

MEDUP

Group18 | 46457

OUTLINE

- 01 INTRODUCTION
- 02 METHODOLOGY
- 03 MEDUP'S INTERFACES
- 04 USECASE DIAGRAM
- 05 CLASS DIAGRAM
- 06 COMPONENT DIAGRAM
- 07 SEQUENCE DIAGRAMS
- 08 ARCHITECTURE DIAGRAM
- 09 DEPLOYMENT DIAGRAM
- 10 FUTURE PLANS

INTRODUCTION

Post-procedure care often often involves a breakdown in communication between patients and healthcare providers , resulting in delayed interventions, increased anxiety, and compromised health outcomes.

MedUp revolutionizes post-procedure care by linking patients and healthcare providers, ensuring quick responses and tailored care, ultimately improving the healthcare experience for everyone involved.



METHODOLOGY

MedUp follows the Agile development methodology :

- 01 Flexibility
- 02 Collaboration
- 03 Faster time to market

iteration number	Module/Subsystem	Duration
1	Registration, Login, Logout, Patient and Healthcare provider profiles.	2 weeks
2	Appointment scheduling, Medication management and Communication.	1 month
3	Agora, <u>yakeen</u> and SMS gateway integration.	1 month
4	AI Chatbot	3 months

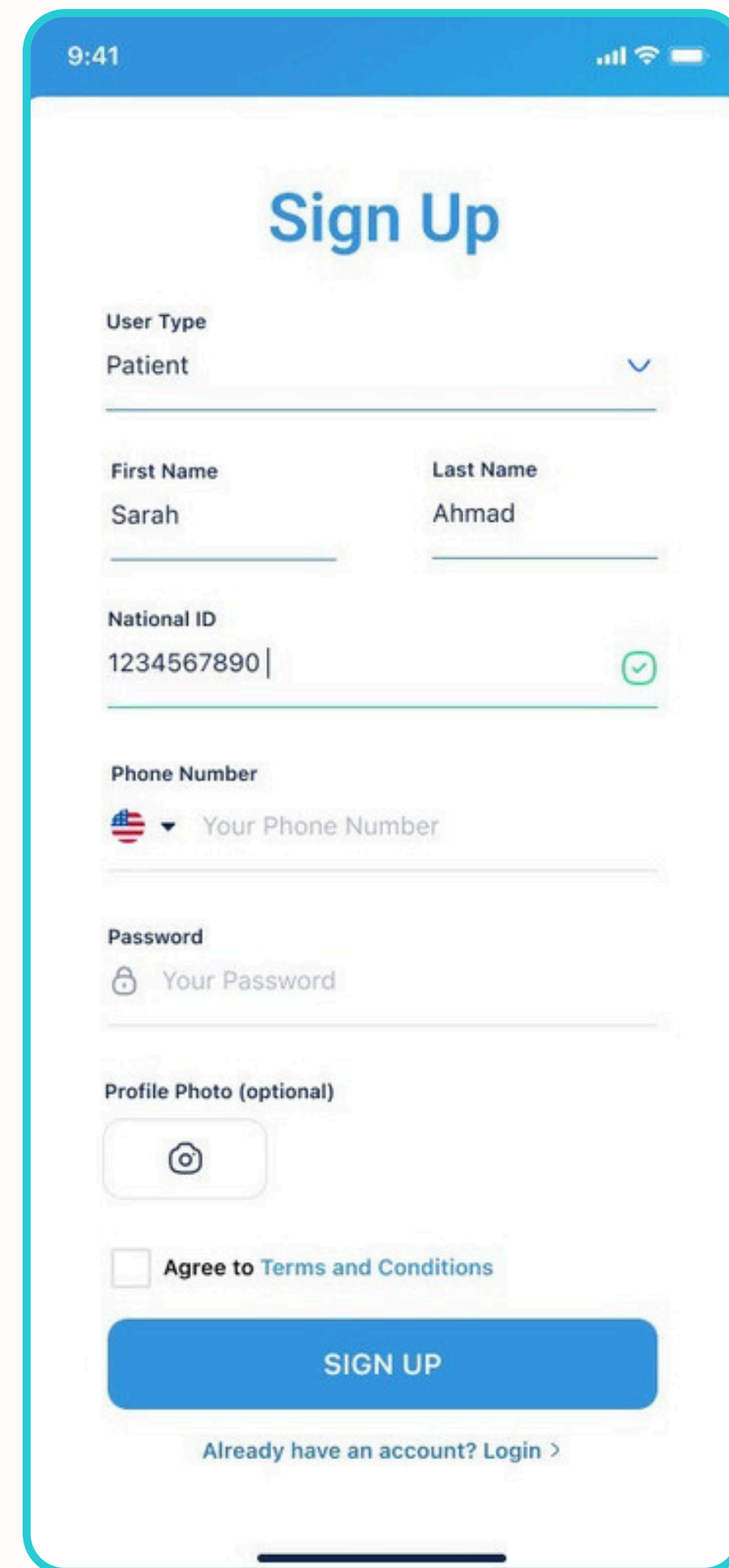
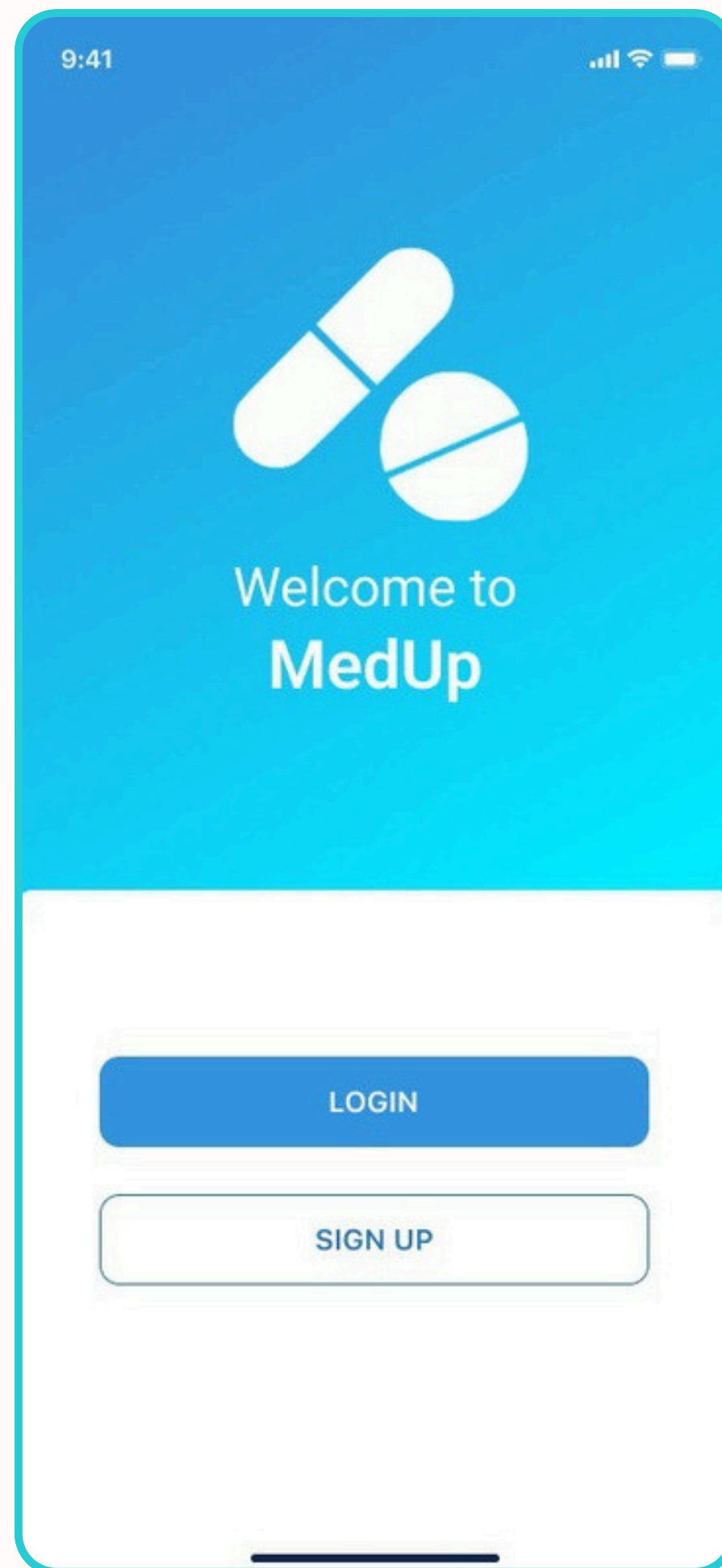
API'S



USER INTERFACES

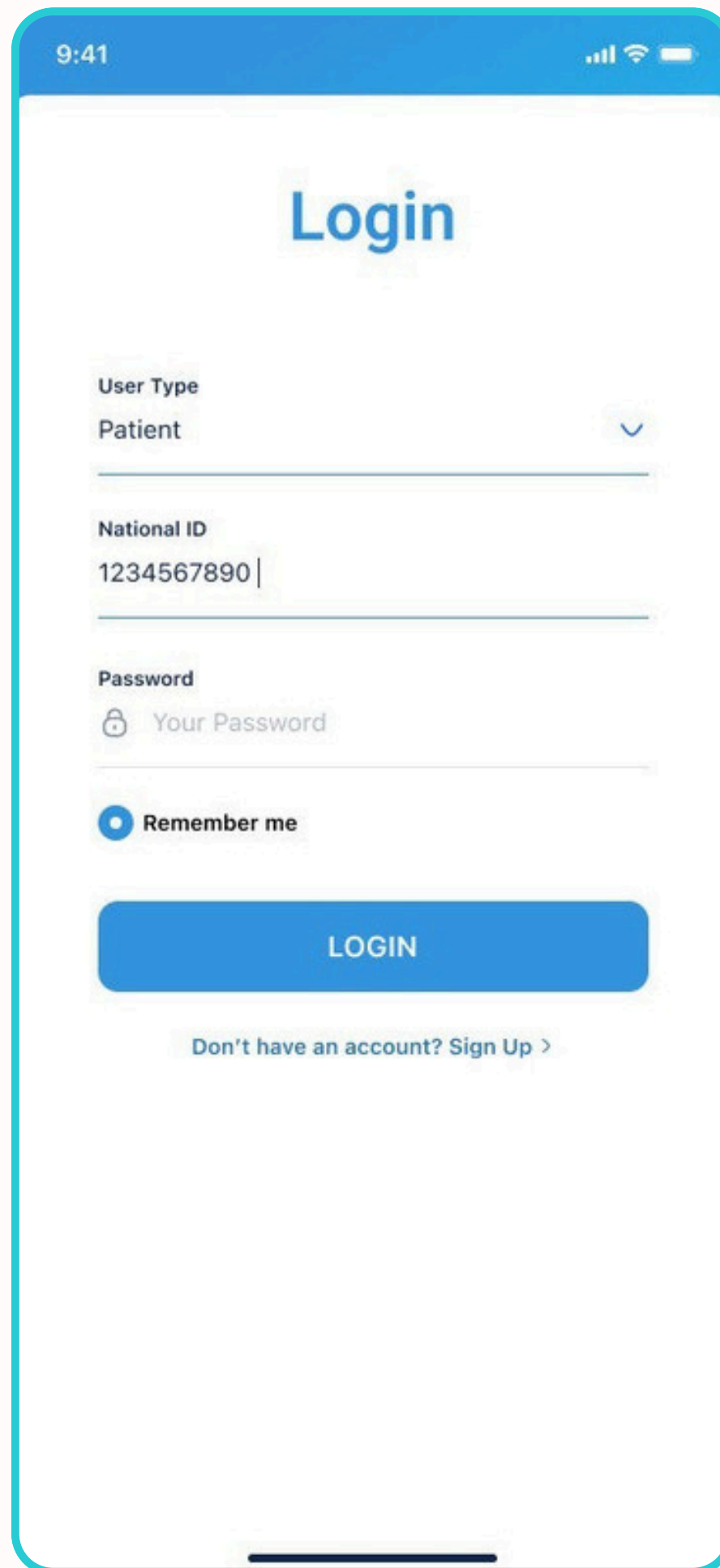
OUR SOLUTION

welcome page

A mobile app mockup for the 'MedUp' sign up page. The title 'Sign Up' is at the top in blue. The form includes: a 'User Type' dropdown menu with 'Patient' selected; 'First Name' (Sarah) and 'Last Name' (Ahmad) input fields; a 'National ID' input field with the value '1234567890' and a green checkmark icon; a 'Phone Number' input field with a US flag icon and placeholder text 'Your Phone Number'; a 'Password' input field with a lock icon and placeholder text 'Your Password'; a 'Profile Photo (optional)' section with a camera icon; a checkbox for 'Agree to Terms and Conditions'; a solid blue 'SIGN UP' button; and a link 'Already have an account? Login >'. The status bar at the top shows the time 9:41 and signal icons.

