**DRUG DISPENSING TOOLS REQUIREMENTS:**

i. Patients are identified by SSN, and their names, addresses, and also ages.

ii. Doctors are identified by an SSN, for each doctor, the name, specialty and years of experience must be recorded.

iii. Each pharmaceutical company is identified by name and has a phone number.

iv. For each drug, the trade name and formula must be reordered. Each drug is sold by a given pharmaceutical company, and the trade name identifies a drug uniquely from among the products of that company. If a pharmaceutical company is deleted, you need not keep track of its products any longer.

v. Each pharmacy has a name, address, and phone number.

vi. Every patient has a primary physician. Every doctor has at least one patient.

vii. Each pharmacy sells several drugs and has a price for each. A drug could be sold

at several pharmacies, and the price could vary from one pharmacy to another.

viii. Doctors prescribe drugs for patients. A doctor could prescribe one or more drugs

for several patients, and a patient could obtain prescriptions from several doctors. Each prescription has a date and a quantity associated with it. You can assume that if a doctor prescribes the same drug for the same patient more than once, only the last such prescription needs to be stored.

ix. Pharmaceutical companies have long-term contracts with pharmacies. A pharmaceutical company can contract with several pharmaceutical companies. For each contract, you have to store a start date, and end date, and the text of the contract.

x. Pharmacies appoint a supervisor for each contract. There must always a supervisor

for each contract

xi. Doctors issue medication orders for in-patients. Medication orders are identified by the name, dose, time of issue, date of issue, instruction for use and route of administration.

xii. A prescription is issued for outpatients and are be identified by date and quantity.

xiii. A drug interaction checker stores the medication, the severity of the illness, the duration and interaction id.