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## **HIS: Hospital Information Systems**

# HIS: Hospital Information Systems

- A **Hospital Information System (HIS)** is a comprehensive information system dealing with all aspects of information processing in a hospital
- As an area of Medical Informatics the aim of HIS is to achieve the best possible support of patient care and administration by electronic data processing.





## HIS IS:

- Deployed all over the hospital
- Composed of different modules
- Manages: Patient Information, Patient Location, Previous Diagnoses, Lab Results, and Mainly financial Things.



## HIS in a hospital serves

- **Patient care** – Delivering innovative, up-to-date care that incorporates the latest clinical research
- **Education** – Providing medical students with hands-on clinical training and knowledge of best practices
- **Research** – Uncovering the latest medical advances and expediting the transition from bench to bedside
- **Community** – Bridging the gaps among referring physicians and surrounding residents, raising awareness and education.

# HIS Modules

- Patients Administration.
  - Registration, Outpatient, Inpatient, ER ...
- Patients Care
  - Clinical documentation, Order entry, OR ...
- Clinical Support.
  - Labs, Pharmacy, Radiology...
- Materials.
  - Inventory, Purchase, Engineering management ...
- Financial and administrative services





# Administrative Applications

- Patient Master Index.
  - Patient registration
  - Unique identifier for each patient
  - Patient information
- Scheduling
  - Doctors Schedule Definition
  - Doctors Schedule Workflow
  - Patients Appointment registration
  - Waiting list management



- Decision Support
  - Medical Knowledge
  - patient data
  - Case-specific advice
- Electronic Medical Record:
  - The Patient information is entered into computer.
  - Well-structured and accessible patient data
  - Diseases, diagnosis, test results, medication data, etc
- Coding And Grouping:
  - Standardization
  - Sharing of Information.



## **New Digitalized HealthCare modules**

- EMR (Electronic medical record)
- Bar-coded medication management
- CPOE (Computerized physician order entry): is an information technology application that can enhance patient care by:
  - Improving communication
  - Providing immediate information access
  - Facilitating decision support.
  - Ensure standardized, legible and complete orders.
  - Provide alert messages : Drug interactions and Allergies
  - Reduce prescribing errors and harm to patients.
  - Support clinical decision making.
  - Improve timeliness and quality of care.
  - Automate the ordering process





## **Patient Medical History**

- The Patient Medical History program facilitate viewing of all patient history and all the activities performed on the patient under their consultation with a single unique ID (Hospital Patient ID).
- End User can see List of Appointments, Lab Results, Outpatient & Inpatient Pharmacy Profile and Theatre Bookings/Operations of the patient from the Patient Medical History Summary screen.