SignUp page

Login page



9:41

Login

User Type
Patient

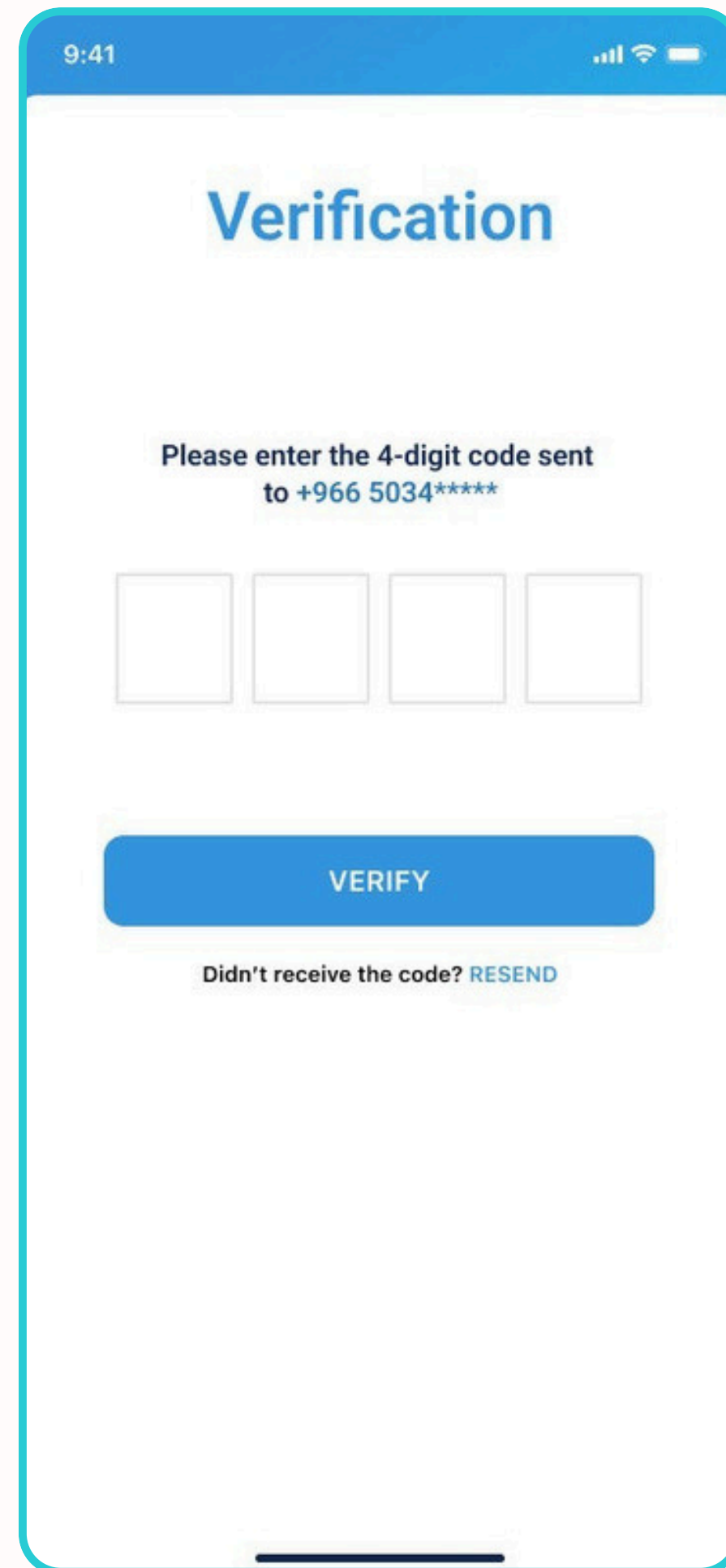
National ID
1234567890

Password
Your Password

☒ Remember me

LOGIN

Don't have an account? [Sign Up >](#)



9:41

Verification

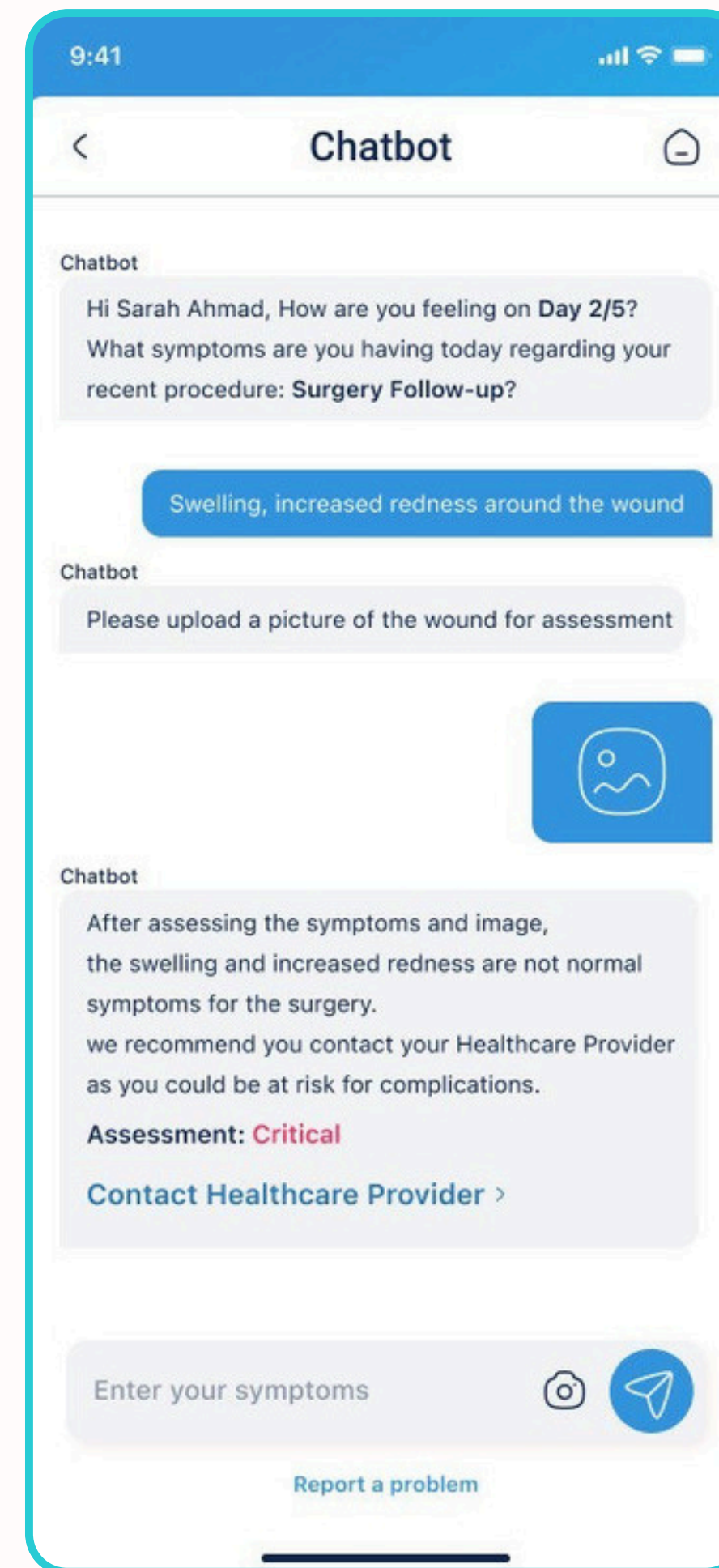
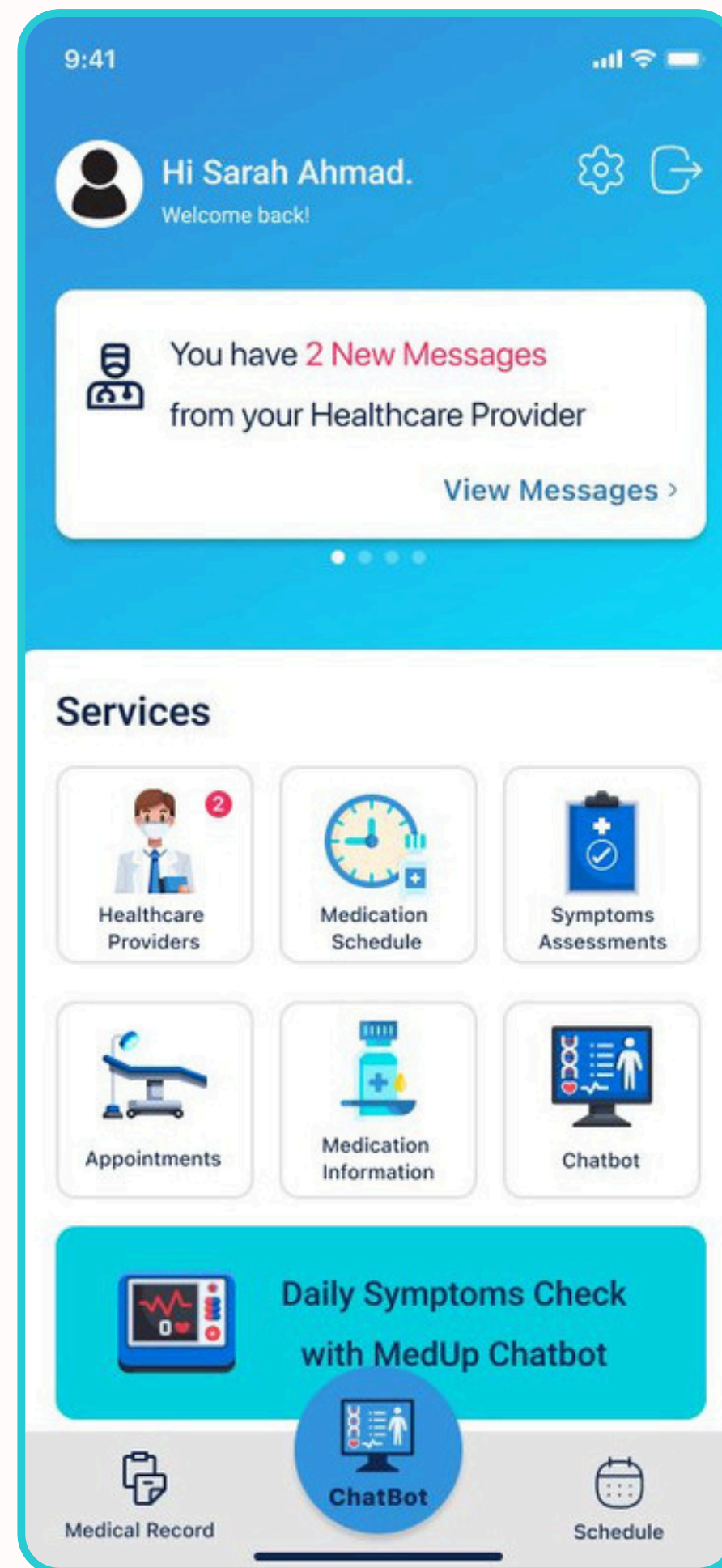
Please enter the 4-digit code sent to +966 5034*****

VERIFY

Didn't receive the code? [RESEND](#)

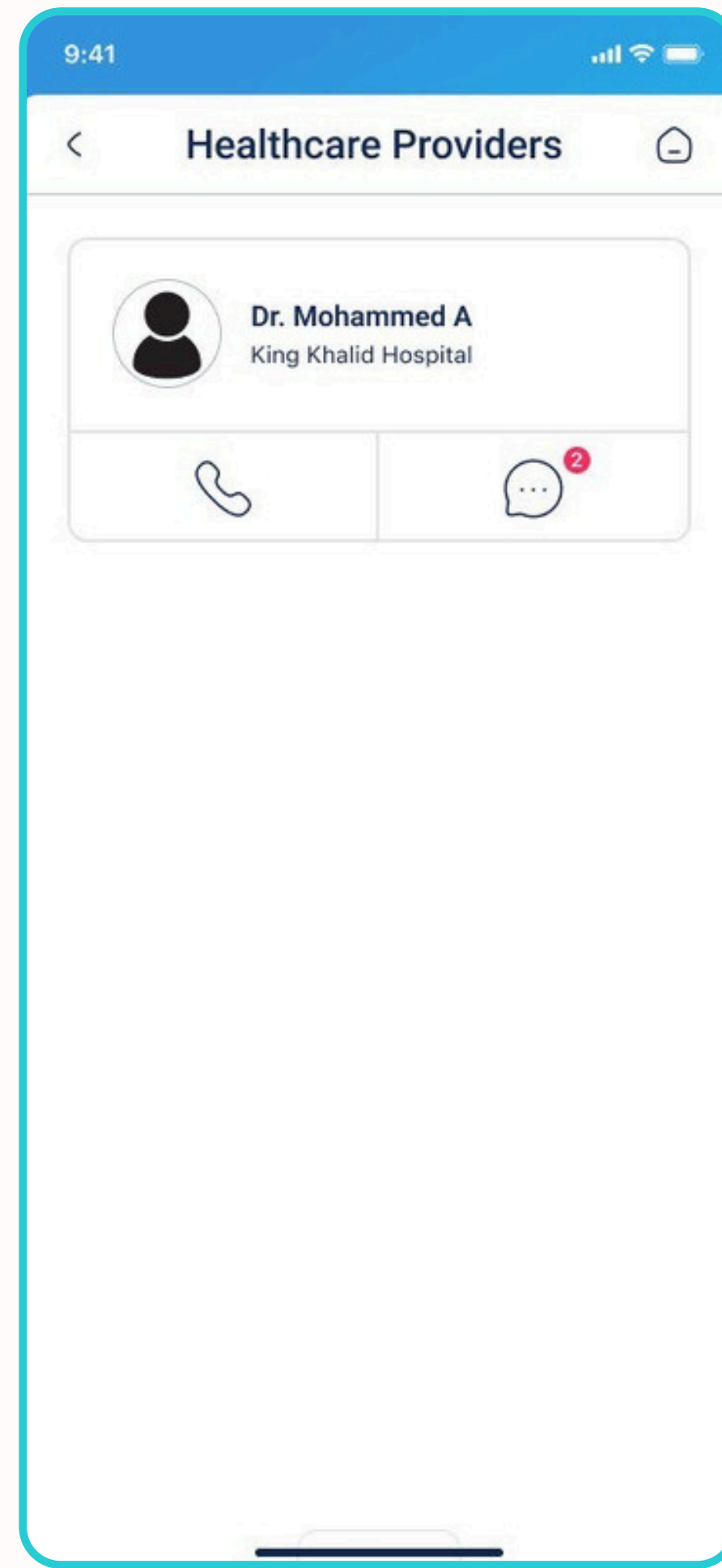
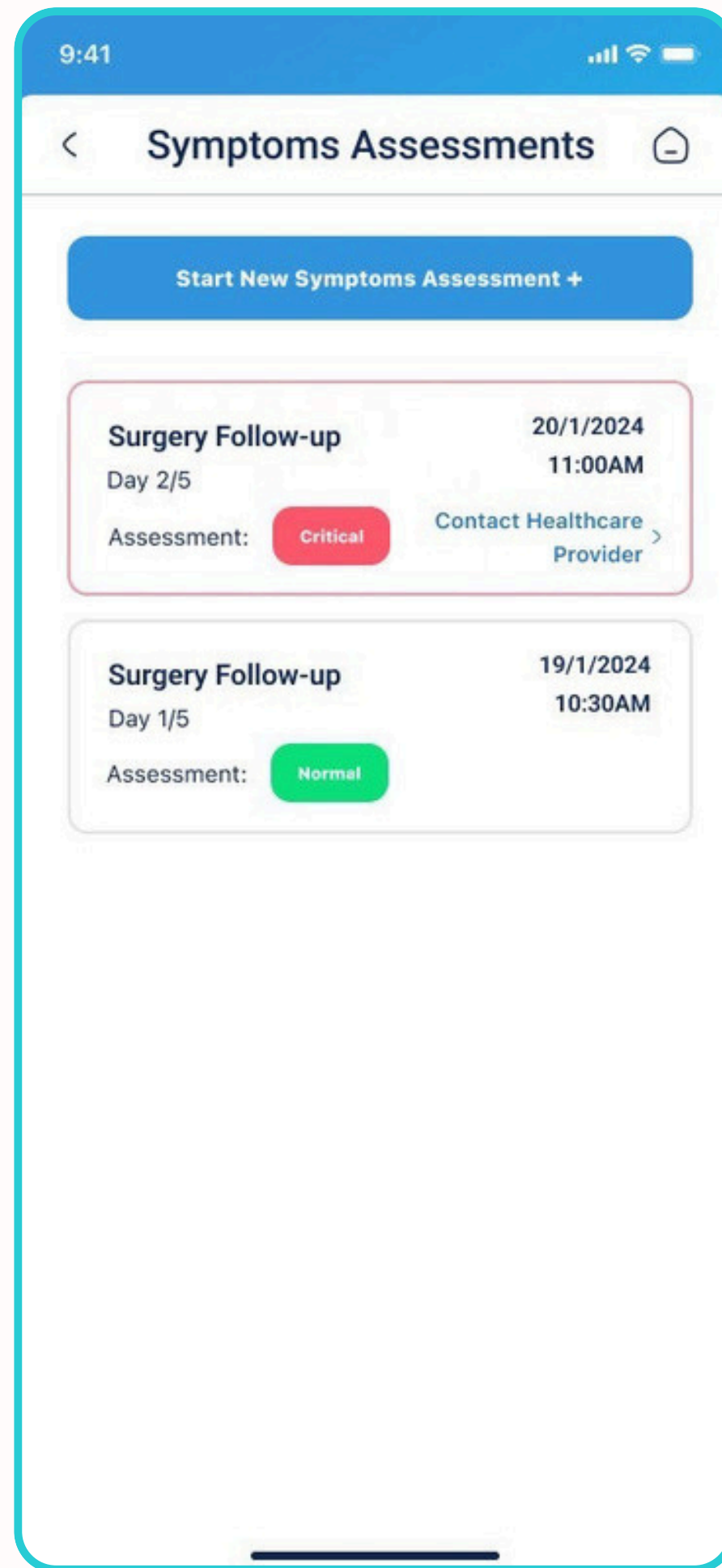
Verification page

Patient homepage



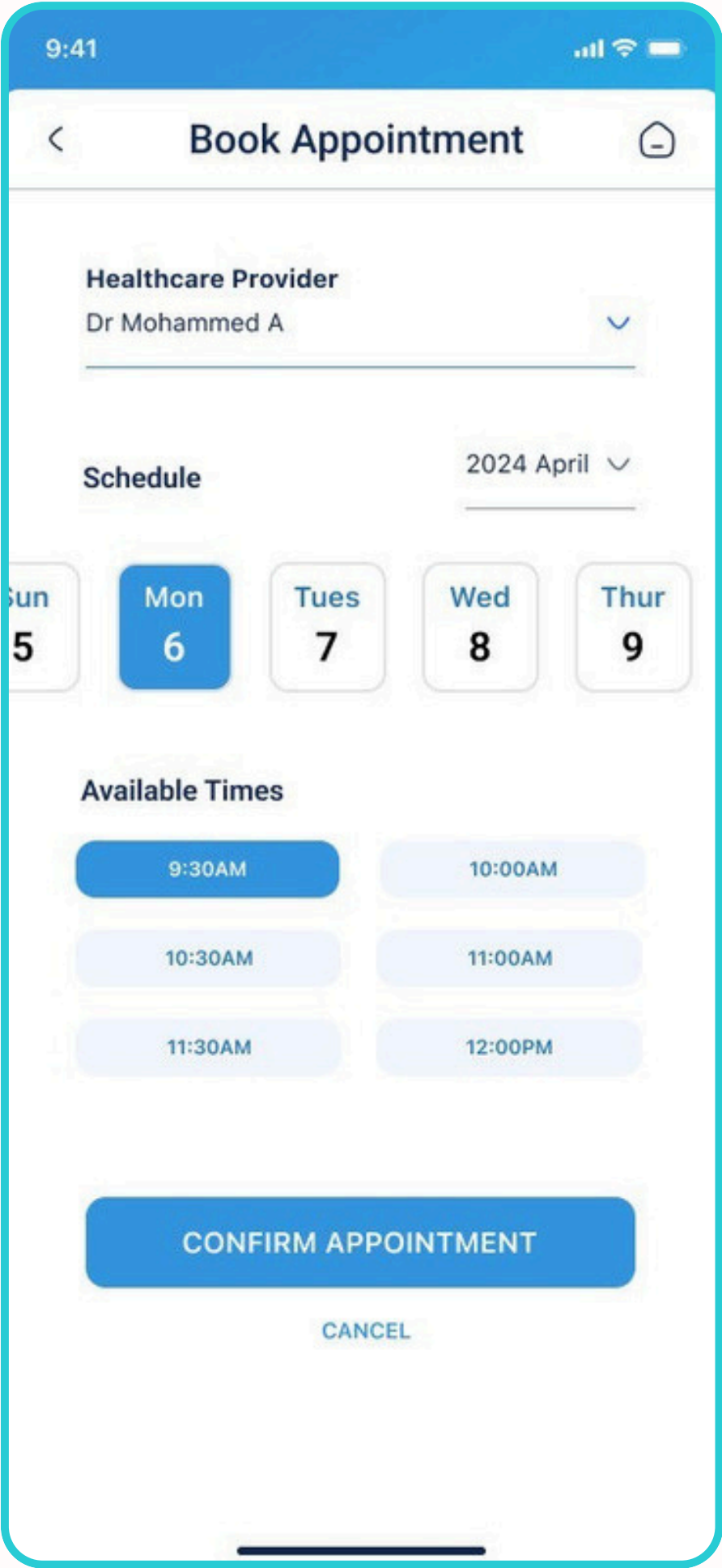
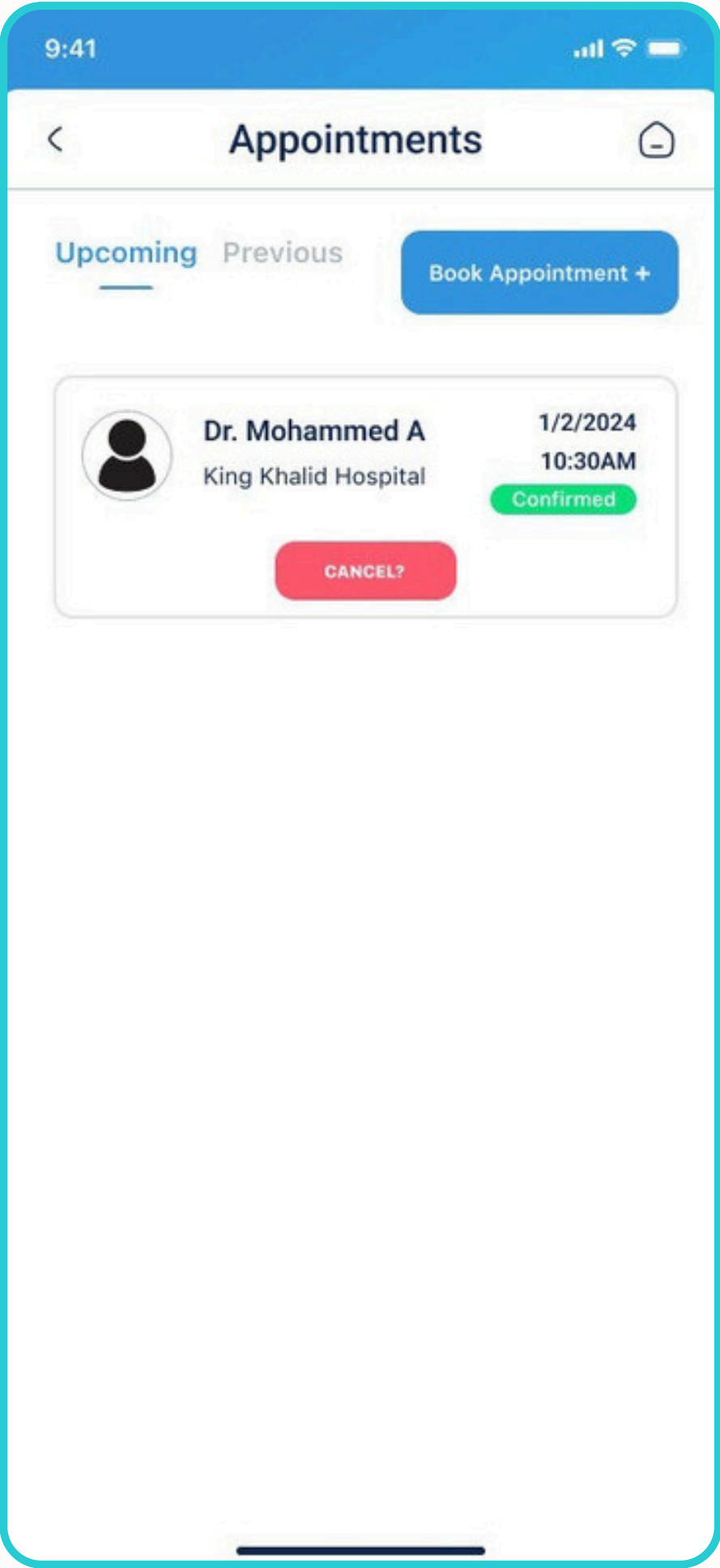
Chatbot page

