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

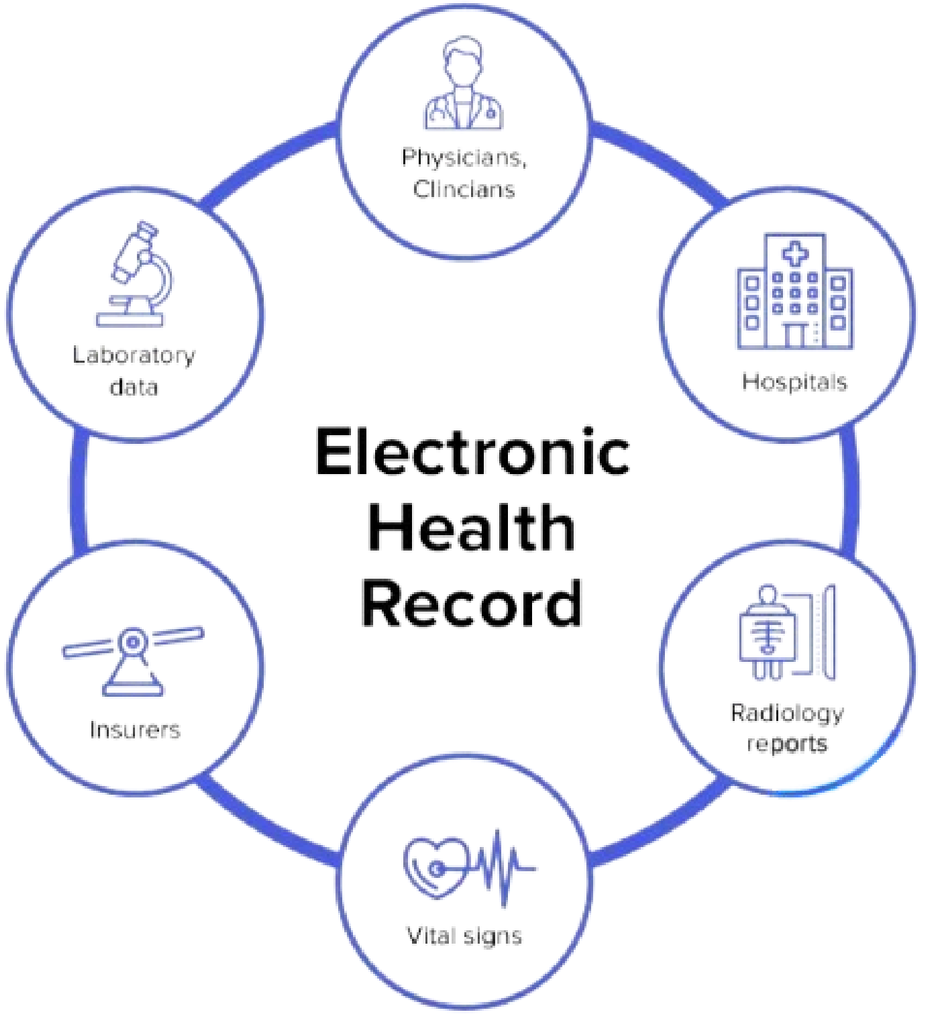
Electronic Health Record

Clinical data repository

Practitioner Portal

Patient Portal

