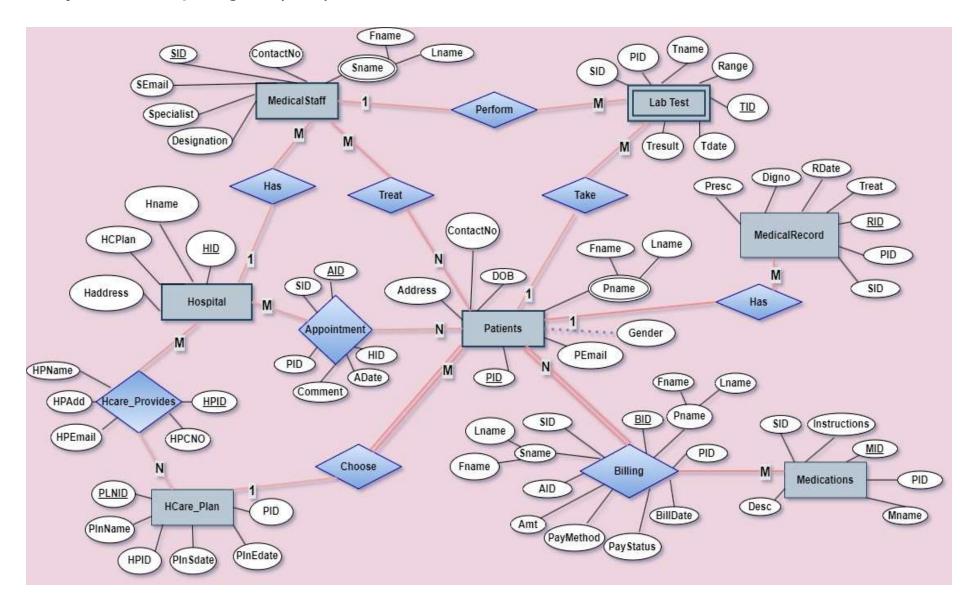
## **DELIVERABLE 1**

## Group N

# PROJECT TOPIC: HEALTHCARE MANAGEMENT SYSTEMS

| Group members          | CWID      | Contribution |
|------------------------|-----------|--------------|
| Dhanvanth Voona        | A20543395 | 20%          |
| Neeraj Vardhan Buneeti | A20545853 | 20%          |
| Priyadarshani LNU      | A20561249 | 20%          |
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## **Entity Relationship Diagram (ERD)**



#### **ABBREVIATIONS:**

- PID PATIENT ID
- Pname PATIENT NAME
- fname, Iname FIRST NAME, LAST NAME
- DOB DATE OF BIRTH
- HID HOSPITAL ID
- Haddress HOSPITAL ADDRESS
- HCPlan HEALTHCARE PLAN
- SID STAFF ID / MEDICAL STAFF ID
- Sname STAFF NAME
- SEmail STAFF EMAIL
- AID APPOINTMENT ID
- ADate APPOINTMENT DATE
- RID RECORD ID / MEDICAL RECORD ID
- RDate RECORD DATE
- Diagno DIAGNOSIS
- Treat TREATMENT
- Presc PRESCRIPTION
- BID BILL ID
- Amt AMOUNT / BILLING AMOUNT
- payStatus PAYMENT STATUS
- pmethod PAYMENT METHOD

- MID MEDICATION ID
- Mname MEDICATION NAME
- desc DESCRIPTION / MEDICATION DESCRIPTION
- HCareProviders HEALTHCARE PROVIDERS
- HCarePlan HEALTHCARE PLAN
- HPID HEALTHCARE PROVIDER ID
- HPName HEALTHCARE PROVIDER NAME
- HPAdd HEALTHCARE PROVIDER ADDRESS
- HPCNO HEALTHCARE PROVIDER CONTACT NO
- HPEmail HEALTHCARE PROVIDER EMAIL
- PLNID HEALTHCARE PLAN ID
- PlnName HELATHCARE PLAN NAME
- PlnSdate HEALTHCARE PLAN START DATE
- PInEdate HEALTHCARE PLAN END DATE
- TID TEST ID / LAB TEST ID
- Tdate LAB TEST DATE
- TName LAB TEST NAME
- Tresults LAB TEST RESULTS

### List of schema from ER diagram

- Patients(PID, Pname[fname, Iname], DOB, Gender, address, ContactNo, PEmail)
- Hospital(<u>HID</u>, Hname, Haddress, HCPlan)
- MedicalStaff( SID , Sname [Fname , Iname ], Specialist ,ContactNo , SEmail , Designation )
- Appointment( AID , PID , SID , ADate , Comment, HID )
- MedicalRecords(<u>RID</u>, PID, SID, Rdate, Diagno, Treat, Presc)
- Billing( BID , PID , Pname[fname,Lname] , SID , sname[Lname,fname], AID, BillDate , Amt , payStatus , pmethod )
- Medications( MID , Mname, PID , SID , desc , Instructions )
- Hcare provides (<u>HPID</u>, HPName, HPAdd, HPCNO, HPEmail)
- Hcare plan ( <u>PLNID</u> , PID , HPID , PlnName , PlnSdate , PlnEdate )
- LabTests( TID , PID, SID , Tdate , TName , TResults , Range )

### **Business Rules:**

- A Patient can book an appointment in many Hospitals, and each hospital can enroll many patients.
- A Patient can take many lab tests, each lab test is associated with only one patient.
- A Patient can get treated by many medical staff, and also a medical staff can perform treatment to many patients.
- A Patient can have many medical records, each medical record is associated with only one patient.
- A health care plan can be chosen by many patients, each patient can choose only one healthcare plan.
- A MedicalStaff can perform many lab tests, each lab test performed is associated with only one medical staff.
- A Patient can be billed for many medications, and each medication can have 0 or many patients.
- Each medical staff is associated with one hospital, and one hospital can have many medical staff.
- A Healthcare Plan can be provided to many hospitals and each hospital can also have many health care plans.