patient
symptoms
assessments
page



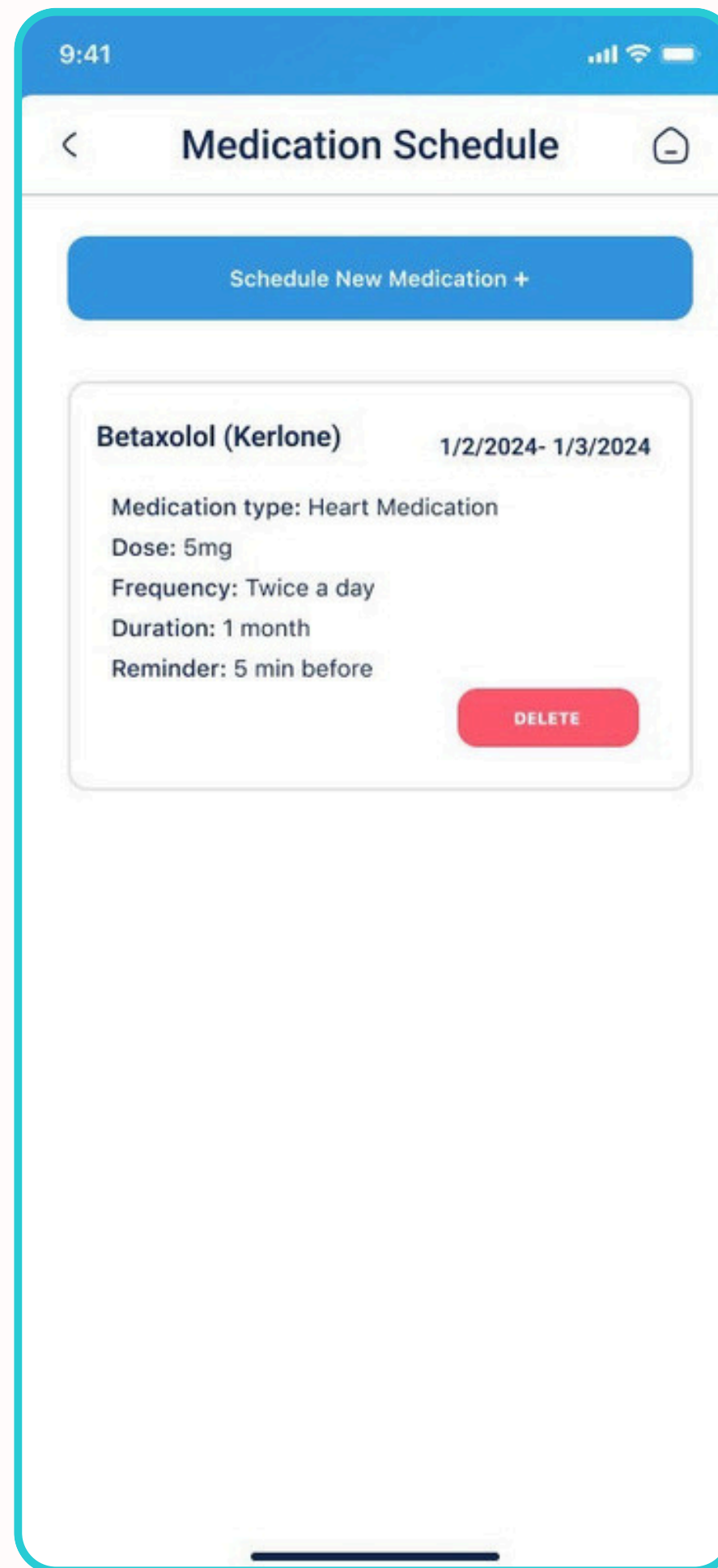
Patient healthcare
providers page

Patient
appointment
page



patient book appoin
page

Medication Schedule Page



9:41

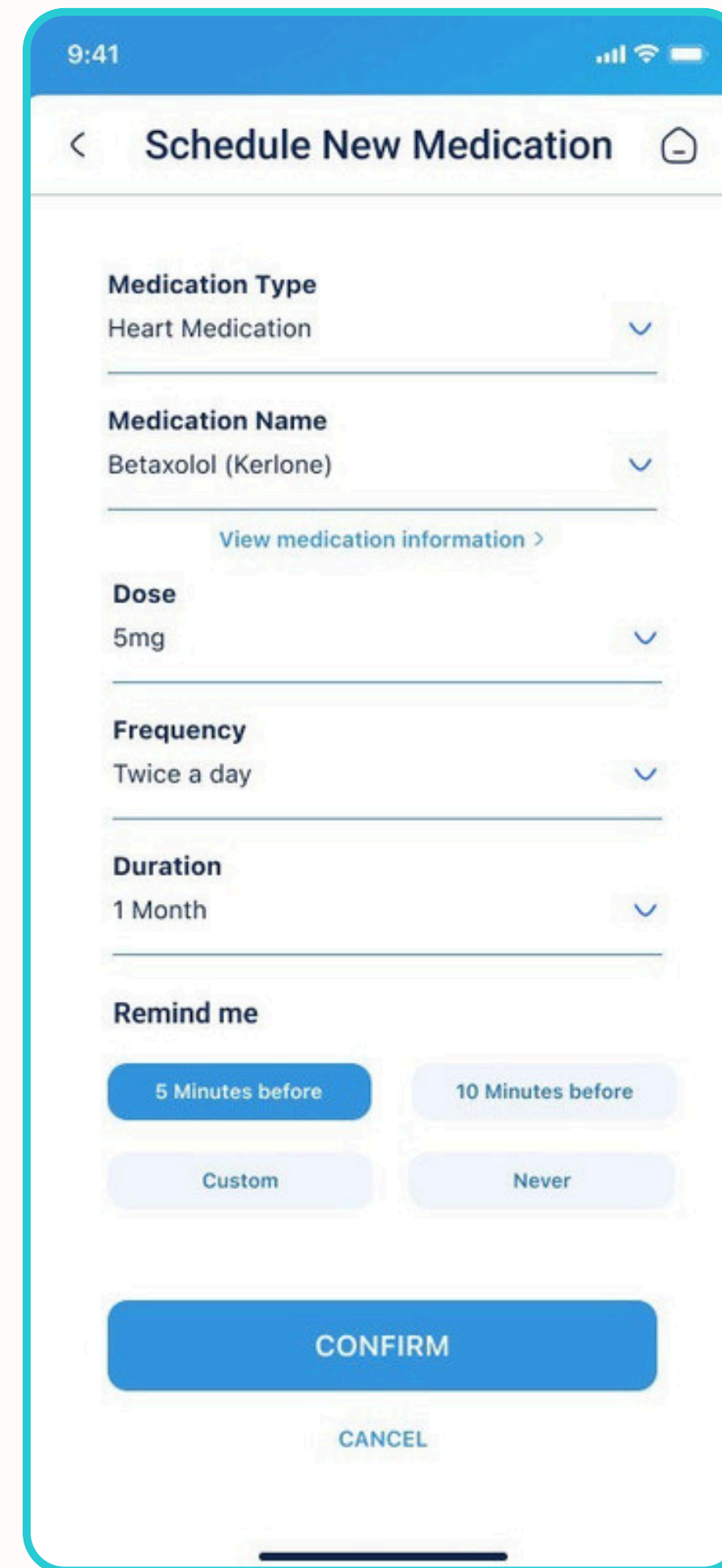
< Medication Schedule >

Schedule New Medication +

Betaxolol (Kerlone) 1/2/2024- 1/3/2024

Medication type: Heart Medication
Dose: 5mg
Frequency: Twice a day
Duration: 1 month
Reminder: 5 min before

DELETE



9:41

< Schedule New Medication >

Medication Type
Heart Medication

Medication Name
Betaxolol (Kerlone)
[View medication information >](#)

Dose
5mg

Frequency
Twice a day

Duration
1 Month

Remind me

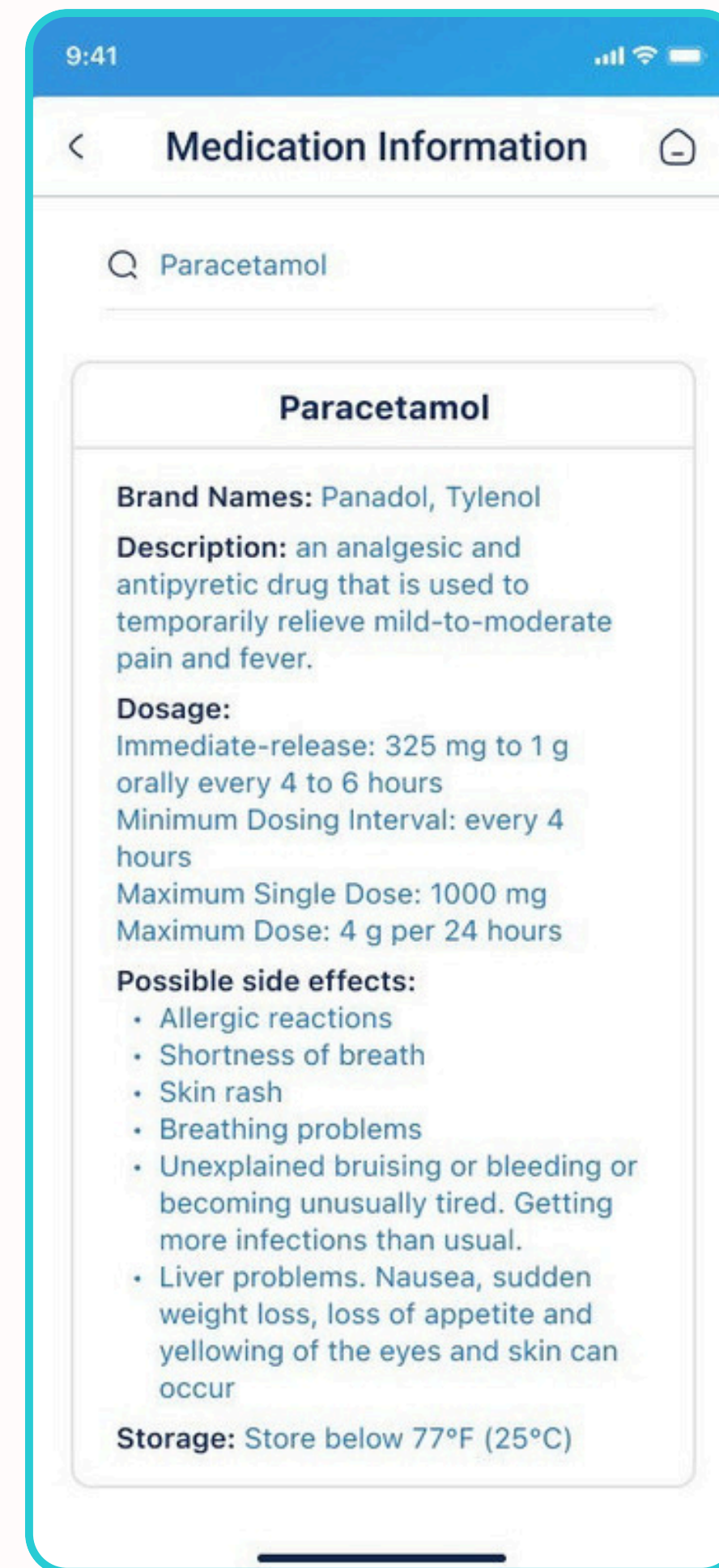
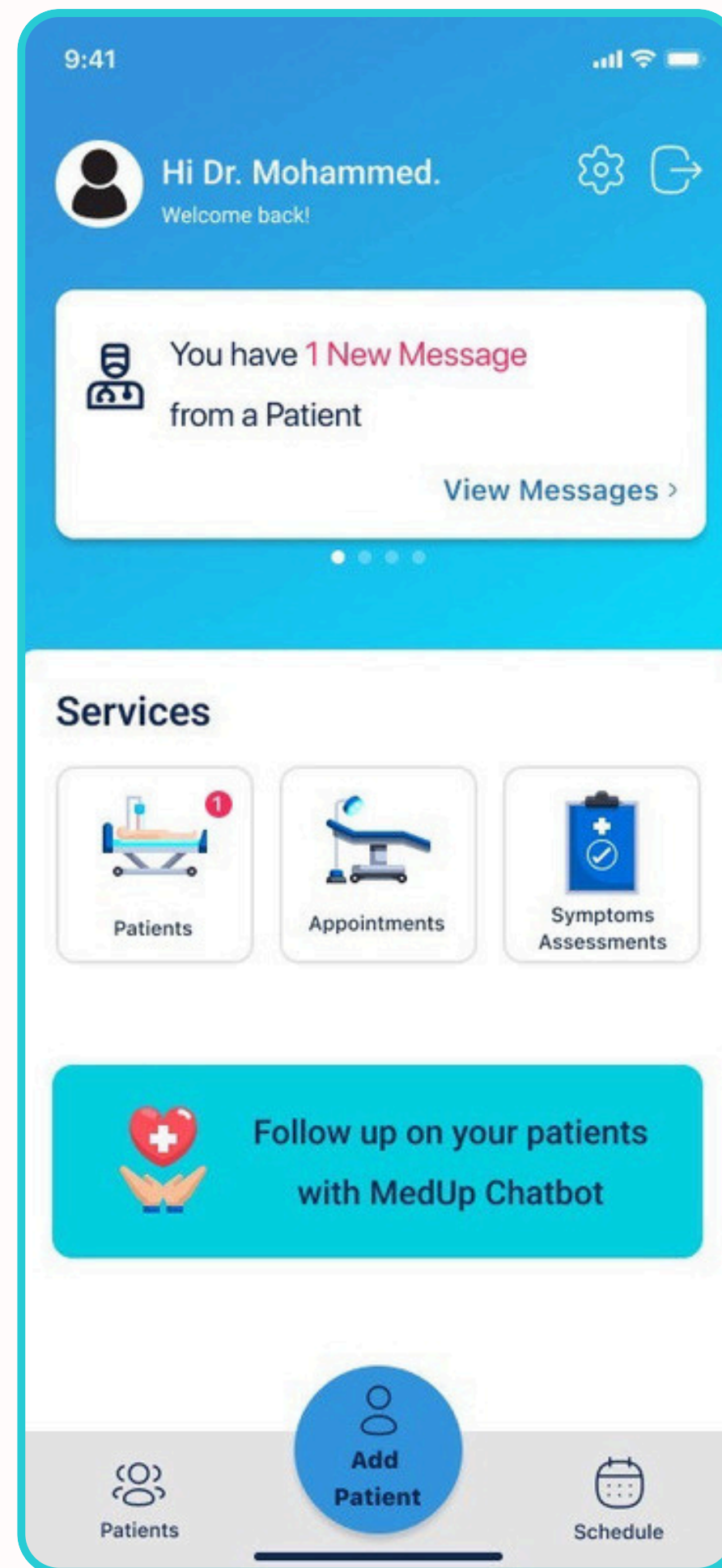
5 Minutes before 10 Minutes before
Custom Never

CONFIRM

CANCEL

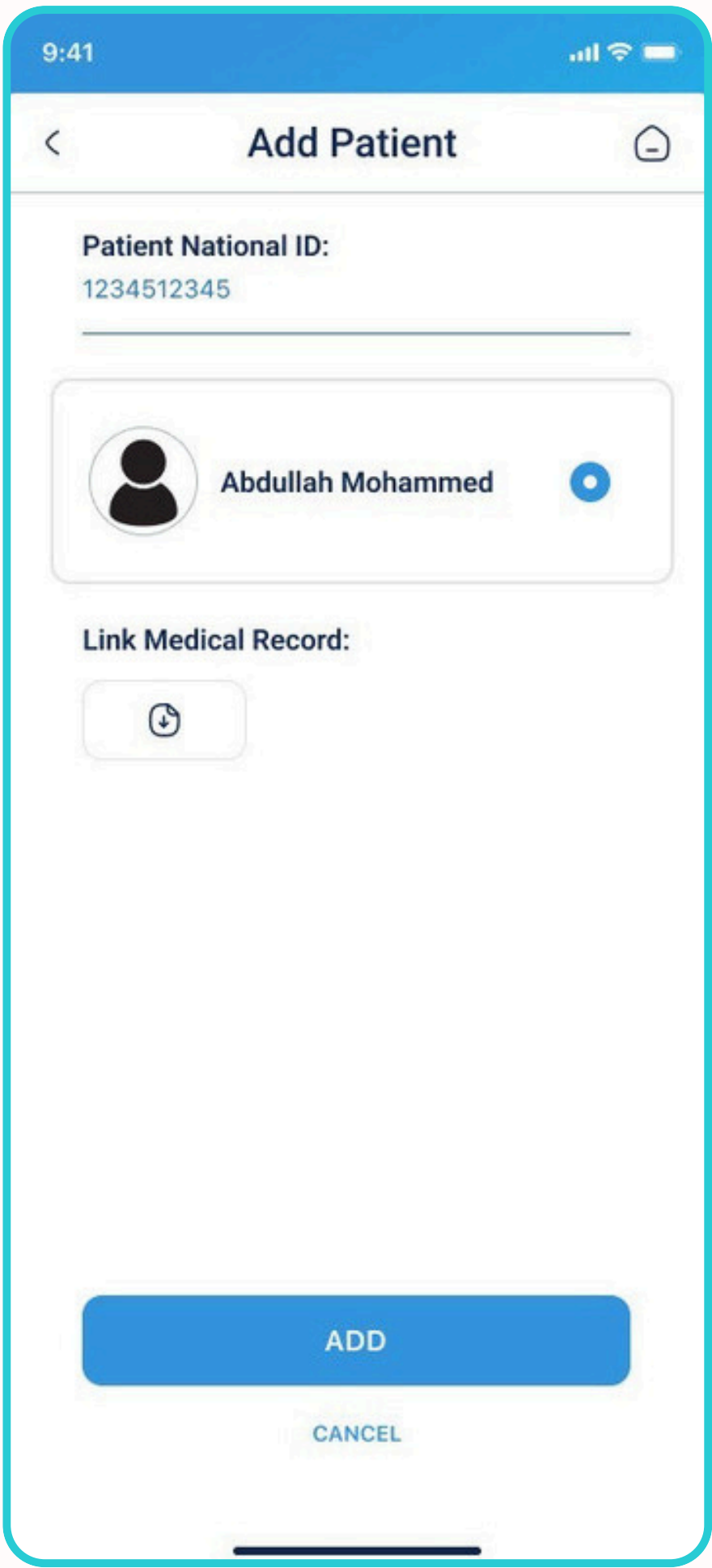
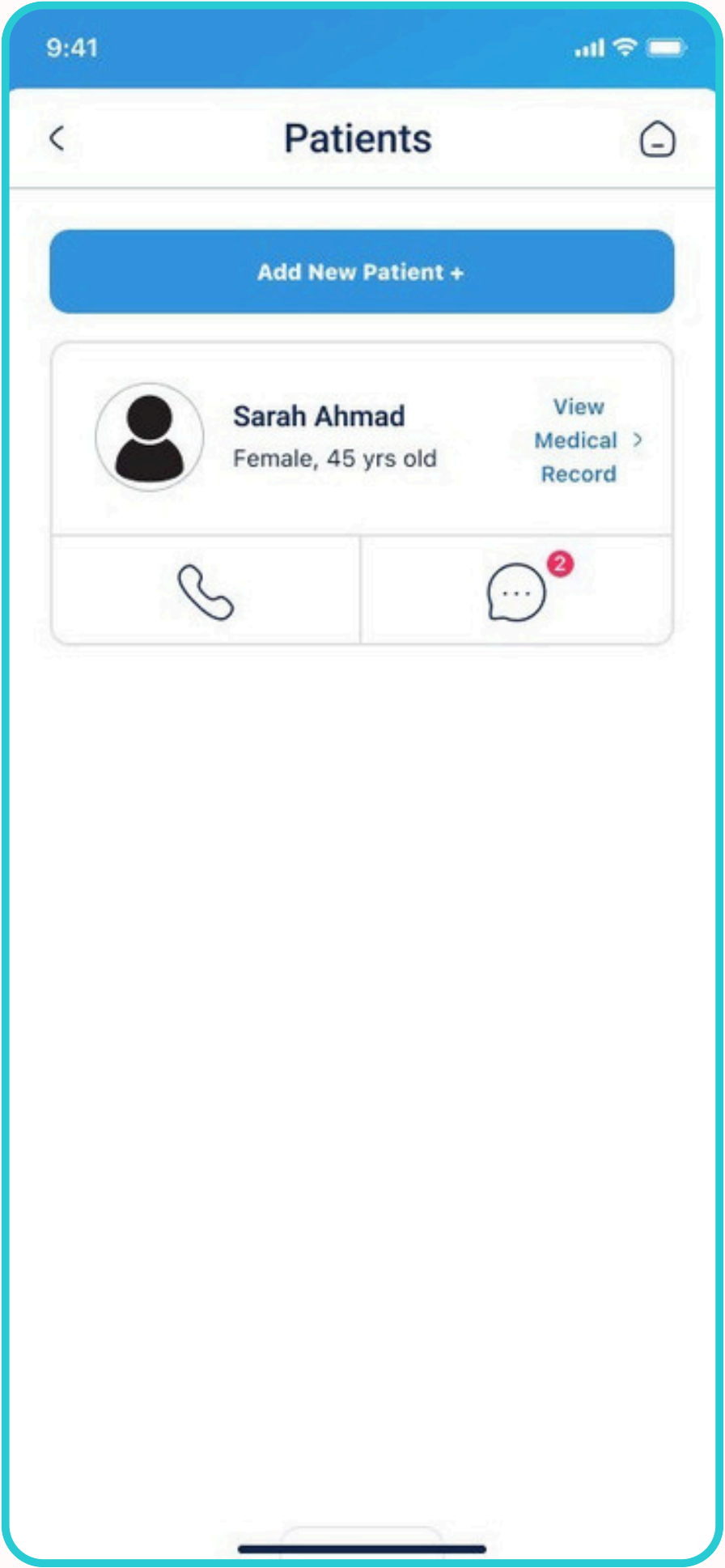
Schedule New Medication Page

