Relational Schema:

Employee(employee_id, email, phone, firstname, lastname)
PK is employee_id

Receptionist(**employee_id**)
PK is employee_id
FK employee_id references Employee(employee_id)

Physician(**employe_id**, license_number, specialization)
PK is employee_id.
FK employee_id references Employee(employee_id)
**license_number can be used as an alternate key

Clinic(clinic_id, address, phone)
PK is clinic_id.

Employs(**employee_id, clinic_id,** start_date, hours)
PK is employee_id, clinic_id
FK employee_id references Employee(employee_id)
FK clinic_id references Clinic(clinic_id)

Patient(patient_id, firstname, lastname, phone, address, gender, email, birthdate, emergency_contact)
PK is patient_id

Appointment(**license_number,** date, starttime, **clinic_id, patient_id**, code, endtime, comments)
PK is clinic_id, license_number, date, starttime.
FK clinic_id references Clinic(clinic_id)
FK license_number references Physician(license_number)
FK patient_id references Patient(patient_id)

CaresFor(**license_number, patient_id**)
PK is license_number, patient_id
FK license_number references Physician(license_number)
FK patient_id references Patient(patient_id)
i.e. what physician each patient is assigned to (may be multiple)

Laboratory(lab_id, city)
PK is lab_Id

Test(test_id, status, results, description, time,**lab_id**)
PK is test_Id
FK lab_id references Laboratory

LabOrder(**lab_id**, **test_id**, **license_number**, **patient_id,** date)

PK is lab_id, test_id, license_number ,patient_id, date

FK lab_id references Laboratory(lab_id)

FK test_id references Test(test_id)

Prescribes(**drug_id, prescription_id**, quantity)

PK is drug_id, prescription_id

FK drug_id references Drug(drug_id)

FK prescription_id references Prescription(drug_id)

Prescription(prescription_id, date, **patient_id, license_number**)

PK is prescription_id

FK patient_id references Patient(patient_id)

FK license_number references Physician(license_number)

Drug(drug_id, description, name, class, price)

PK is drug_id

***in reality, medication, immunization, allergies, and treatments are likely to be separate tables to represent the many to many relationship, however, for simplicity we decided to leave them as a textual description. eg) treatments("patient receiving physiotherapy twice a week.")*

MedicalRecord(medical_record_id, **patient_id**, height, weight, notes, medications, immunizations, allergies, treatments)

PK: medical_record

FK patient_id references Patient(patient_id)