

HEADER:

Database Normalization for Doctor's Office Patient and Service Tracking System

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BUSINESS ANALYSIS:

The doctor's office requires a database system designed to track the services rendered to patients and manage billing through households. The system needs to account for the complex relationships between patients, their households, and the various services they receive, including multiple services on different dates. The database should enable the office to understand its financial interactions with each household as a billing unit while maintaining detailed records of individual patient care.

ASSUMPTIONS

- Each household will have a unique identifier, separate from the patients themselves.
- Services rendered will be billed directly to the household rather than individual patients.
- Patients are uniquely identified, regardless of whether they share a household with other patients.
- Services have unique billing codes, which may correspond to similarly named services but will be distinct for billing and tracking purposes.
- The database will not track payments or changes to the balance due, only the balance itself.

BUSINESS RULES**1. Patients:**

- The system must be able to track multiple patients.
- Each patient is assigned to exactly one household.
- Patients may receive multiple services.

2. Households:

- A household can include multiple patients.
- Each household has a single outstanding balance at any given time.

3. Services:

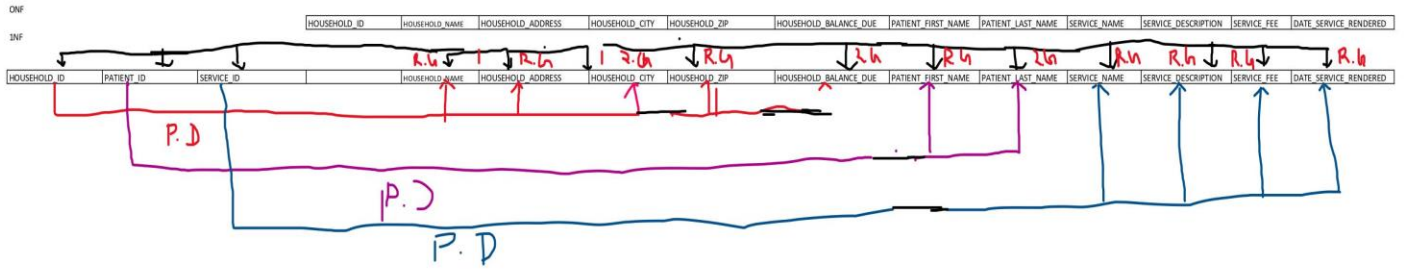
- Services are identifiable by unique codes.

- Each service has a defined fee.
- A patient can receive the same service on multiple occasions.

4. **Service Renderings:**

- Each instance of a service rendered to a patient is recorded with a date.
- Service renderings link patients to the services they receive.

5.



Entity Diagram:

HOUSEHOLD

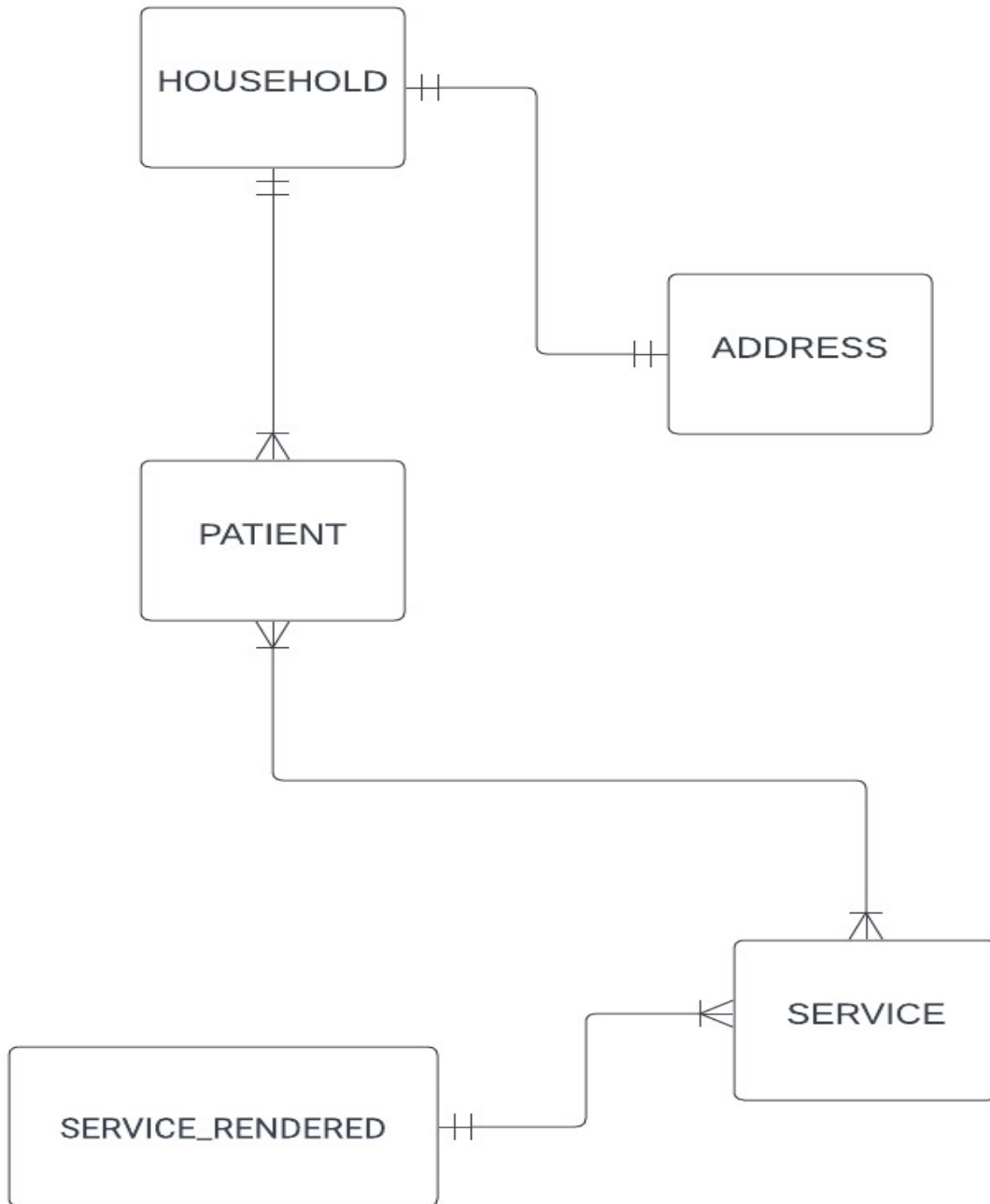
ADDRESS

PATIENT

SERVICE

SERVICE_RENDERED

Relationship Diagram:



EDR Diagram:

