Application of Computers in hospital Pharmacy practice

Introduction

Computers are used in Pharmacy Practice to perform various type of works . It reduce the work load of pharmacists. Using computer many of time consuming and difficult works can be done easily , paying less time and efforts . It reduce the paper work and expenses of Hospital Pharmacy .

Nowadays mobile phones are also used at the place of computers in many aspects .

Some specific Applications of Computer in Hospital Pharmacy .

I. Patient Record Data base
II. Patient Medication Profile
III. Inventory management (Purchasing and selling of drugs)
IV. Formation of drug formulary
V. Entry of medication order
VI. Entry of returned drugs .
VII. Billing Procedure .

VIII. to provide Drug related information data
IX. maintaining prescription record
X. help in automated dispensing system .
XI. calculation of drug dosage .
XII. easy to search any recorded data .
XIII. to maintain financial record

Advantage of Computers in Hospitals/ Pharmacy.

1. Computers save times and money of Pharmacy and Hospitals.
2. Computerised records helps Doctors and Pharmacist to see patients' medication records quickly.
3. Computers help in prevention of drug interaction and adverse effects of drugs.
4. Computers helps in assessment, evaluation, maintaining the economic position of Hospital and Pharmacy.
5. Computers helps in advising Doctor on medicine and current clinical research.

Disadvantages of Electronic Health Records

1. The set up cost of Electronic Health Records are costly.
2. All information has to be converted to the digital form.
3. Safety of data is important so protection of Electronic Health Records is very crucial task for IT staff.
4. Implementation of training Program introduce this system to Doctors and other medical staff.
5. It always required software and antivirus updates.

1. Maintenance of Records

➤ This helps in gathering information about all the new patient admission, discharges, transfer and unoccupied beds.

➤ A Pharmacist may retrieve orders for review before administering to patients. The drug order should contain following information.

➤ Drug Name, Generic Name, Strength, Administration route, Dosage schedule, Starting date, Stopping date, Doctor name, Pharmacist name.

5. Hospital Pharmacy & Retail Pharmacy

Computers are used in all business and government organization. Computers are useful in following ways in Hospital and Retail Pharmacy.

1. Computers prepare e prescription or digital prescription.
2. It helps in calculating total prescription cost.
3. Computers track all medicine stocks.
4. Computers track near expiry medicine and gives notification alerts
5. Computers are also helps in generating invoices.

Electronic Health record (EHR)

It is an electronic health record of patient which maintained by the health care providers, it contain all the essential clinical data related to patient care for example disease , medication , immunization , laboratory reports, radiology reports , disease history .

And it can be up-to-dated and shared to patient and to other healthcare providers through electronic medium .

Components of EHR

1. patient contact details
2. details of consultation with medical exports
3. allergies
4. insurance information
5. family history
6. vaccination history
7. information regarding any illness
8. medicine list
9. hospitalisation record
10. Details regarding any previous surgeries or procedures

Advantages Of EHR

- It provides patient's complete , accurate , and up-to-date information during providing health care .
- It shares patient 's data through electronic medium to the patient and other health care providers .
- It helps to prevent medical errors .
- it makes easy to provide health care services .
- It decrease costs by reducing paperwork and repeated laboratory and radiology tests .

Softwares Used in Hospital Pharmacy

Various softwares are available in market that help the pharmacist and community pharmacy that decrease the efforts of Pharmacists and save a lot of time

some examples of softwares are following :

1) EHR : It provides complete patients 's medical records in electronic form which can be updated and shared to patients and other health care providers .

2) Medical Billing Software : It provides Health care billings name of some of them : NextGen Healthcare HER , Kareo , Therapy notes etc.

3) E-Prescribing : This software is used to create and send a prescription to the pharmacy in electronic form .

4) Telemedicine software : This software helps medical professionals to schedule patient appointments online , using a web browser or a mobile application .

5) Therapeutic Drug Monitoring : (TDM) This software is used to calculate drug dosages according to patient age , weight etc.

6) Drug Information Data Storage : This software provides a complete drug information that a pharmacist requires , like Uses , drug , interaction to drugs or food , dosage , adverse effects , Toxicity etc .

Some important software used in Pharmacy in India are

1. Logic ERP
2. SWIL ERP
3. Marg ERP
4. Halemind
5. MEDICIN ERP
6. RedBook
7. Retail 108
8. eVitalRx