

Developing therapeutic guidelines.

composition and requirement ~~to~~ therapeutic guidelines association -

administrators (3 members)

medical and pharmacy editors (6 members)

1 person from (IT) information - technology

1 research person.

1 evaluation person

1 Marketers person

Development of guidelines →

~~How~~

1. How can form guidelines.
2. Identify and refine the problem focusing on disease and publish literature.
3. Review the literature, organisational recommendation and internet sources to determine present ~~stand~~ standard of 'K. - To give ~~prop~~ proper treatment / research refers the publication ~~pub~~ (similar work done) of the present work you're going to do.
4. obtained opinions from experts.
5. begin the feedback process.
6. coordinate resources to avoid duplication of resources and time. (local patient)
7. assess the quality relevance, variability and strength of information.
8. Synthesize the information.
9. Summarize and disseminate the information, focus in on measurable outcome (plan act or state)

Unit IV

DEVELOPING THERAPEUTIC GUIDELINES

GUIDELINES FOR HOSPITAL FORMULARY:

•The governing bodies of hospital shall appoint a PTC composed of physicians

pharmacists which will prepare hospital formulary system.

•The medical staff in governing body shall sponsor & outline the purposes,

Other matters related to drugs in the hospital & shall published in hospital

organizations, function & scope of hospital formulary system.

•The PTC shall develop policies & procedures governing the hospital formulary &

medical staff adapt the policies & procedures subject to administrative approval.

•The policies & procedures shall afford guidance in approval selection, procurement, storage, distribution, use, safety procedures. formulary The hospital shall make it certain that the nurse panels / personnel's are informed

in writing .

•Use of communication that their exist the formulary system in a hospital procedure governing its functions.

THERAPEUTIC GUIDELINES:

1. ORGANISATION

2. MAIN OBJECTIVES

3. MAIN FUNCTIONS

4. COMPOSITION/REQUIREMENTS

To produce comparative disease based guidelines for therapy based on best

5. available evidence integrated with clinical experience

GUIDELINE CHARACTERISTICS

6. EXAMPLES

ORGANISATION:

- Mainly works for the non-profit , financially self-supporting intellectually and financially independent of government & pharmaceutical industry.

MAIN OBJECTIVES:

- To procedure , publish & sell the products & to promote quality use of medicine.

2. MAIN FUNCTIONS:

- To produce comparative disease based guidelines for therapy based on best available evidence integrated with clinical experience

4. COMPOSITION/REQUIREMENTS:

- Administrators(3 members)
- Medical & pharmacy Editors(6 members)
- One person from IT1(Information technology)
- Researcher (1 person)

- Evaluators (1 person)

- Marketer (1 person)

5. GUIDELINES CHARACTERISTICS:

- Clinically oriented

- Arrangement according to clinical problems

- Clear & practical evidence

- Comprehensive / cover all common area of care

- Authorised & credible

- Experts independent interpretation of evidence

Uses For this guidelines →

1) Improving the quality of patient care.

2) Guidelines are also necessary to control healthcare costs.

3) To increase consistency of recommendations and treatment by practitioners.

Factors affecting implementation.

→ complexity.

→ organization and resource related factors.

→ characteristics of patients.

→ other limitations include.

→ Being the information feedback process.

→ coordinate resources to avoid duplication of resources and time.

Drug distribution in hospital pharmacy

Drug distribution is one of the basic service provided by the hospital pharmacy

Drug distribution system falls in to 3 categories

- 1) Ward – controlled system**
- 2) Pharmacy controlled imprest based system**
- 3) Pharmacy controlled patient issue system**



**DRUG
DISTRIBUTION
SYSTEM**

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graph TD; A([DRUG DISTRIBUTION SYSTEM]) --> B([OUT-PATIENT SERVICES]); A --> C([IN-PATIENT SERVICES]);
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**OUT-PATIENT
SERVICES**

**IN-PATIENT
SERVICES**



1. Individual prescription order system:

It is a type of prescription system where the physician writes the prescription for individual patient who obtains the drug prescribed from any medical store or hospital dispensary by paying own charges.

Advantages:

- ☐ All medication orders are directly reviewed by pharmacists.
- ☐ It provides the interaction of pharmacist-doctor, nurse and the patient.
- ☐ It provides clear control of inventory.

