HOSPITAL MANAGEMENT SYSTEM

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Contents

Requirements Analysis

Hospital is divided into **Wards:**
- o A **unique** Ward name
- o **Unique** ID
- o Specialty
- o ID of day sister
- o ID of night sister

Nurses *work for a ward:*
- o A **unique** Nurse ID
- o Name
- o Role (Day sister, Night sister, staff nurse)
- o Is the nurse registered for nursing (true if nurse is registered, else false)
- o CNIC
- o Address
- o Phone number

Doctor:
- o A **unique** Doctor ID
- o Name
- o CNIC
- o Address
- o Phone number

Patient *is treated by doctor:*
- o A **unique** patient ID
- o Name
- o Address
- o CNIC
- o Phone Number
- o Date of Birth

A nurse is in charge of one **Care-Unit:**
- o A **unique** unit ID
- o ID of nurse in charge

Each care-unit has a **Bed:**
- o **Unique** Bed ID
- o Purchase Date
- o Availability (true/false)

Team of doctors is led by a consultant doctor:
- A **unique** team ID
- Date when team was formed
- ID of leading consultant

Team has Members:
- A Member's **unique** doctor ID
- Role
- Performance Grade

Each Member makes Progress:
- A **Unique** progress ID
- Performance Grade
- Date of Grading

Complaint is made by patient:
- A unique code
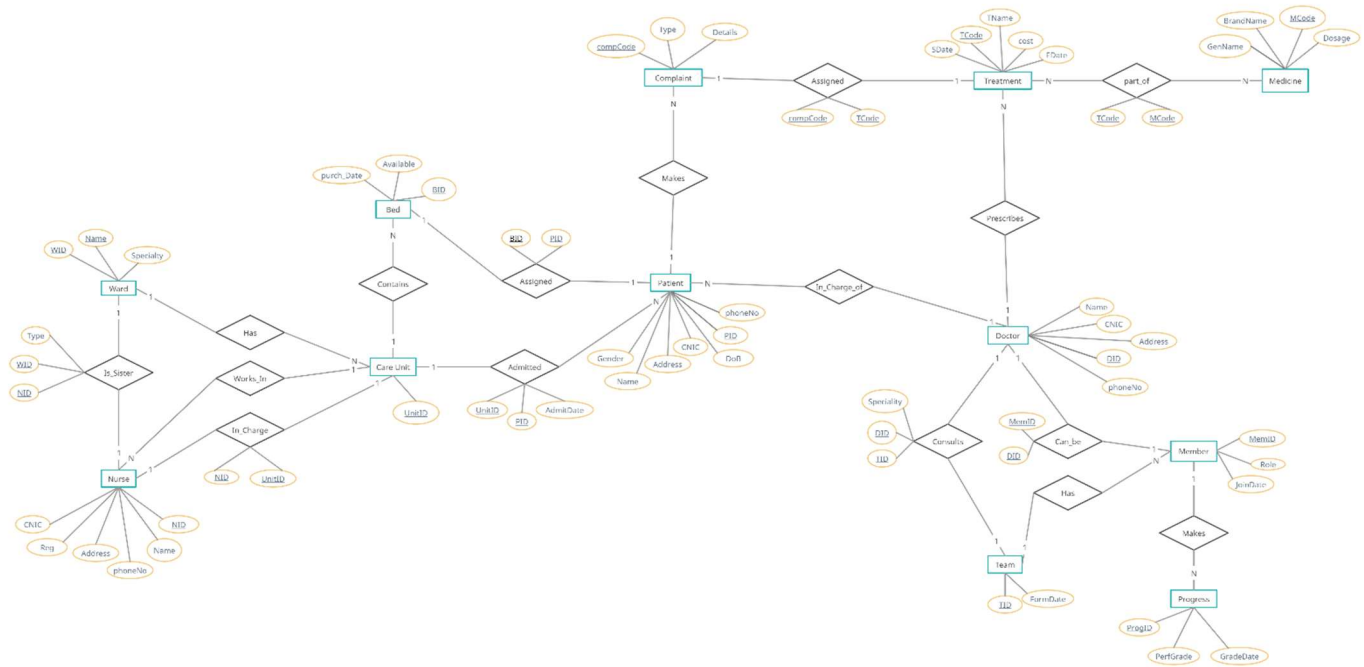- Complaint type
- Details

Treatment is prescribed by doctor:
- A **unique** treatment code
- A name for the treatment/procedure
- Cost of treatment
- Start Date
- End Date

Medicine is part of the treatment:
- A **unique** Medicine code
- Brand Name
- Generic name
- Dosage

ERD

(See attached JPEG image of above ERD for clarity)

ERD was made using creately.com

Mapping

Ward (<u>WID</u>, WName, Specialty)

Care_Unit (<u>UnitID</u>, WID)

➢ *WID references Ward(WID)*

Nurse (<u>NID</u>, N_Name, CNIC, Address, phoneNo, Reg, UnitID)

➢ *UnitID references Care_Unit(UnitID)*

Bed (<u>BID</u>, purch_Date, available, UnitID)

➢ *UnitID references Care_Unit(UnitID)*

Patient (<u>PID</u>, PName, CNIC, phoneNo, DoB, Address, Gender, UnitID, DocID)

➢ *UnitID references Care_Unit(UnitID)*
➢ *DocID references Doctor(DID)*

Complaint (<u>compCode</u>, Type, Details, PID)

➢ *PID references Patient(PID)*

Treatment (<u>TCode</u>, TName, cost, SDate, EDate, DID)

➢ *DID references Doctor(DID)*

Medicine (MCode, GenName, BrandName, Dosage)

Doctor (<u>DID</u>, DName, CNIC, Address, phoneNo)

Team (<u>TID, FormDate</u>)

Member (<u>MemID</u>, Role, JoinDate, TID)

➤ *TID references Team(TID)*

Progress (<u>ProgID</u>, PerfGrade, GradeDate, MemID)

➤ *MemID references Member(MemID)*

Treatment_Med (<u>TCode</u>, <u>MCode</u>)

➤ *TCode references Treatment(TCode)*
➤ *MCode references Medicine(MCode)*

Doc_Mem (<u>MemID</u>, <u>DID</u>)

➤ *MemID references Member(MemID)*
➤ *DID references Doctor(DID)*

Consultant (<u>DID</u>, <u>TID</u>, Speciality)

➤ *DID references Doctor(DID)*
➤ *TID references Team(TID)*

Admit (<u>UnitID</u>, <u>PID</u>, AdmitDate)

➤ *UnitID references Care_Unit(UnitID)*
➤ *PID references Patient(PID)*

Bed_Assign (<u>BID</u>, <u>PID</u>)

➤ *BID references Bed(BID)*
➤ *PID references Patient(PID)*

Sister (<u>WID</u>, <u>NID,</u> Type)

⬆ ⬆

> ➢ *WID references Ward(WID)*
> ➢ *NID references Nurse(NID)*

Unit_InCharge (<u>NID</u>, <u>UnitID</u>)

⬆ ⬆

> ➢ *NID references Nurse(NID)*
> ➢ *UnitID references Care_Unit(UnitID)*

Comp_Treatment (<u>compCode</u>, <u>TCode</u>)

⬆ ⬆

> ➢ *compCode references Complaint(compCode)*
> ➢ *TCode references Treatment(TCode)*