Relational Database

Doctors (**DID**, Name, Specialty, years of Experience)

Patients (PID, Name, Age, Address, Doctor)

Pharmacies (Name, Address, Phone)

Pharmaceutical Company (Name, Phone)

Drugs (**Trade Name**, Formula)

Prescribes (Patient, Doctor, Trade Name, Date, QTY)

Sells (Trade Name, Pharmacy, Price)

Contracts (Pharmaceutical Company, Pharmacy, Start Date, End Date, Supervisor)

Creates (Drugs, Pharmaceutical Companies)

Primary Physician (Doctor SIN, Patient SIN)

Patients:

PID (Patient Identifier) -> Name, Address, Age

Primary Physician (Doctor DID) -> PID (Patient Identifier)

Doctors:

DID (Doctor Identifier) -> Name, Specialty, Years of Experience

Pharmaceutical Companies:

Name (Company Identifier) -> Phone Number

Drugs:

Trade Name, Pharmaceutical Company Name -> Formula

Trade Name, Pharmaceutical Company Name -> Price

Pharmaceutical Company Name -> Trade Name (Unique identification of drugs within a company)

Pharmacies:

Name (Pharmacy Identifier) -> Address, Phone Number

Prescriptions:

(DID, PID, Drug Trade Name, Prescription Date) -> Quantity

(DID, PID, Drug Trade Name, Prescription Date) is a composite key to ensure that the same doctor cannot prescribe the same drug to the same patient on the same day.

Pharmaceutical Company Contracts:

(Pharmaceutical Company Name, Pharmacy Name, Start Date) -> End Date (Pharmaceutical Company Name, Pharmacy Name, Start Date) is used to define the contracts between pharmaceutical companies and pharmacies.

Pharmacy Supervisors:

(Pharmacy Name, Pharmaceutical Company Name, Start Date) -> Supervisor

(Pharmacy Name, Pharmaceutical Company Name, Start Date) is used to associate a supervisor with a specific contract between a pharmacy and a pharmaceutical company.