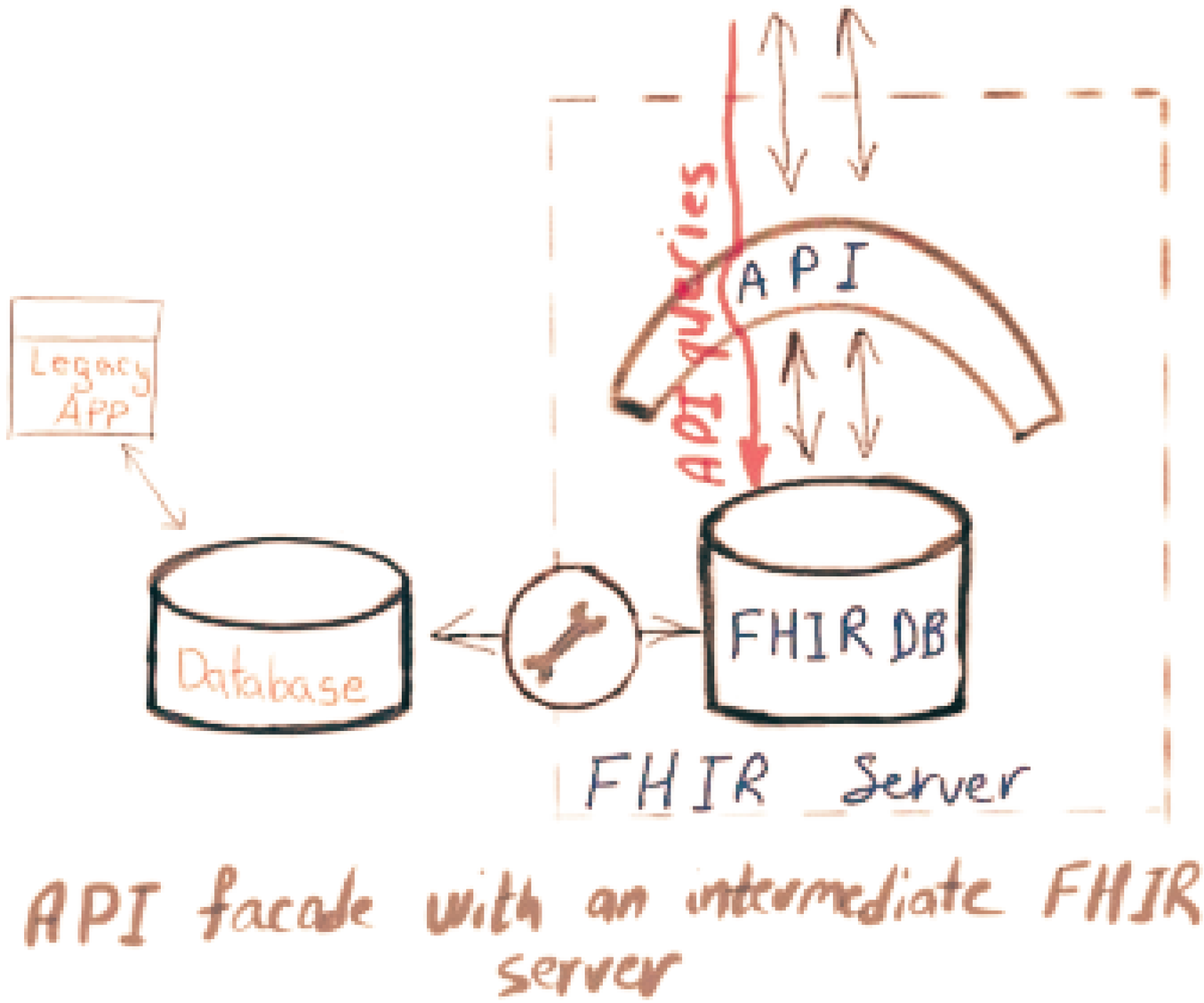
Data Security



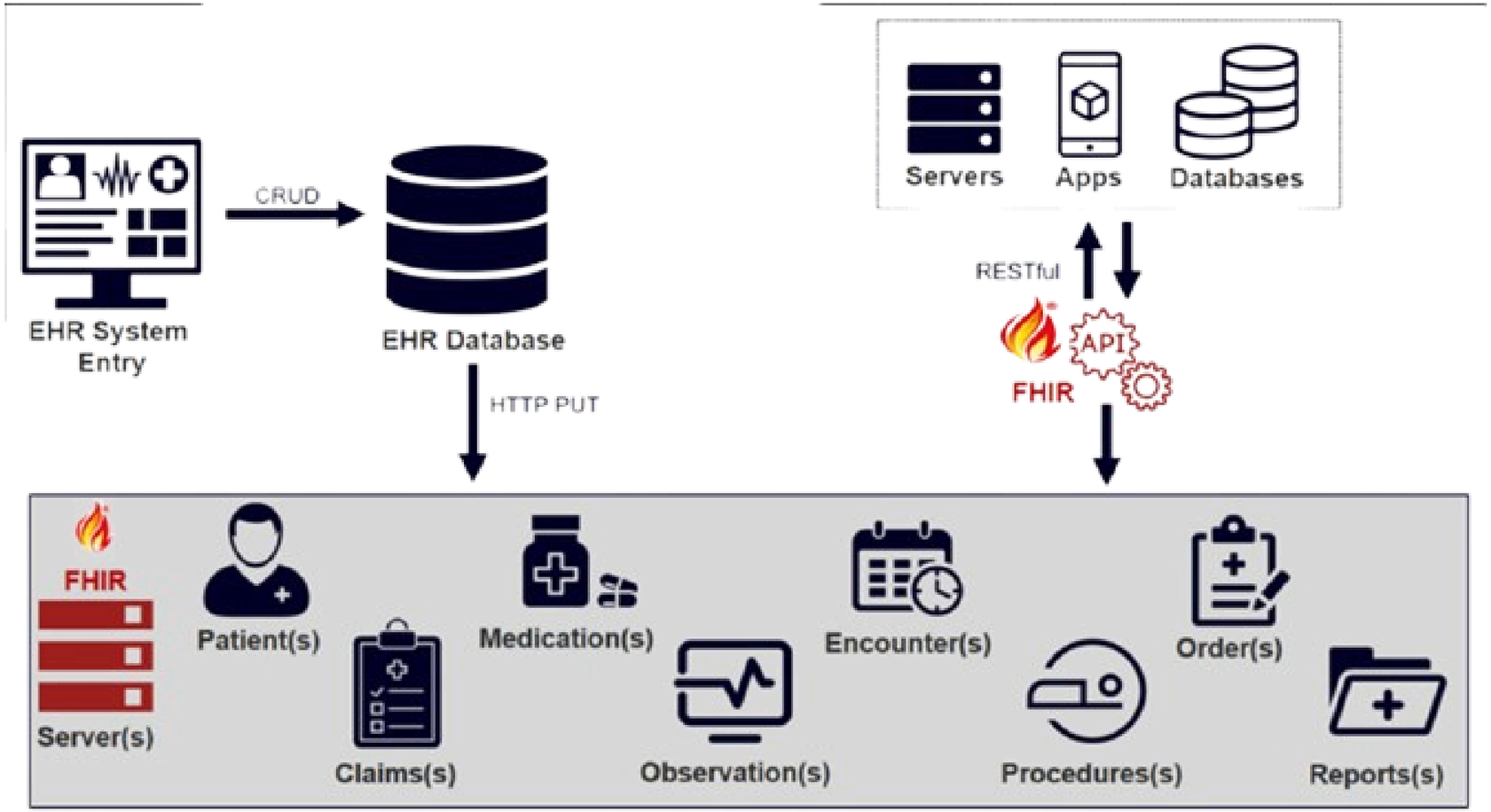
FHIR

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

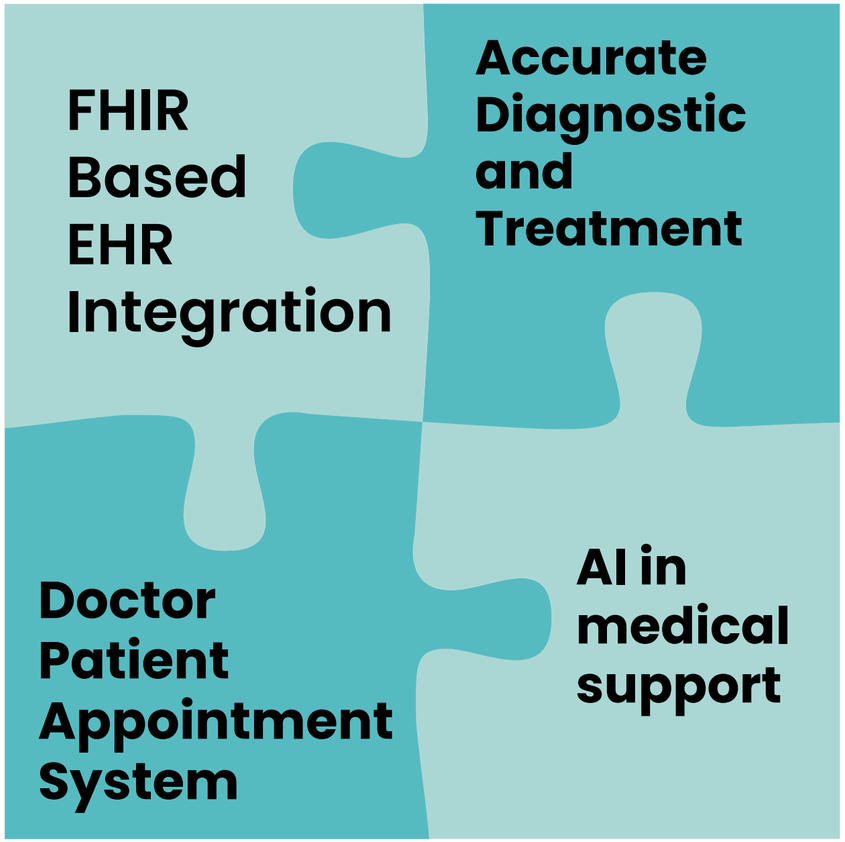
