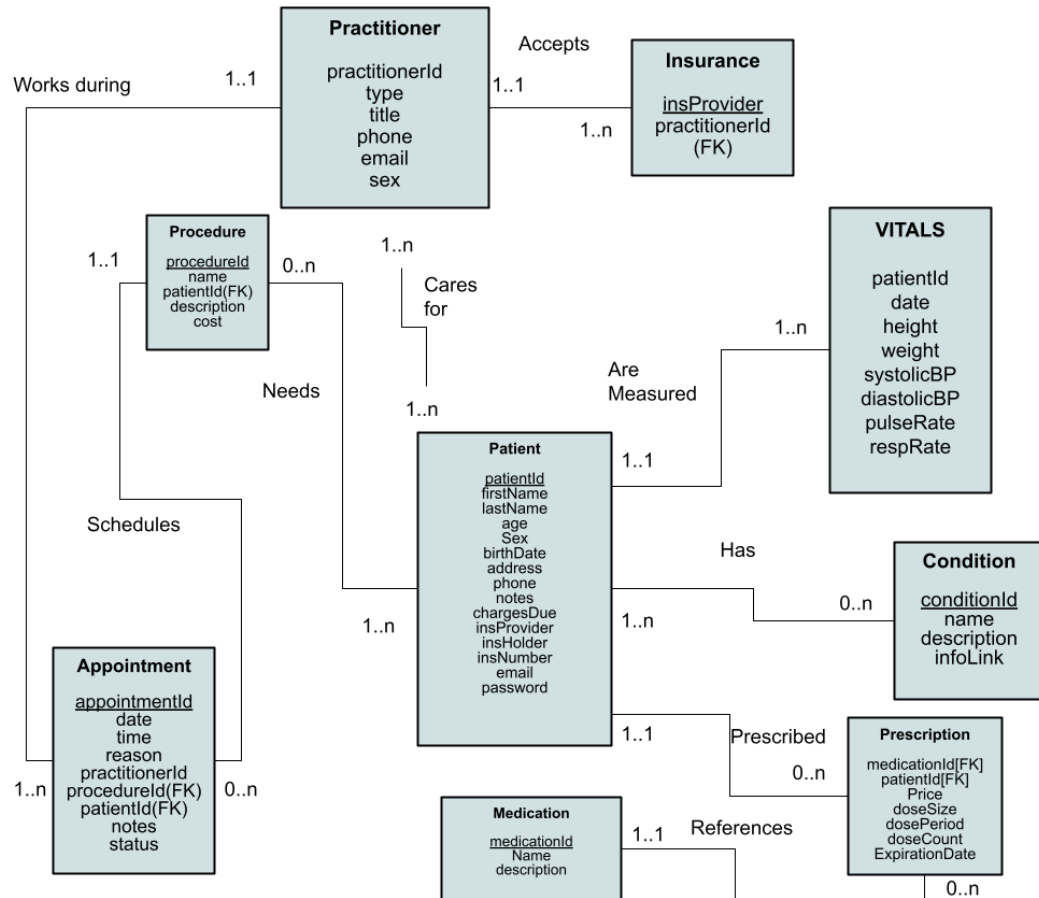


# UML Diagram



\*Descriptions of ambiguous attributes are presented in the “Relational Schema” section.

## Relational Schema

Patient(patientId INT [PK], firstName VARCHAR(32), lastName VARCHAR(32), age INT, sex VARCHAR(16), birthDate DATE, address VARCHAR(64), phone VARCHAR(16), notes VARCHAR(1024), chargesDue REAL, insProvider VARCHAR(32), insHolder VARCHAR(32), insNumber INT, email VARCHAR(32), password VARCHAR(32))

Notes allows for some more qualitative notes to be kept about a patient that don't have a place in the relational schema

Procedure(procedureId INT [PK], name VARCHAR(64), patientId INT [FK to Patient.patientId], description VARCHAR(1024), cost REAL)

Description refers to the type of work done during the procedure

Appointment(appointmentId INT [PK], date DATE, time TIME, reason VARCHAR(256), practitionerId INT [FK to Practitioner.practitionerId], procedureId INT [FK to Procedure.procedureId], patientId INT [FK to Procedure.patientId], notes VARCHAR(1024), status VARCHAR(16))

Notes refers to a place where qualitative notes can be taken about certain aspects of an appointment

Status refers to the state of the appointment (ex: checked in, canceled, completed, etc)

practitionerId refers only to the main doctor that will be administering the procedure during the appointment

HasCondition(conditionId INT [FK to Condition.conditionId], patientId INT [FK to Patient.patientId])

Condition(conditionId [PK], name VARCHAR(32), description VARCHAR(1024), infoLink VARCHAR(128))

Description refers to a short description about what the condition is and possibly some symptoms

More detailed information about the condition can be found through the link provided in the infoLink field

Vitals(patientId INT [FK to Personal.patientId], date DATE, height INT, weight INT, systolicBP INT, diastolicBP INT, pulseRate INT, respRate INT)

Blood pressure has 2 numbers associated with it which is why there are 2 fields for it.

Prescriptions(medicationId INT [FK to Medication.medicationId], patientId INT [FK to Patient.patientId], Price REAL, doseSize VARCHAR(16), dosePeriod VARCHAR (16), doseCount INT, ExpirationDate DATE)

A prescription for our schema involves taking a 1 dose every dosePeriod. There are a number of doses in a prescription equal to dose count. doseSize is the size of the dose.

ExpirationDate refers to when a medication goes bad, not when you would run out of medication. From this, we will be able to set reminders in the patient portal for scheduling an appointment.

Medications(medicationId INT [PK], name VARCHAR(32), description VARCHAR(75))

Description provides a field to describe what the medication treats or does

Practitioner(practitionerId INT [PK], name VARCHAR(32), title VARCHAR(32))

Title refers to the field that the practitioner works in

Cares(practitionerId INT [FK to Practitioner.practitionerId], patientId INT [FK to Patient.patientId])

A patient can be assigned to multiple practitioners and a practitioner can be assigned to multiple patients.

Insurance(insProvider VARCHAR(32) [PK], practitionerId INT [FK to Practitioner.practitionerId])

NeedProcedure(patientId INT [FK to Patient.patientId], procedureId INT [FK to Procedure.procedureId])