Healthcare Provider Homepage



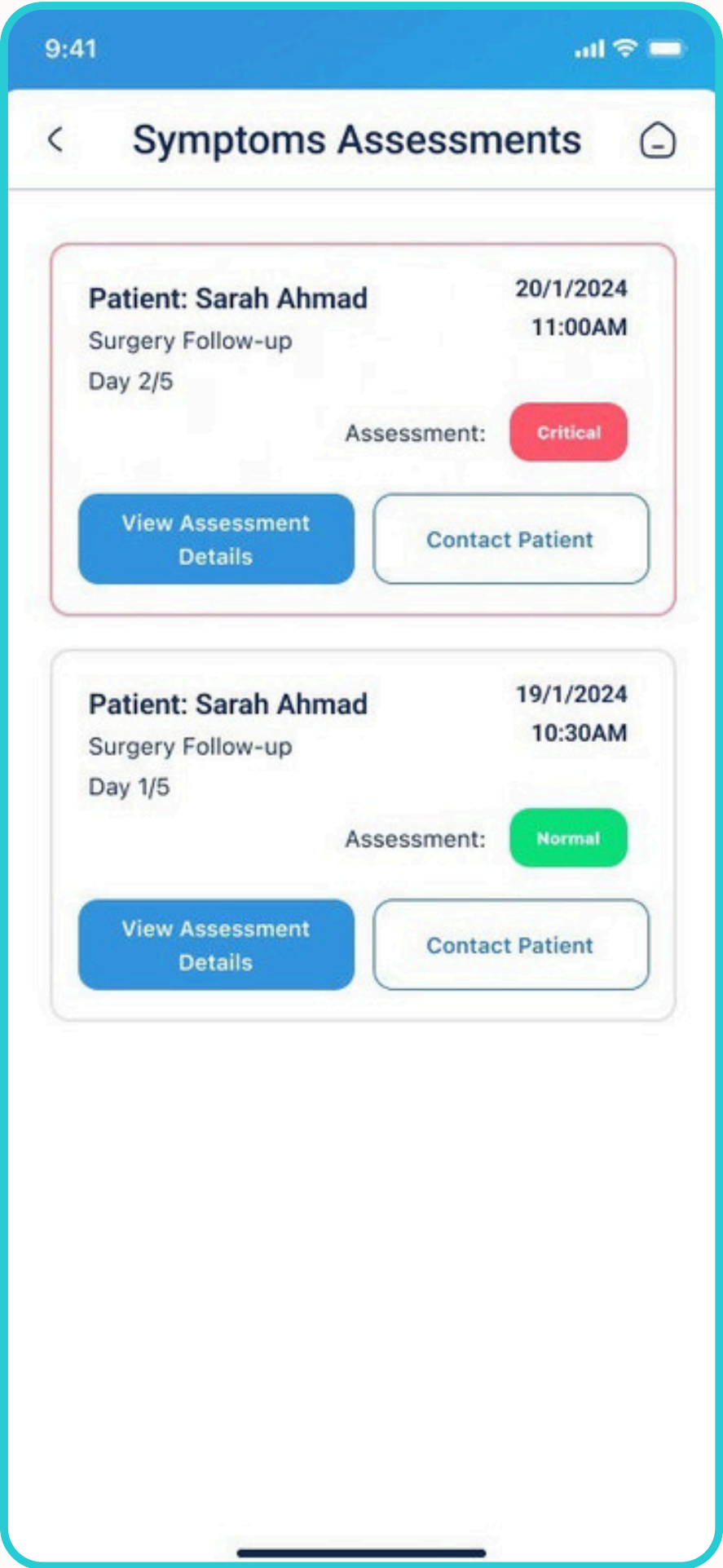
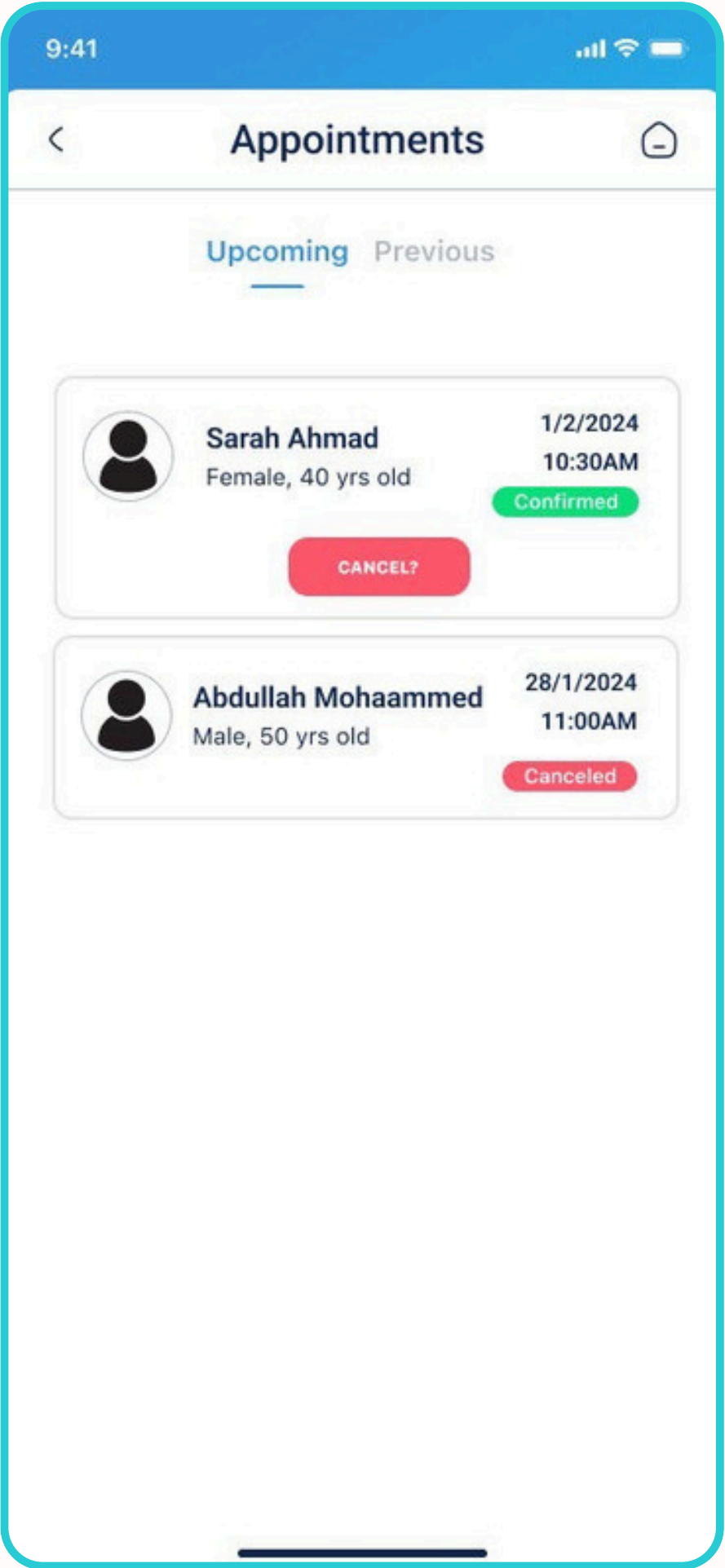
Medication Information Page