DISADVANTAGES:

- ☐ There may be possible delay in obtaining the required medications for administration to the patient
- ☐ Increase in the cost to the patient



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2) COMPLETE FLOOR STOCK SYSTEM

- Drugs are stored at the nursing station and are administered by a nurse according to the chart order of the physician
- Only commonly used drugs are stocked on the floor

ADVANTAGES:

- The drugs are readily available for administration
 - Minimum return of drugs
 - Reduced in-patient prescription orders
 - Reduction in number of pharmacy personnel required
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DISADVANTAGES:

- Increase in chance of medication errors
- Increase in drug inventory
- Increase chances of drug deterioration due to lack of proper storage facilities and due to unnoticed drug degradation
- Increased workload on nurses

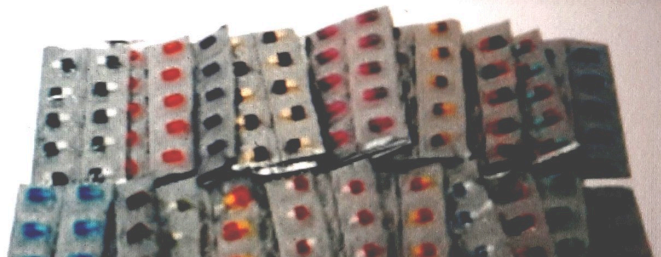
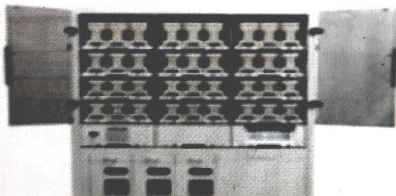


4. Unit dose dispensing:

Those medications which are ordered ,packed ,handled administered and charged in multiples of single dose units containing a predetermined amount of drug or supply sufficient for one regular dose.

- ❑ A single unit package is one witch contains one complete pharmaceutical dosage forms

Ex-one tablet,caps ' '

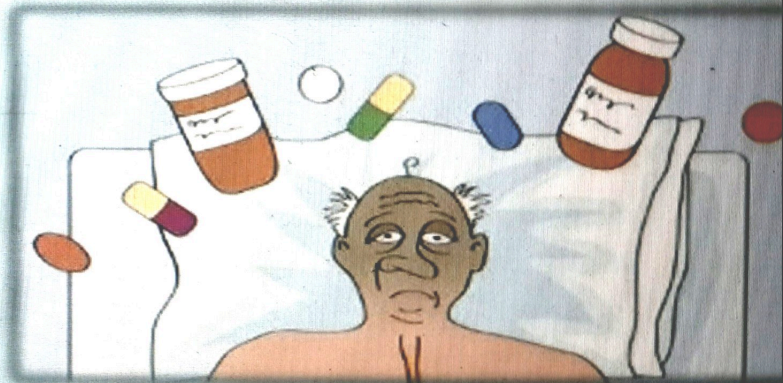


ADVANTAGES:

- Patient receives improved services and are charged for only those doses which are administered
- Nurses get more time for direct patient care
- Medication errors are reduced
- More space is available in nursing station by eliminating bulky floor stock
- It eliminates wastage of drug and pilferage

DISADVANTAGES:

- It requires more space since packaging material increases the bulk of the dosage forms.
- It requires increased number of skilled personnel in the pharmacy
- The cost of medication is increased to the patient due to increased handling charges



Preparation of Hospital Formulary

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1. Introductory information:

- Acknowledgement
- List of abbreviations
- Intended usage of the formulary manual.

2. Basic information of the drug :

- Generic name
- Dosage form
- Strength Indications
- Pharmacological action
- Precautions
- Side effects
- Frequency Instructions
- Drug interactions.

3. Supplementary information on each drug :

- Price Regulatory category
- Storage guidelines
- Patient counselling information
- Brand names

4. Prescribing and dispensing guidelines :

- Principles of prescription writing Name and address of the patient
- Prescribed drug should be written in formulary terminology
- Strength of prescribed medication must be given in accepted metric system.
- Correct dispensing guidelines Prevention and reporting of ADRs

5. General drug use advice :

Use of IV additives Prescribing in special situations
Poisoning and antidotes

6. Other components :

- Formulas for various diagnostic stains
- Diagnostic aids
- Table of common Lab-values
- Posological tables
- Index of the drugs included in the formulary Metric units Indexes (by generic name, brand name, therapeutic category)

7. The Format :

- Pharmacist decides the format before commencing work on printing and publishing in the hospital.
- He/She has to collect formularies of some leading hospitals as well as their format.
- Copies of finally published formulary may be sent to bodies like directorate general of health services, Govt of India, PCI etc.

8. Size :

- It is sufficiently small in size so that it could be easily carried by clinicians, nurses etc, in the pockets of their uniform or lab coats.
- The hospitals may determine their own size of the formulary.

9. Type of format :

Loose leaf or Bound Printed or Mimeographed Indexing and Assigning categories

DEFINITION

The hospital formulary is a list of pharmaceutical agents with its important informations which reflects the current clinical views of the medical staff.

The hospital formulary system is a method whereby the medical staff of a hospital with the help of pharmacy and therapeutic committee selects and evaluate medical agents and their dosage form which are considered to be most useful in the patient care. The hospital formulary system provides the information for procuring, prescribing, dispensing and administering of drugs under non-proprietary or proprietary (brands) names in instances

Guiding principles for admitting or deleting of drugs

- 1) **It should be established** whether the local general or specialist has considered the **drug to be of proven clinical value based on their experience with it.**
- 2) **The drug must be recognized** by the **pharmacopoeias and formularies** approved under the Drugs and Cosmetic Act and Rules and the National Formulary of India.
- 3) **The manufacturer of the drugs** must be **licensed under the drugs and cosmetic act and rules** and should not have been punished for any serious offence under any laws pertaining to drugs.

4) No preparation of **secret composition** will be considered or **admitted to the formulary**.

5) **No product** of a **multiple ingredients** shall be **admitted** if the same therapeutic effect can be achieved through the use of a single drug preparation.

This is a very **important and complicated task for the pharmacy and therapeutic committee** to provide a basis of **drugs to be added or deleted in the formulary**.

The **committee** should be **free to invite specialist to attend particular committee meetings** for the purpose of evaluation of preparations commonly used in his specialized practice for including in the formulary.

2) COMPLETE FLOOR STOCK SYSTEM

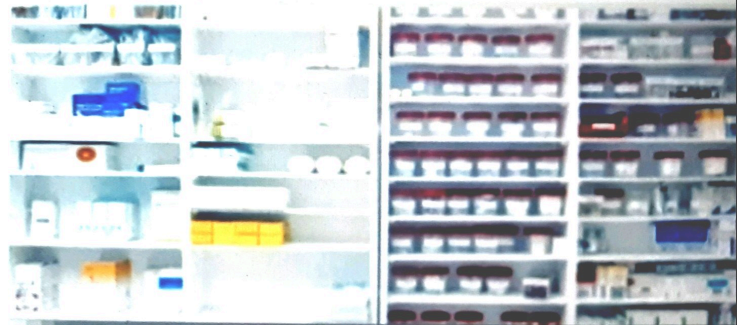
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Drugs on the nursing station are known as Floor Stock Drugs



A) DISPENSING OF CHARGE FLOOR STOCK DRUGS

- These are drugs for which patient is charged for every single dose administered to him
- Selection of these drugs is made by PTC
- Charge floor stock drugs are stored at various nursing stations
- An envelope is used to dispense such drugs

b. Non-charge floor stock drugs:

Non charge floor stock drugs are the medicaments that are placed at the nursing station for the use of all patients on the floor.

- ❑ These drugs ,there shall be no direct charge from the patients account. It is divided in to two methods.

- a. **Drug basket method.**

- b. **Mobile dispensary unit.**

Drug basket method:

- Nurse fill a requisition form for delivery of drugs at their floor;
- When there is an empty container ,the nurse place it in the drug basket.
- Once the basket is completed,it delivery to the floor via messenger service.
- Alternatively mobile dispensary can be utilised.



MOBILE DISPENSARY UNIT

- It is a specially constructed stainless steel truck
- It measures 60 inches high, 48 inches wide and 25 inches deep



Fallowing list of such non-charge drugs

ampoules	capsules	tablets	solutions	powders
adrenaline	dulcolax	Atropine sulphate	Tin.belladona	glucose
digoxin	multivitamins	paracetamol	Castor oil	Sodium bicarbonate
Lidocaine HCl	digitalis	nitroglycerine	Tin.benzoin compound	talcum
aminophylline			Elixir kcl	

3. Combination of individual and floor stock system:

- This system is followed in the government and also in private hospital who run on the basis of no profit and no loss.
- Individual prescription or medication system is followed as a major means.
- Requirement of drugs or surgical items are given to the patient who purchase and deposit these items in hospital wards or rooms under supervision of registered nurse .

OUTPATIENT DISTRIBUTION:

- › Out patient refers to the patients not occupying beds in hospital or in clinics, health centres and other places where out patients usually go for health care.
- › No medicaments should be issued without the prescription.
- › After the issue has been made the quantities supplied must be recorded.
- › In short form the out patient department was called as OPD.

