Here’s a conceptual schema:

1. \*\*Users Table\*\* - To store information about all users.

- id (Primary Key)

- username

- password\_hash

- role\_id (Foreign Key to Roles Table)

- email

- created\_at

- updated\_at

2. \*\*Roles Table\*\* - To define different user roles.

- id (Primary Key)

- role\_name

3. \*\*Patients Table\*\* - To store patient specific information.

- id (Primary Key)

- user\_id (Foreign Key to Users Table)

- first\_name

- last\_name

- dob (date of birth)

- medical\_record\_number

4. \*\*Medical Professionals Table\*\* - To store details about medical staff.

- id (Primary Key)

- user\_id (Foreign Key to Users Table)

- first\_name

- last\_name

- title

- department

5. \*\*Devices Table\*\* - To manage medical devices.

- id (Primary Key)

- name

- type

- manufacturer

6. \*\*PatientDevice Table\*\* - To assign devices to patients.

- id (Primary Key)

- patient\_id (Foreign Key to Patients Table)

- device\_id (Foreign Key to Devices Table)

- assigned\_date

7. \*\*Measurements Table\*\* - To store readings from the devices.

- id (Primary Key)

- patient\_device\_id (Foreign Key to PatientDevice Table)

- measurement\_value

- measurement\_time

- type (e.g., blood pressure, glucose level)

8. \*\*Appointments Table\*\* - To manage appointments.

- id (Primary Key)

- patient\_id (Foreign Key to Patients Table)

- professional\_id (Foreign Key to Medical Professionals Table)

- appointment\_time

- status

- notes

9. \*\*Messages Table\*\* - For communications.

- id (Primary Key)

- sender\_id (Foreign Key to Users Table)

- receiver\_id (Foreign Key to Users Table)

- message\_content

- message\_time

- status (e.g., sent, received, read)

10. \*\*Notifications Table\*\* - To send alerts and reminders.

- id (Primary Key)

- user\_id (Foreign Key to Users Table)

- notification\_content

- notification\_time

- status (e.g., pending, delivered)