Healthcare
Provider
Patients Page



Add Patient Page

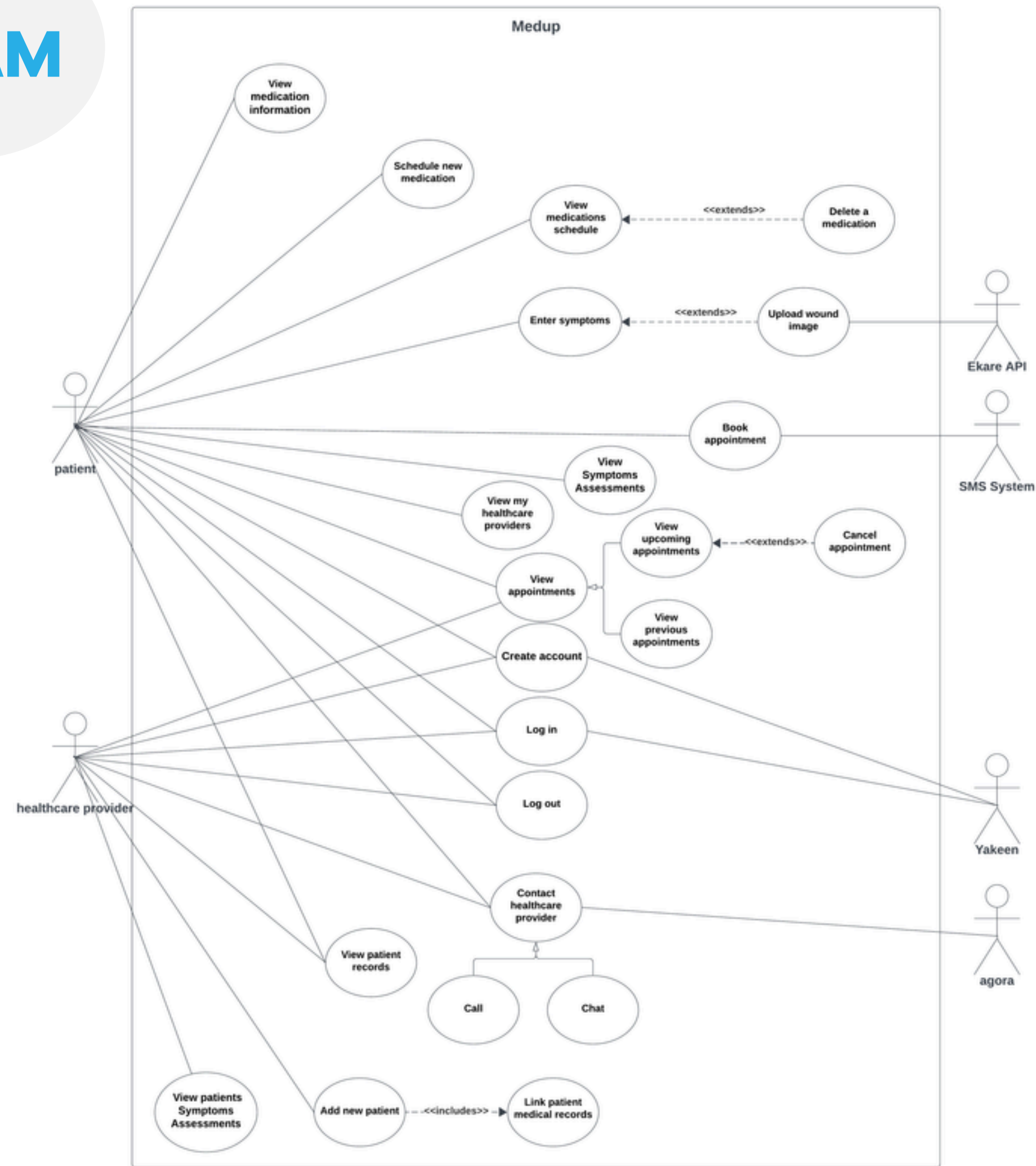
Healthcare Provider Appointments Page



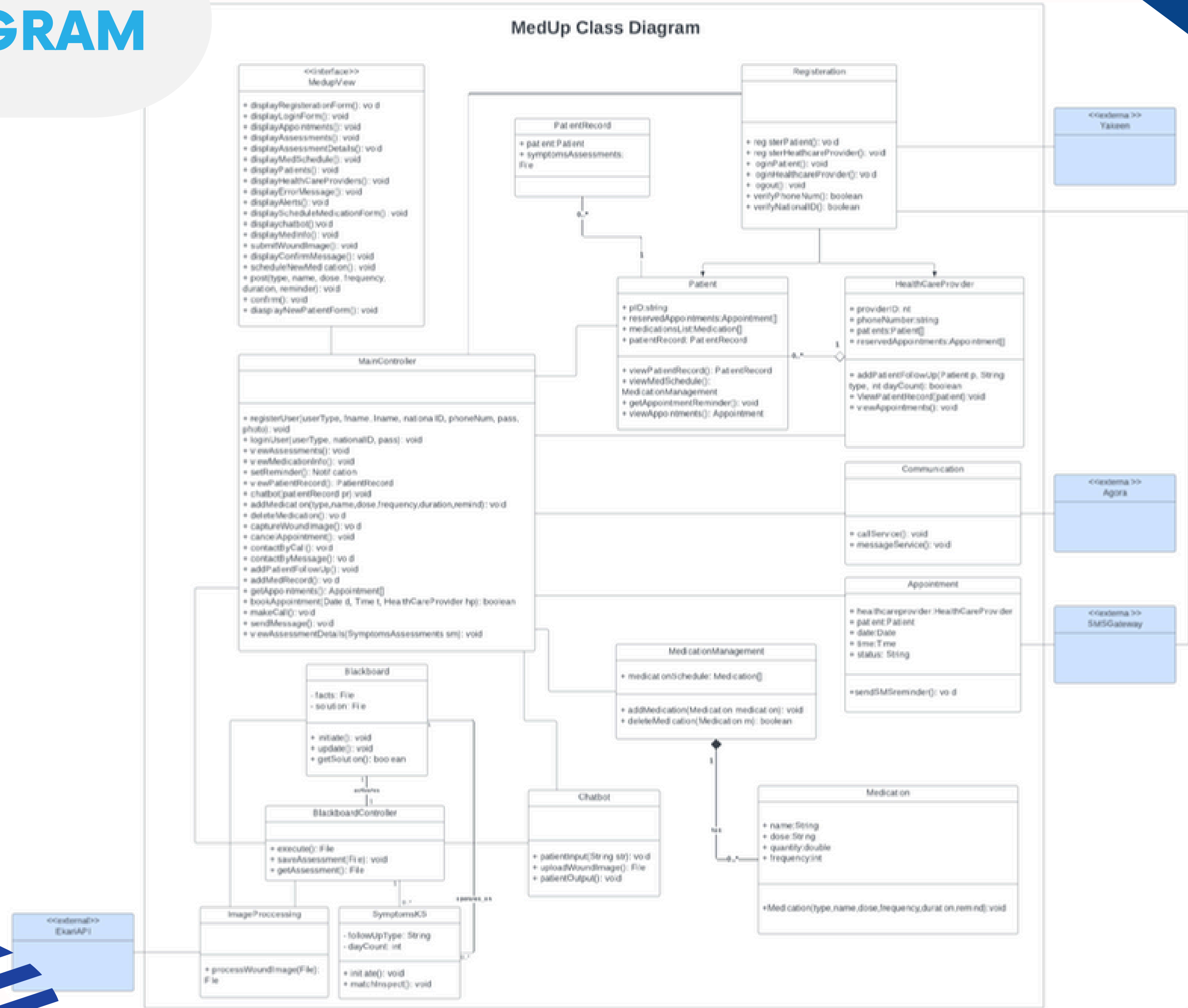
Healthcare Provider Symptoms Assessments Page

