- It is crucial for formulary management, drug policy enforcement, and clinical governance in drug use.

Goals and Objectives

- Ensure rational and evidence-based drug therapy.
- Improve patient safety through policies on adverse drug reactions (ADR), drug interactions, and medication errors.
- Establish and update the hospital formulary.
- Develop clinical and therapeutic guidelines.
- Control drug expenditure without compromising quality.
- Monitor antimicrobial resistance and support antibiotic stewardship.

Composition (Multidisciplinary Team)

Designation	Role in Committee
Chairperson	Often a senior physician or Medical Director
Secretary	Chief Pharmacist or Hospital Pharmacist
Clinical Pharmacologists	Provide expert insight on pharmacodynamics/pharmacokinetics
Physicians & Surgeons	Represent departments (medicine, surgery, etc.)
Microbiologist	Advises on infection control and antimicrobial use
Nursing Superintendent	Represents nursing administration
Hospital Administrator	Budget, policy implementation, interdepartmental coordination

Objectives of the PTC

1. **Selection of Drugs:** To review and approve drugs to be included in the **hospital formulary**, based on efficacy, safety, quality, and cost.

2. **Drug Use Policy Development:** To develop policies guiding the safe and effective use of medicines.
3. **Evaluation of New Drugs:** To assess newly introduced drugs for clinical use.
4. **Monitoring Drug Utilization:** To conduct drug utilization reviews and promote rational drug use.
5. **Formulation of Therapeutic Guidelines:** To help create standardized treatment protocols.
6. **Adverse Drug Reaction (ADR) Monitoring:** To evaluate and respond to reports of drug-related problems.
7. **Education and Training:** To educate hospital staff on updates in pharmacotherapy, drug interactions, and new protocols.

Functions of the PTC

A. Formulary Development

- Establishes criteria for inclusion/exclusion.
- Periodically reviews the efficacy, safety, cost-effectiveness, and usage statistics.
- Evaluates duplicate entries and eliminates irrational combinations.

B. Drug Evaluation

- Scientific assessment of new molecules using:
 - Clinical trial data
 - WHO Essential Drug List
 - National List of Essential Medicines (NLEM)
 - Cost-benefit and pharmacoeconomic analysis

C. Guidelines Formulation

- Develops Standard Treatment Guidelines (STGs) based on evidence and hospital microbiological profile.
- Guidelines for restricted-use drugs (narcotics, cytotoxic, high-alert drugs).

D. Drug Use Surveillance

- Conducts Drug Use Evaluations (DUE) and Drug Utilization Reviews (DUR).
- Studies prescribing trends and alerts prescribers for irrational usage.

E. Policy Making

- Procurement policies (single vs multiple suppliers, generic preference).
- Prescription writing standards (legibility, generic names).
- Policies for automatic substitution (e.g., brand-generic interchangeability).

F. Continuing Education

- Provides CME (Continuing Medical Education) for staff.
- Circulates newsletters, drug bulletins, ADR reports, etc.

G. Pharmacovigilance and ADR Monitoring

- Collects ADR reports from wards.
- Submits data to the Pharmacovigilance Programme of India (PvPI).
- Evaluates causality, severity, and preventability of ADRs.

H. Audits and Inspections

- Evaluates expiry drugs, storage conditions, temperature logs.
- Reviews internal compliance with drug use guidelines.

Importance of PTC

- Prevents irrational prescriptions (polypharmacy, unnecessary injections).
- Reduces hospital-acquired infections by enforcing antimicrobial policies.
- Strengthens patient safety and therapeutic outcomes.
- Aligns hospital practices with national and international regulatory frameworks (CDSCO, WHO, NABH).

Hospital Formulary

Definition

- A hospital formulary is a comprehensive, regularly updated document listing medications that are approved for use within a particular hospital.
- It is more than a drug list—it is a clinical and administrative tool to standardize prescribing practices and facilitate efficient pharmaceutical care.

Objectives

- Guide clinicians in choosing safe, effective, and economical drugs.
- Prevent use of non-approved or irrational medications.
- Ensure uniformity in therapeutic practices across departments.
- Streamline procurement and inventory control.
- Reduce medication errors and therapeutic duplications.

Types of Formularies

- There are generally two main types:

1. Open Formulary

- All available drugs can be prescribed.
- There are no strict limitations.
- May lead to irrational prescribing and increased costs.

2. Closed Formulary

- Only selected drugs are permitted for use.
 - Promotes rational prescribing and cost control.
 - Requires strong enforcement and compliance.
- Some hospitals may adopt a **hybrid (partial) formulary**, allowing certain non-formulary drugs upon special approval.

Components of a Hospital Formulary

A comprehensive formulary generally includes:

1. List of Drugs

- Arranged by therapeutic category (e.g., analgesics, antibiotics, antihypertensives).
- Includes both generic and brand names.
- Dosage forms and strengths are specified.

2. Drug Monographs

➤ **Detailed information on:**

- Pharmacology
- Indications
- Dosage (adult and pediatric)
- Contraindications and precautions
- Adverse effects
- Drug interactions
- Storage conditions

3. Therapeutic Guidelines

- Standard treatment protocols for common conditions.
- First-line and alternative therapy options.

4. Policies and Procedures

- Guidelines on prescribing, dispensing, and administration.
- Process for inclusion or removal of drugs.

5. Non-formulary Drug Request Forms

- Used when a clinician needs to request a drug not listed in the formulary.

6. Index

- For quick navigation by drug name or therapeutic class.

Development of the Hospital Formulary

- The Pharmacy and Therapeutics Committee (PTC) is responsible for the development and regular updating of the formulary.

Steps:

1. Drug Evaluation

- Assessing drugs based on clinical evidence (efficacy, safety, and cost).

2. Consultation with Departments

- Gathering inputs from clinical departments based on their needs.

3. Selection of Drugs

- Prioritizing essential, cost-effective, and widely used drugs.

4. Approval by PTC

- Final list is approved and periodically revised.

5. Distribution

- Formulary is printed or digitized and distributed to all departments.



FREE PREVIEW

[Click here to visit our website](#)

PHARMACY PREMIUM NOTES

Complete subject
and semesters are
available on
FirstHope app only.



[Scan or click here](#)

Click here to get the app



Available on Google Play

JOIN THE FIRSTHOPE COMMUNITY

Join our Telegram channel

Click here to join Telegram



[Scan or click here](#)

@FirstHopeNotes

Instagram

@firsthope.official

[Click here to follow >](#)

YouTube channel

FirstHope-Pharmacy / Live streams

[Click here to watch >](#)

WhatsApp channel

Follow FirstHope on WhatsApp

[Click here to join >](#)

FirstHope website

firsthopenotes.com

[Click here to visit >](#)

B.Pharm / D.Pharm / M.Pharm / Pharm.D

Preview notes. Complete subjects and semesters in the FirstHope app.