

SMART CLINICAL SUPPORT: A UNIQUE APPROACH TO HEALTHCARE SUPPORT IN BANGLADESH

PRESENTED BY

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Introduction

Smart Clinical Support



- Web-based Healthcare service
- Prevent Prescribing Error in Bangladesh
- **FHIR & HAPI FHIR** for digital records

Key points

Smart Clinical Support



Patients previous
health record

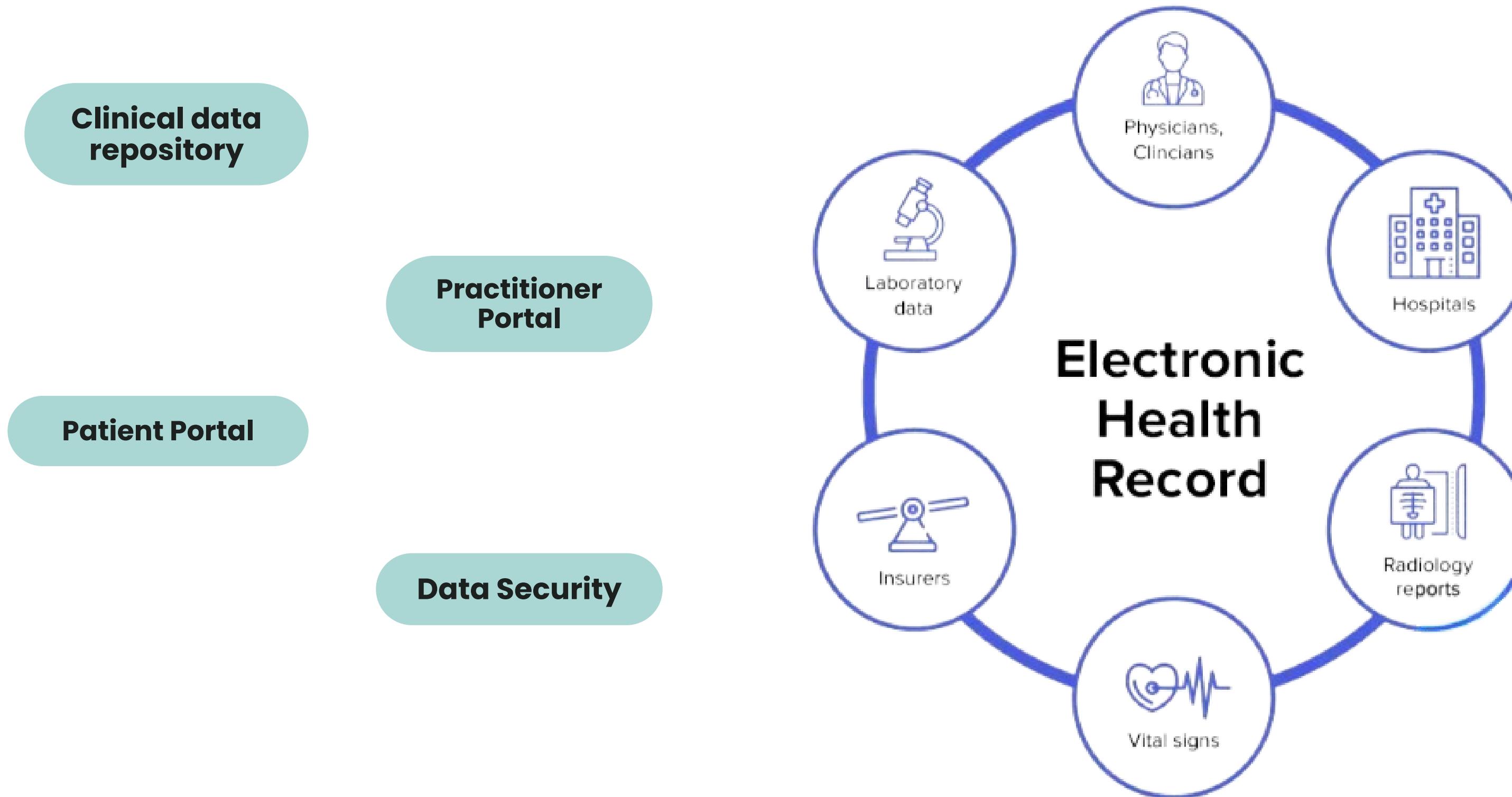


Prevent Drug
Interaction



Data sharing between
clinics

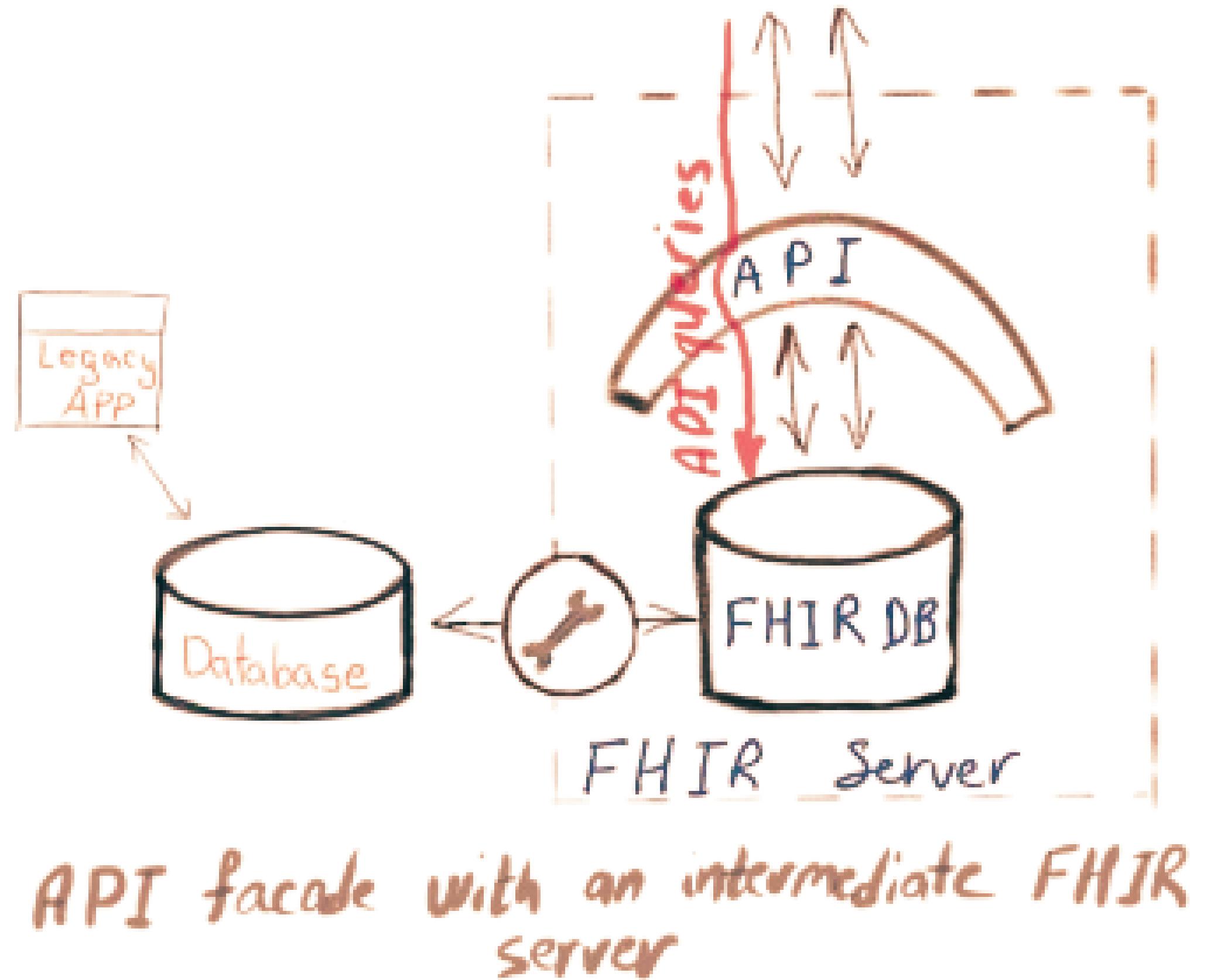
Electronic Health Record



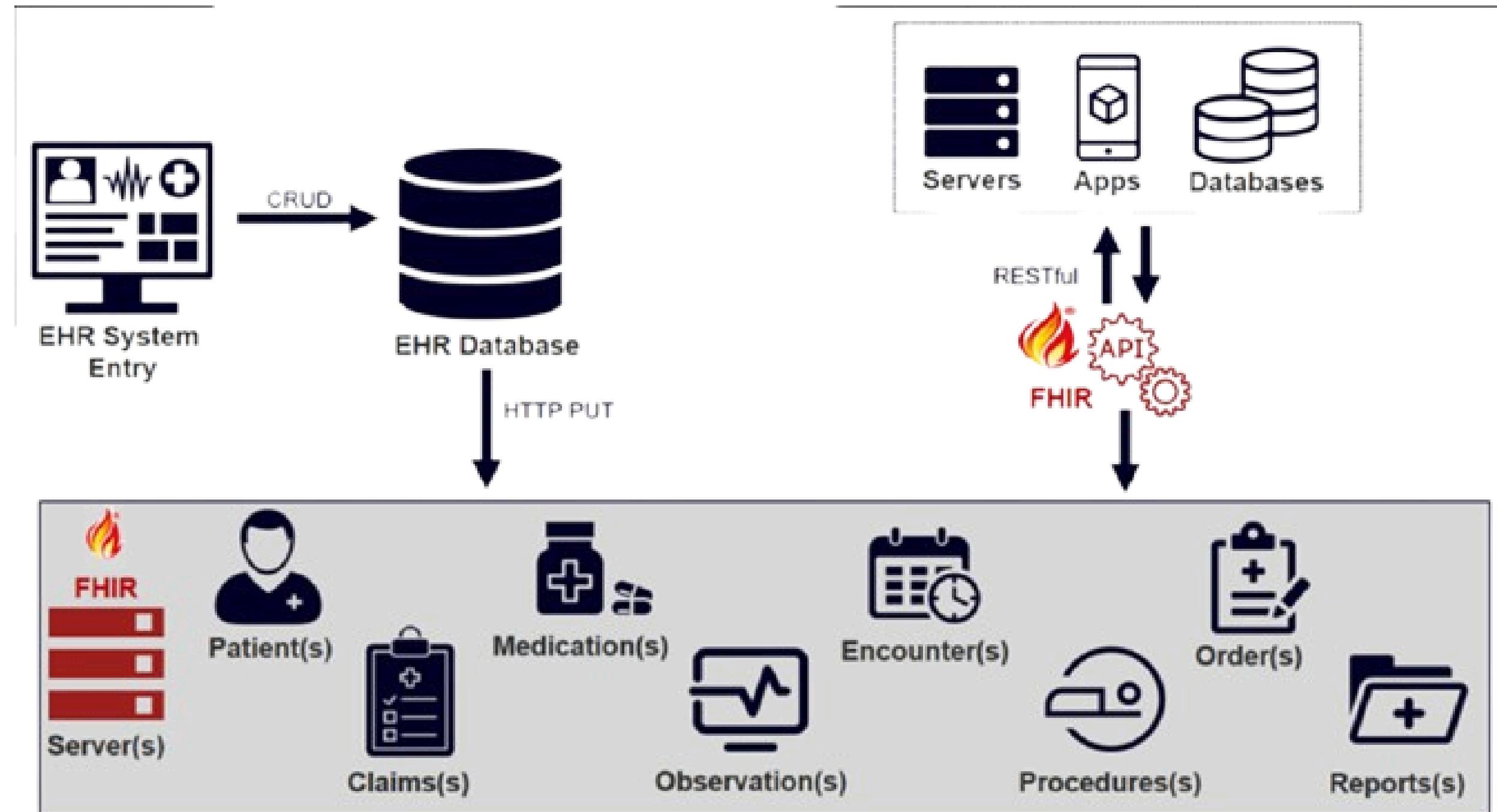
FHIR

Fast Healthcare Interoperability Resources (FHIR) is a standard for sharing healthcare data between systems. FHIR is used to exchange electronic health records (EHRs) between providers and organizations.

HAPI FHIR



Integrating EHR with HAPI FHIR



RELATED WORKS

Smart Clinical Support

F

FHIR
Based
EHR Integration

FHIR
Based
EHR
Integration

Accurate
Diagnostic
and
Treatment

Doctor
Patient
Appointment
System

AI in
medical
support

D

Doctor
Patient Appointment
System

A

Accurate Diagnostic and
Treatment

AI

AI in medical
support

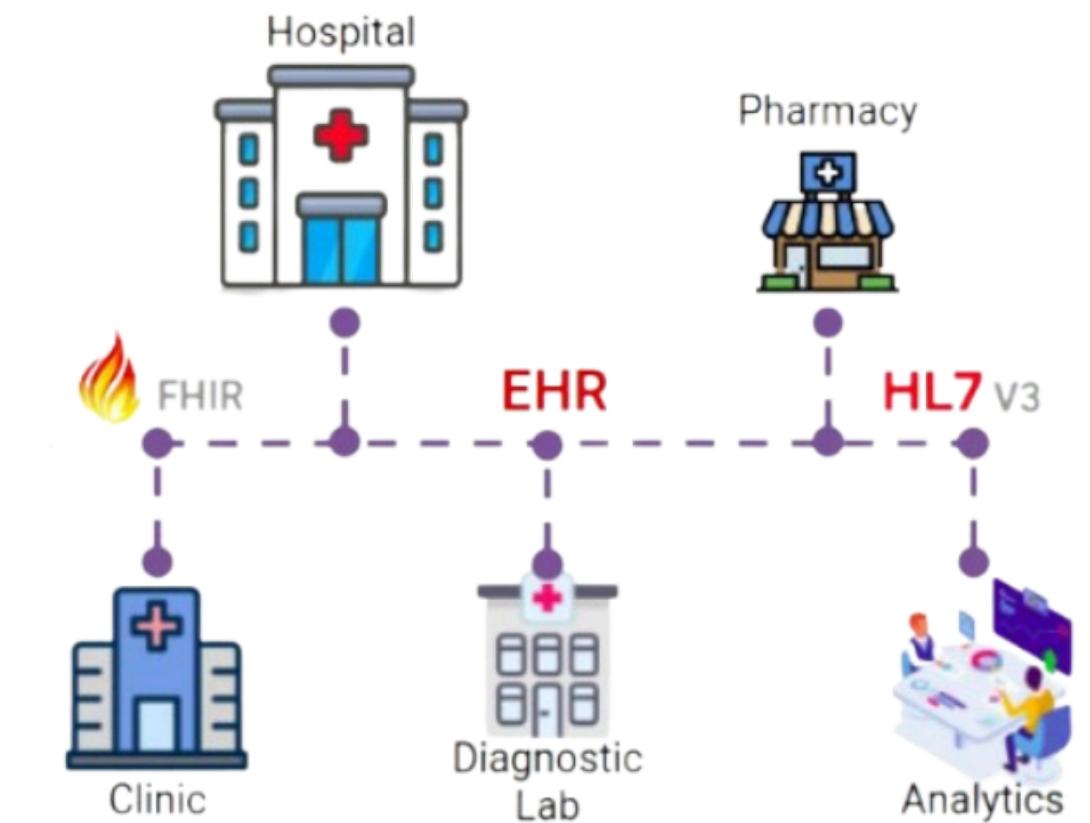
Key Research Papers

"Using FHIR to develop a healthcare mobile application"
(Lamprinakos et al.)

- ✓ Directly focuses on FHIR for healthcare data exchange
- ✓ RESTful architecture for electronic personal health records (EHRs)
- ✓ Enhances communication among healthcare providers
- ✓ FHIR ensures seamless data exchange

Hybrid clinical decision support system: An automated diagnostic system for rural Bangladesh" (Iqbal et al.)

- ✓ Combines AI and Data-Driven Decision-Making
- ✓ Targets Healthcare Challenges in Bangladesh
- ✓ Enhances Diagnostic Precision
- ✓ Learning and Adaptability



Problem Statement

Smart Clinical Support



Patients previous health record to avoid drug interaction



E-prescription and store for better care



FHIR Standard maintenance to exchange patient data between Bangladeshi clinics.