Smart Clinical Support

F

FHIR
Based
EHR Integration

D

Doctor
Patient Appointment
System



A

Accurate Diagnostic and
Treatment

AI

AI in medical
support

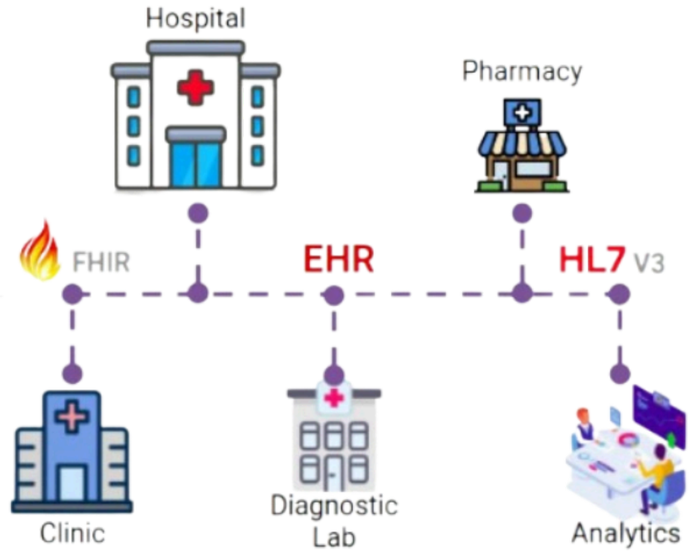
