**PSEUDOCODE**

**Choose if they want to add, update, show all or delete a patient.**

**If they choose add:**

* **Enter for patient information name, age, medical history…**
* **Save data**

**Else if they choose update:**

* **Ask the name of the patient**
  + **If patient's name is a duplicate show both and let them choose which one.**
* **Retrieve the patient’s information**
* **Ask what they would like to change name, age…**
* **Update the patient's information**
* **Go to step 1**

**Else if they choose show all:**

* **Retrieve all patients data**
* **Go to step 1**

**Else if they choose delete:**

* **Ask patient's name**
* **Retrieve the patient’s information**
* **Ask for confirmation**
* **Delete patient**
* **Go to step 1**

Else

* Exit the program.

**FLOWCHART**

**Else**

**Enter: choice**

**1.add, 2.update, 3.show all or 4.delete**

If choice = 2

If choice = 1

If choice = 3

If choice = 4

Retrieve all data

**Enter:Name**

**Enter: Name,** Date of birth, Gender,Contact information (address, phone, email),Medical history.

**Enter:Name**

Retrieve patient data

If Name is duplicate

Retrieve patient data

If Name is duplicate

**Enter:Choice for name, age…**

Save data

**Enter:Confirm**

Delete patient

**Enter:Choice**

**Enter: the update data**

**Enter:Choice**

Update data

**Patient Demographics:**

1. First name
2. Last name
3. Date of birth
4. Gender
5. Contact information (address, phone, email)
6. Emergency contact details

**Medical History:**

1. Past medical conditions
2. Surgical history
3. Allergies and adverse reactions
4. Current medications
5. Family medical history

**Clinical Data:**

1. Vital signs (e.g., blood pressure, temperature, heart rate, respiratory rate)
2. Height, weight, and body mass index (BMI)
3. Physical examination findings
4. Diagnostic test results (e.g., lab tests, imaging studies)
5. Diagnoses and problem lists

**Treatment and Care Plan:**

1. Prescribed medications, including dosage, frequency, and instructions
2. Ordered diagnostic tests and procedures
3. Physician notes and care plans
4. Referrals to specialists or other healthcare providers
5. Immunization records

**Appointment and Scheduling:**

1. Ability to schedule, reschedule, and cancel appointments
2. Automated appointment reminders and patient notifications
3. Integration with calendar systems

**Patient Communication:**

1. Secure messaging and communication between patient and healthcare provider
2. Ability for patients to request prescription refills, access test results, and update personal information

**Document Management:**

1. Secure storage and retrieval of scanned or uploaded documents (e.g., consent forms, insurance cards, advance directives)
2. Ability to attach supporting documents to patient records

**Billing and Insurance:**

1. Patient insurance information, including plan details and coverage
2. Billing and payment history
3. Integration with practice management or revenue cycle systems

**Data Security and Access Controls:**

1. Role-based access permissions to ensure appropriate access to patient data
2. Audit trails for all user actions and data modifications
3. Compliance with relevant healthcare regulations (e.g., HIPAA)