Research Question

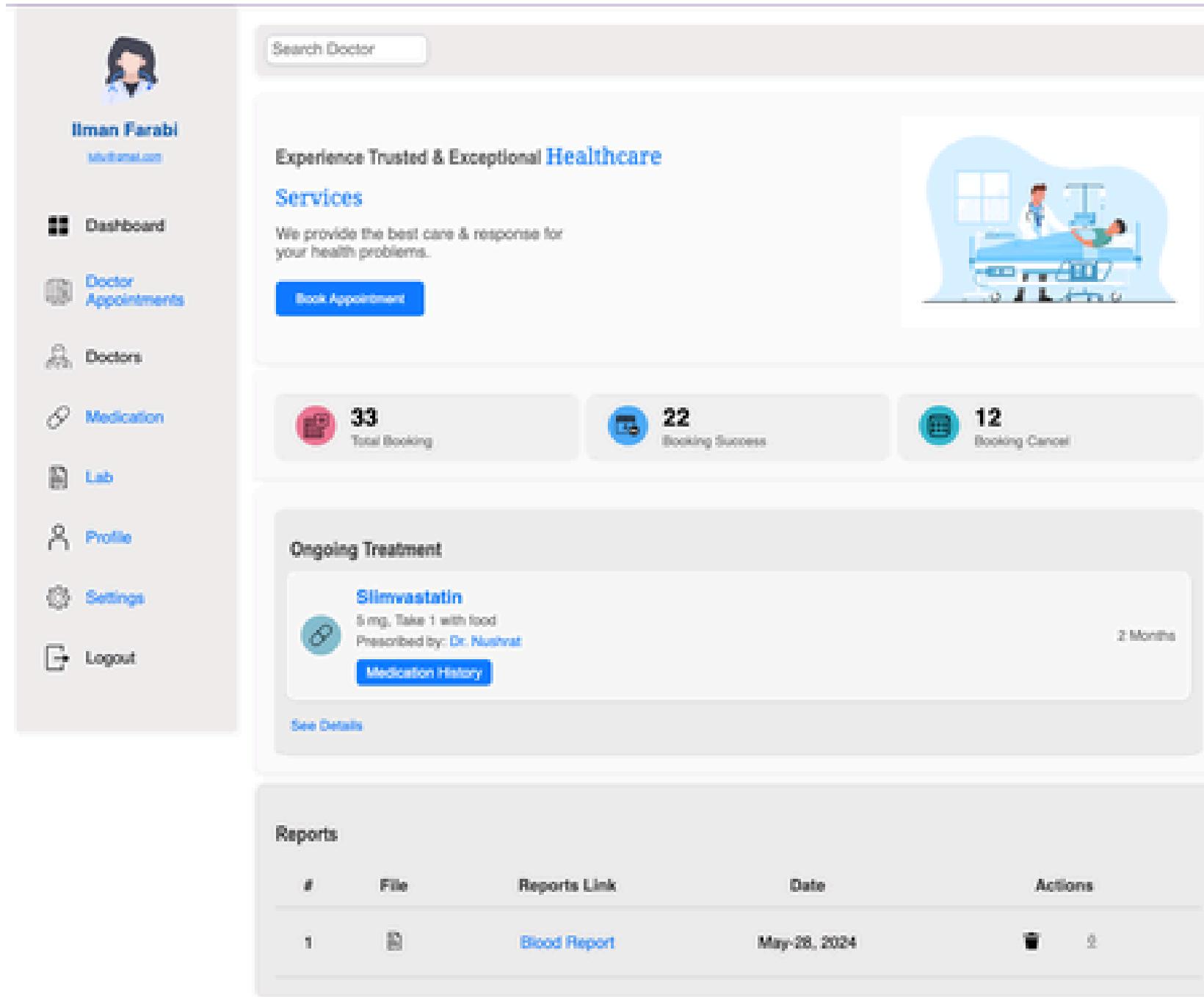
Smart Clinical Support

- Can a Smart Clinical Support System prevent medication errors among healthcare professionals in Bangladesh?
- How can a Smart Clinical Support system provide a standardized way for multiple clinics to access and share patient data?