TYPES OF DRUG DISTRIBUTION SYSTEMS:

- › There are five different systems in use for drug distribution in hospitals:
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- i. Individual prescription order system
 - ii. Complete floor stock system
 - iii. Combination of individual prescription and floor stock system
 - iv. Unit dose system
 - v. Non-floor stock system

4. Unit dose dispensing:

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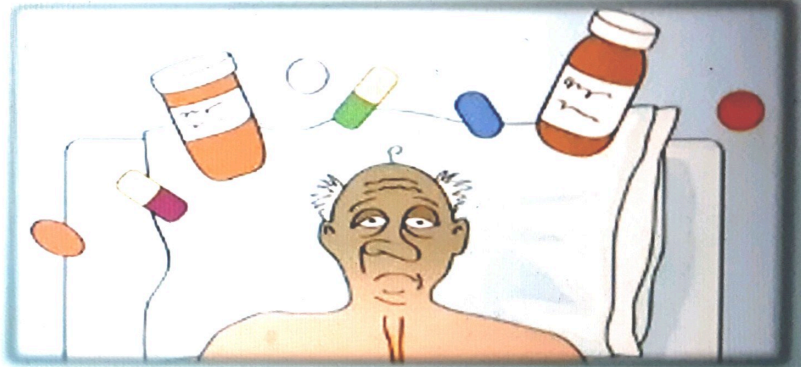


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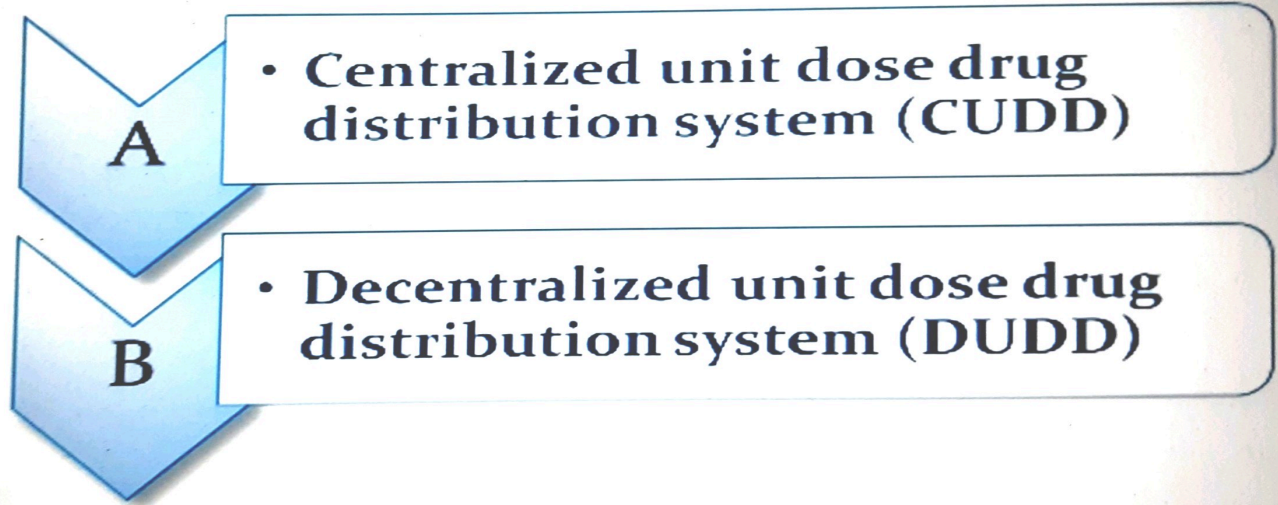
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- ❑ Two methods of dispensing unit doses are:



A. Centralised unit-dose drug distribution system(CUDD):

- ☐ All in-patient drugs are dispensed in unit doses and all the drugs are stored in central area of the pharmacy and dispensed at the time the dose is due to be given to the patient.
- ☐ Drugs are transferred from the pharmacy to the indoor patient by medication cards.

B. Decentralized unit dose dispensing:

This operates through small satellite pharmacies located on each floor of the hospital.

Procedure:

- Patient profile card containing full date ,disease ,diagnosis is prepared.
 - Prescription are sent directly to the pharmacist witch are then entered in the patient profile card.
 - Pharmacist checks medication order.
 - Patient profile card and prescription order is filled by pharmacy technicians.
 - The nurses administer the drugs and make the entry in their records.
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Advantages:

- ☐ Easy for the administration staff.
- ☐ accounting becomes easier in certain cases.
- ☐ better stability of the products

Ex-Eno-fruit salt in sachets.

Disadvantages:

- ☐ High cost.
- ☐ consumes more time and doubtful.
- ☐ will occupy more space for storing.
- ☐ ledger posting and inventory control problem.