Requirements for Health Insurance Database

The goal of this database is to keep track of health insurance information of people living in the metropolitan Boston area who have health insurance through their employers.

1. Each person is identified by his/her SSN. In the database, we want to keep the following information: SSN, name, phone number, address, primary care physician, insurance company, and employer. Each person has exactly one primary care physician, is insured with exactly one insurance company, and works for exactly one employer.

2. For each physician, we want to keep a unique identification number, name, phone number, address, specialty, insurance companies he/she has a contract with, and the hospital he/she is affiliated with. A physician has a contract with one or more insurance companies and is affiliated with one or more hospitals.

3. Each hospital in the database will have its name, phone number, and address.

4. For each insurance company, we want to keep the name, phone number, and address.

5. For each employer, we will keep the name, phone number, address, and insurance   companies with which the employer has contracts. An employer has a contract with   one or more insurance companies.

6. Whenever a person visits a physician, we want to keep the following information for   each visit: patient's SSN, doctor's id, diagnosis, and visit date. The record must also show whether the doctor is the patient's PCP or not. We assume that a patient visits the same physician at most once a day but can visit multiple

physicians on the same day.

7. We want to keep information about insurance claims. For each visit, one or more claims are filed with the insurance company from which the person has health insurance. For each claim, we want to keep a unique claim number, claim amount, filed date, and paid date.