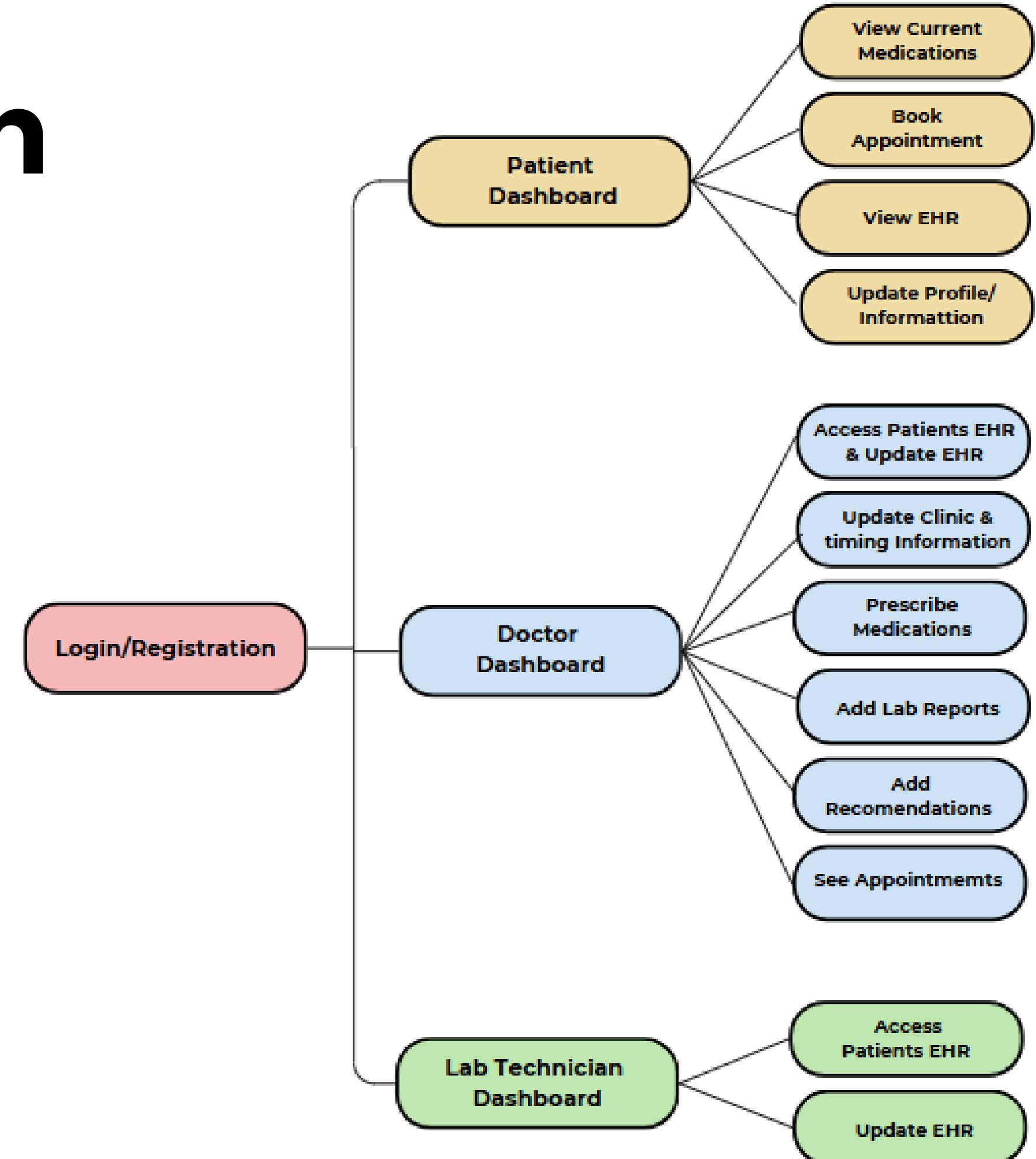
Software Design

Smart Clinical Support



The screenshot shows a user interface for a medical application. On the left is a sidebar with a profile picture of a woman, her name "Ilman Farabi", and a blue "invitacare" link. Below are icons for Dashboard, Doctor Appointments, Doctors, Medication, Lab, Profile, Settings, and Logout. The main content area has a header "Search Doctor" and a sub-header "Experience Trusted & Exceptional Healthcare Services". It features a doctor icon, a message "We provide the best care & response for your health problems.", and a "Book Appointment" button. Below this are three stats: "33 Total Booking", "22 Booking Success", and "12 Booking Cancel". A section titled "Ongoing Treatment" shows a prescription for "Simvastatin 5 mg, Take 1 with food Prescribed by Dr. Nushrat" with a "Medication History" button and a "See Details" link. At the bottom is a "Reports" section with a table:

#	File	Reports Link	Date	Actions
1		Blood Report	May-28, 2024	



**Thank you
very much!**

Smart Clinical Support