**Conducts** (Doctor to MedicalTest)

**MedicalTest**  

**Doctor** 

**OutPatient**

**InPatient**

ISA

**Patient** 

**Undergoes** (Patient to MedicalTest)

**Treatment** (Doctor to Patient)

**E-R diagram, Queries  
  
The hospital management system is to be developed. The hospital records patient ID, patient name, gender, email and address. The patient can be in-patient  or out-patient. For in-patient, the room# is stored where as for out-patient, the outward number is stored. The hospital also records doctor id, doctor name, field of specialization and joining date. The medical tests are conducted for several patients. For each patient, test\_id, test\_type, medicines and observations are stored. Draw E-R diagram.**

Relationships

1. **Treatment** (Doctor to Patient)
   * Many-to-Many relationship (a doctor can treat many patients, a patient can be treated by many doctors)
   * Attributes: TreatmentDate, Diagnosis
2. **Conducts** (Doctor to MedicalTest)
   * One-to-Many relationship (a doctor can conduct many tests, each test is conducted by one doctor)
3. **Undergoes** (Patient to MedicalTest)
   * One-to-Many relationship (a patient can undergo many tests, each test is for one patient)