Key Reasearch Papers

"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

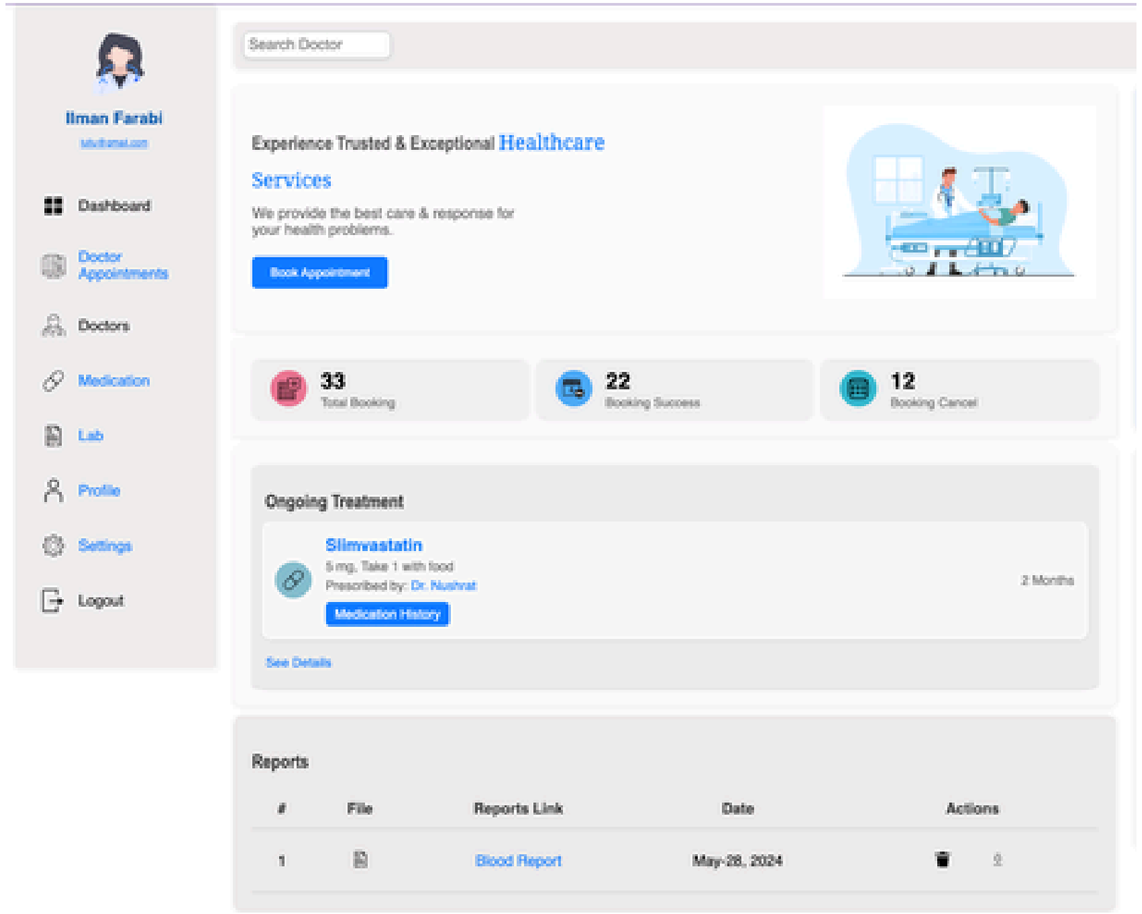
Smart Clinical Support

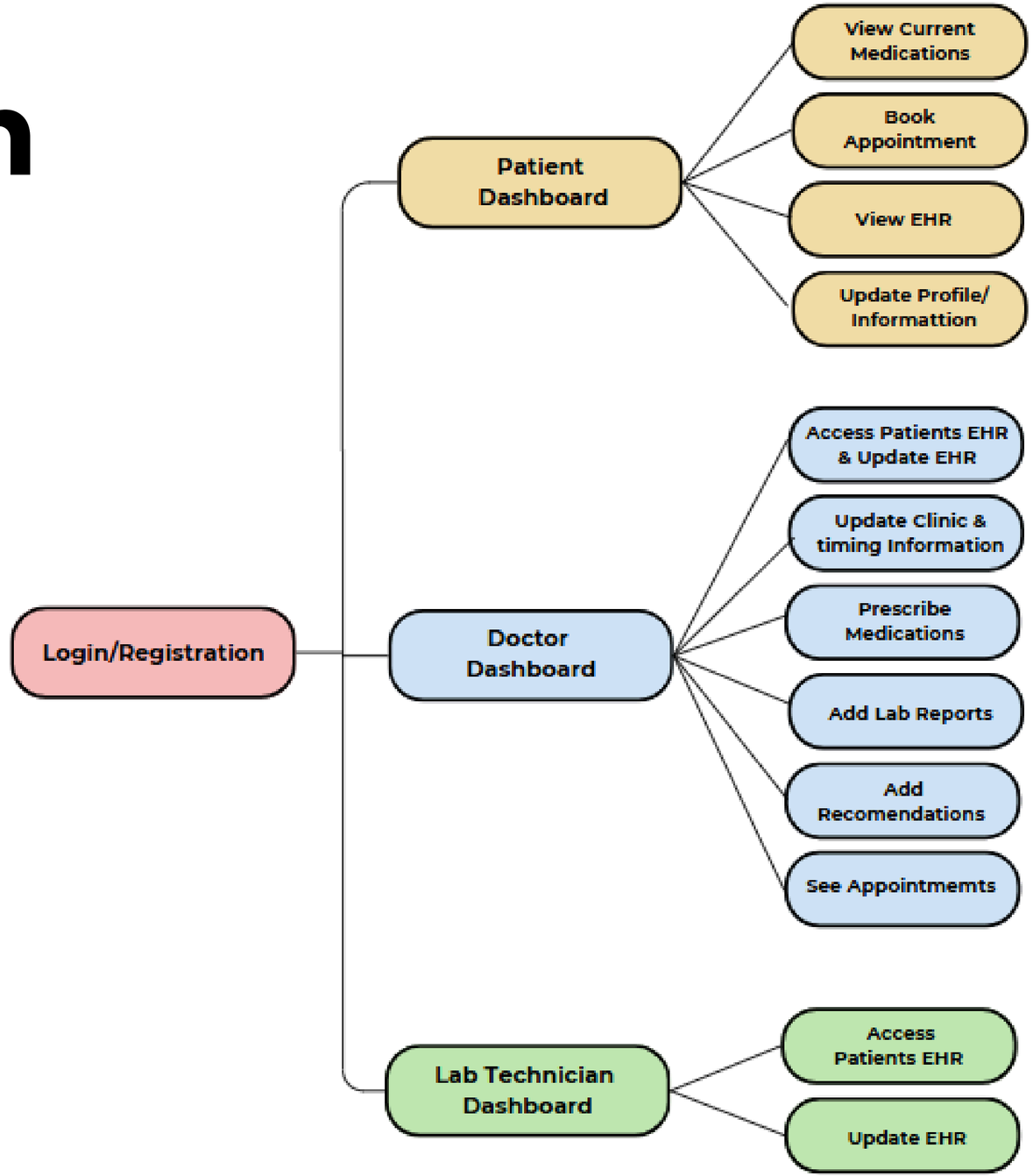
- Can a Smart Clinical Support System prevent medication errors among healthcare professionals in Bangladesh?

- 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





Thank you very much!

Smart Clinical Support