DIAGRAMS

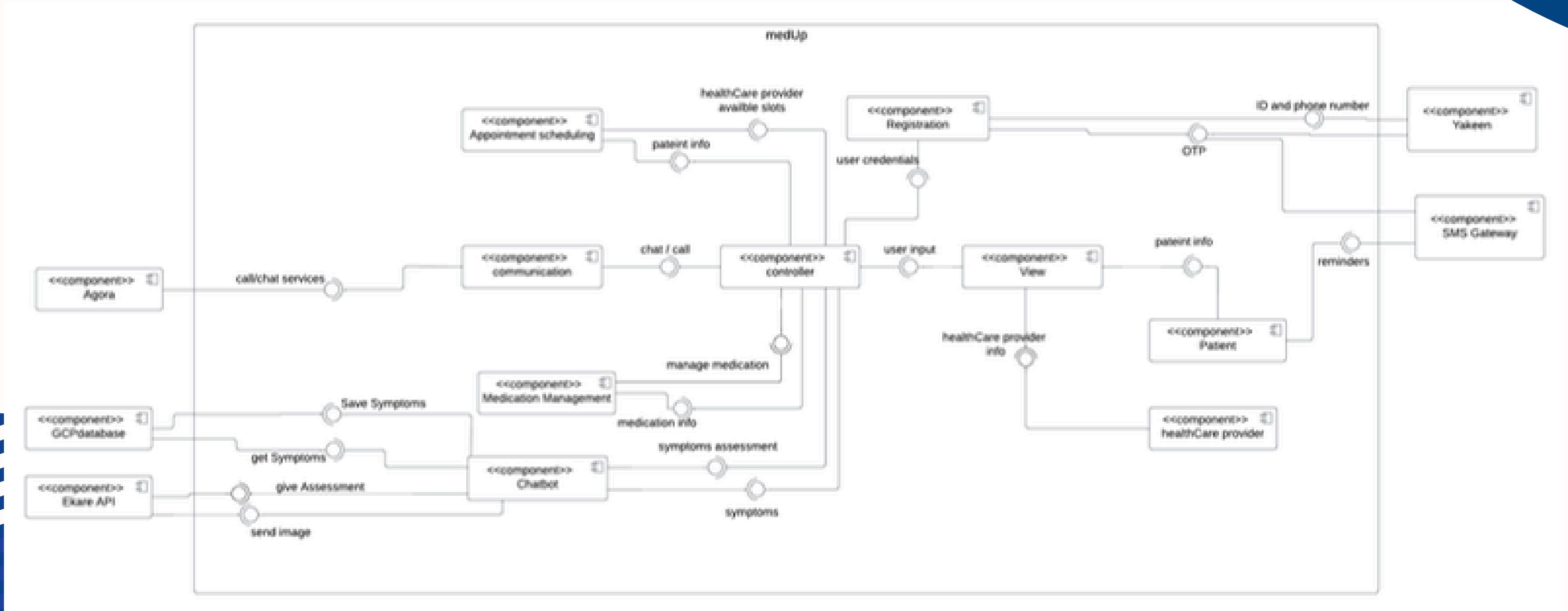
USECASE DAIGRAM



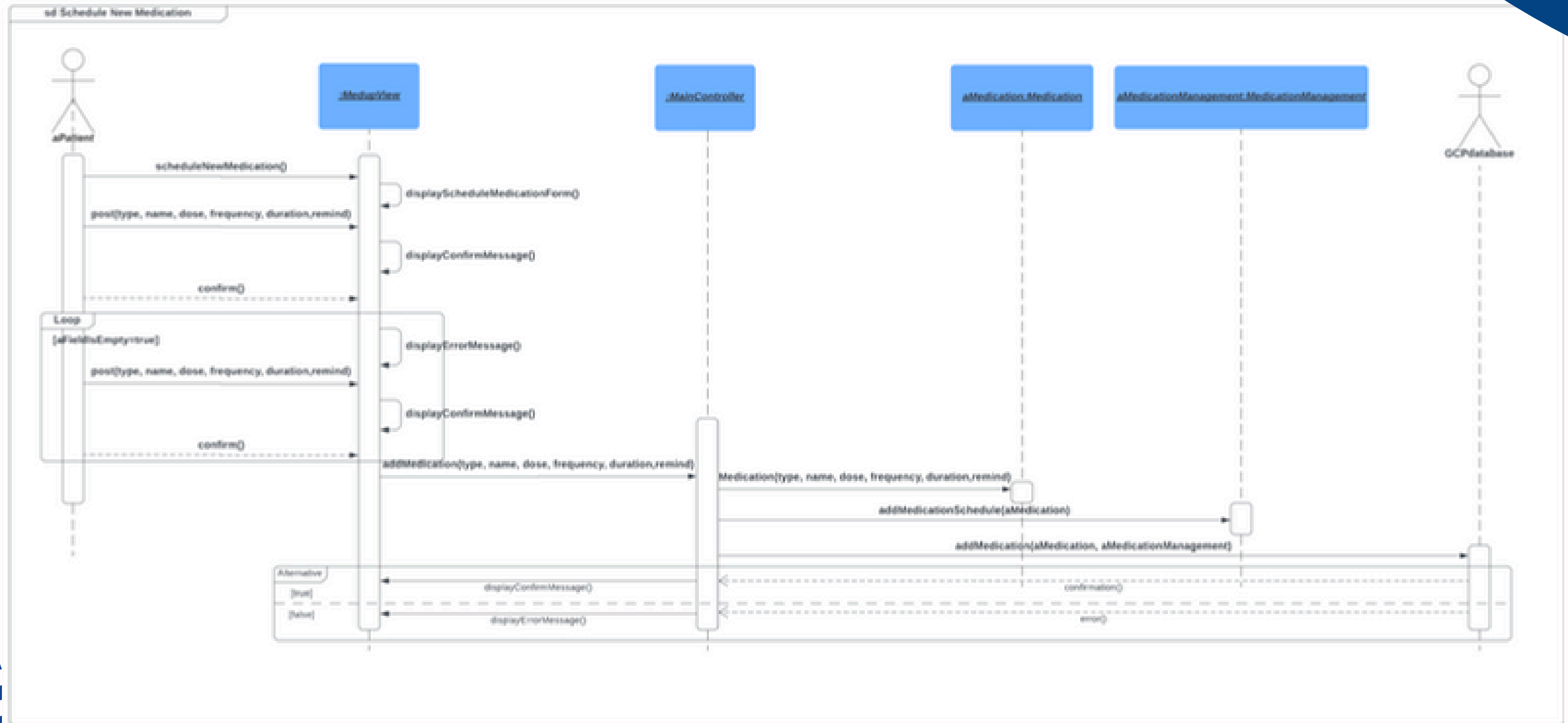
CLASS DAIGRAM



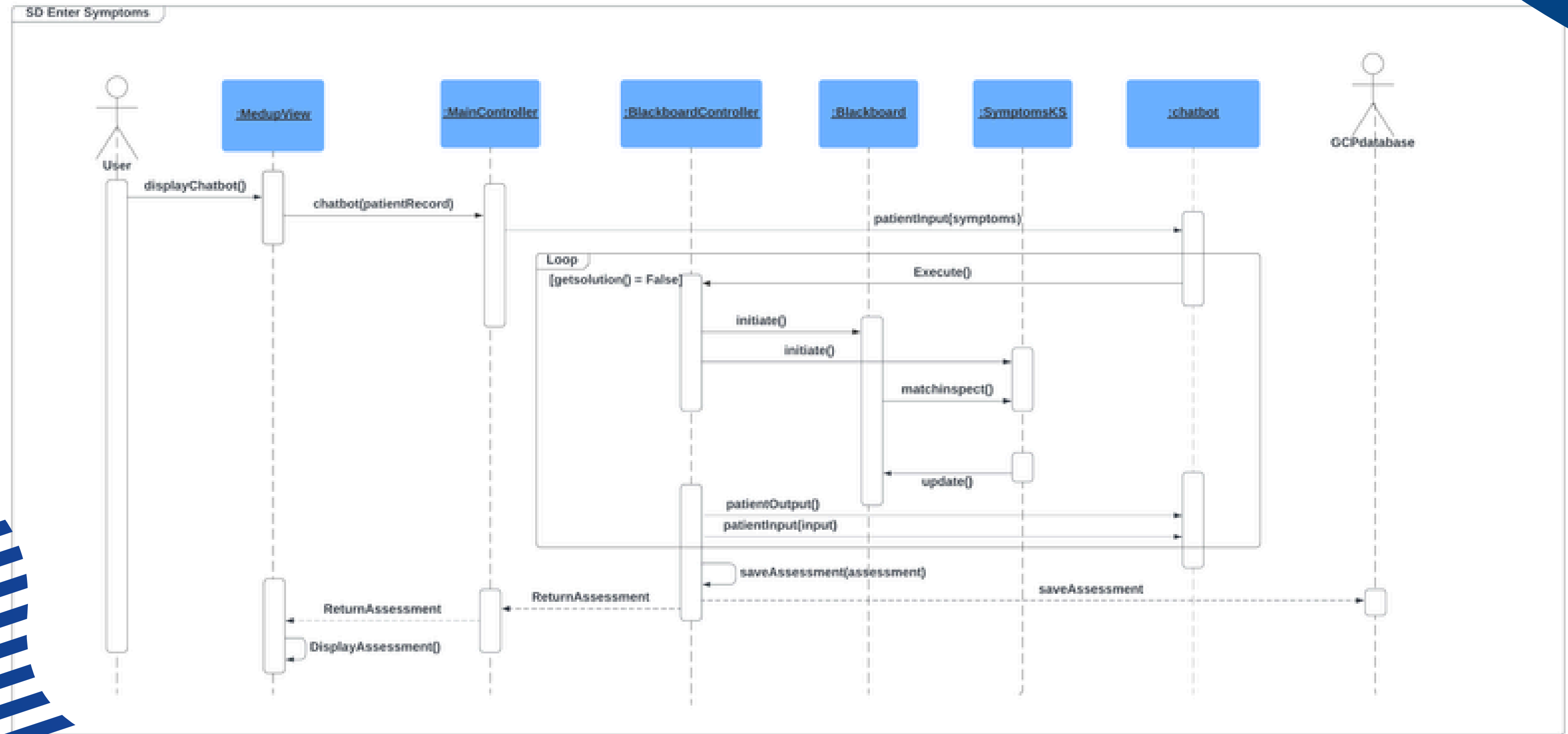
COMPONENT DAIGRAM



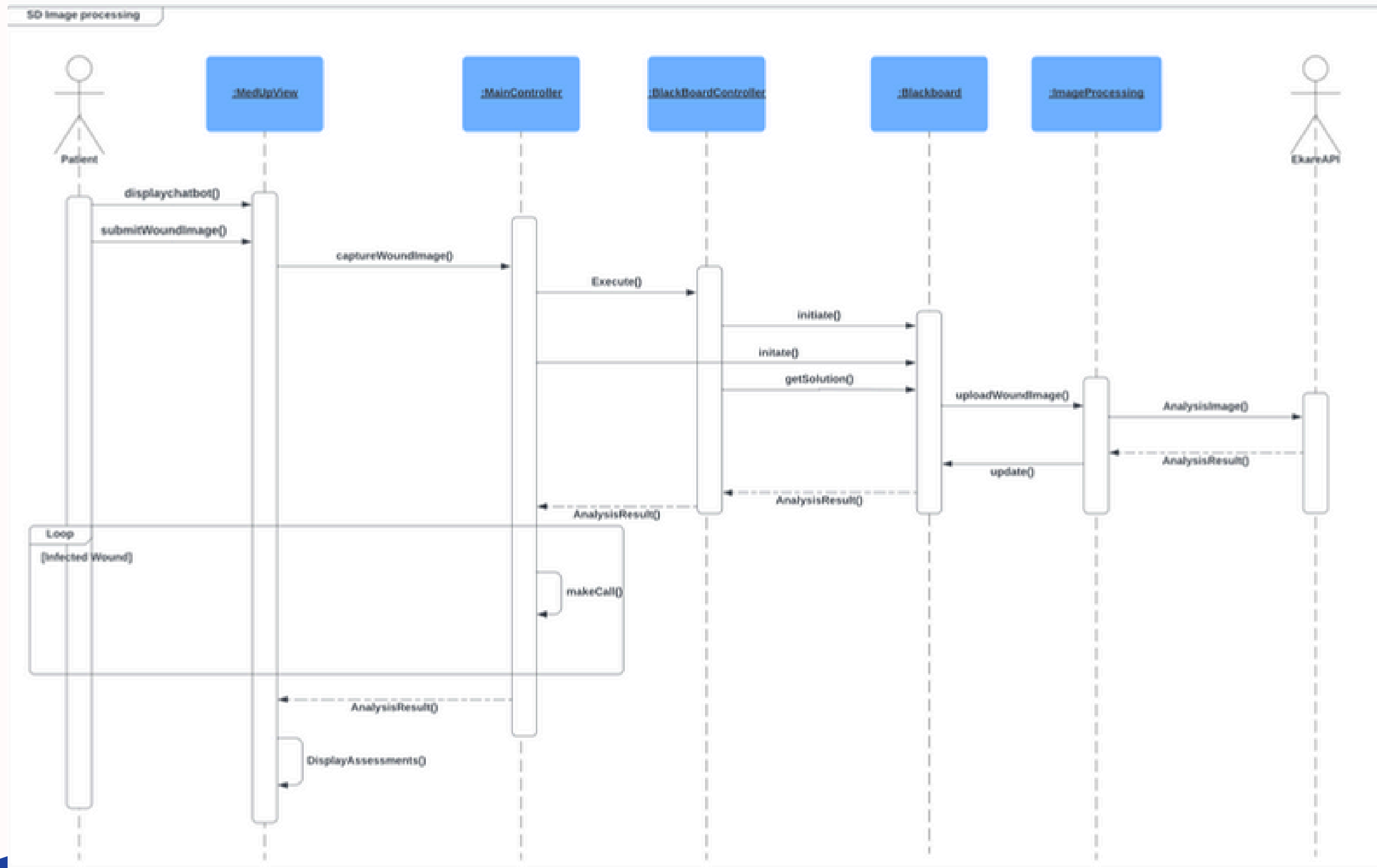
SEQUENCE DIAGRAMS



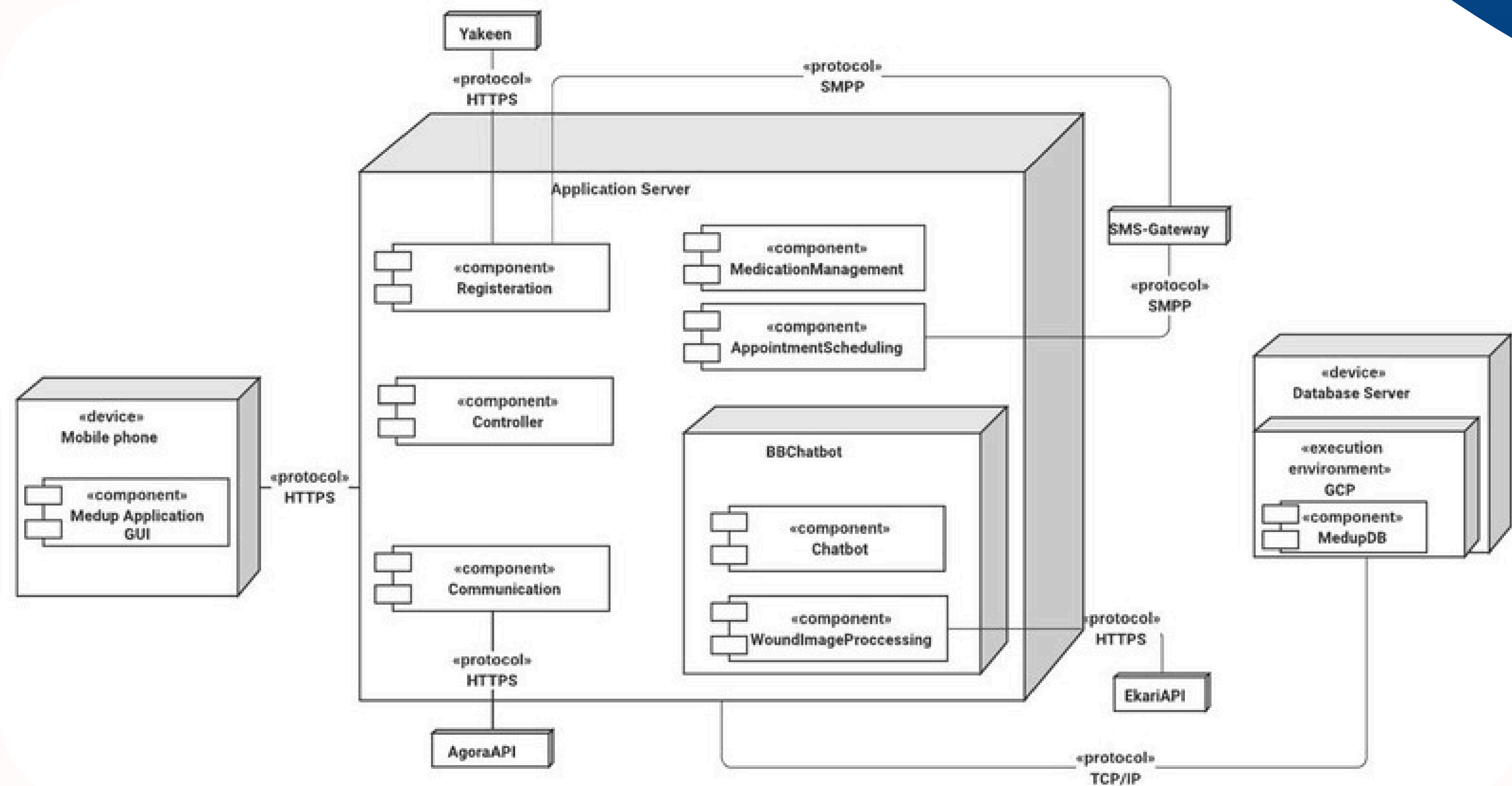
SEQUENCE DIAGRAMS



SEQUENCE DIAGRAMS



DEPLOYMENT DIAGRAM



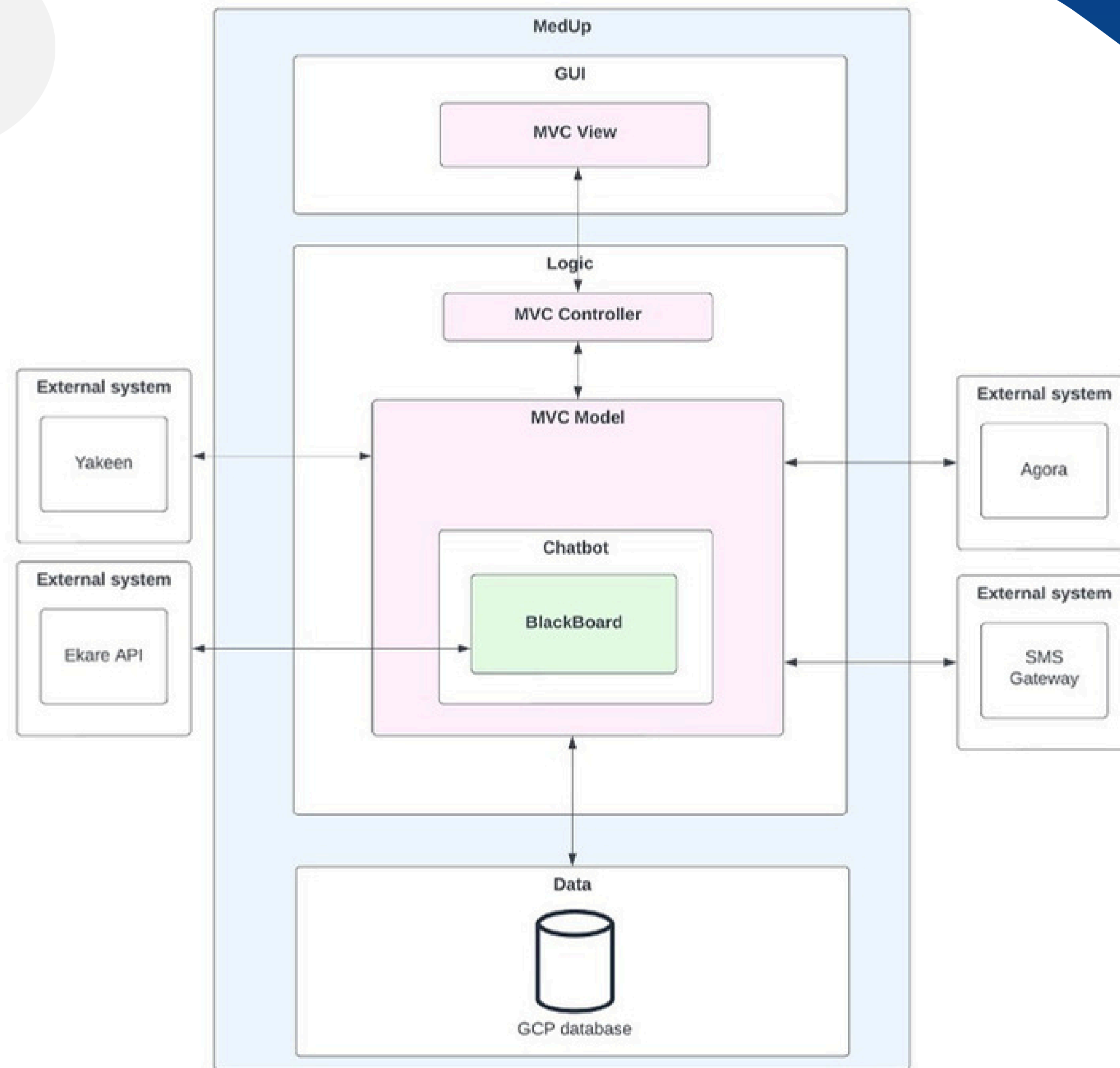
ARCHITECTURE STYLE

we've combined two architectural styles, **Model-View-Controller (MVC)** and **Blackboard**, to leverage the benefits of both.

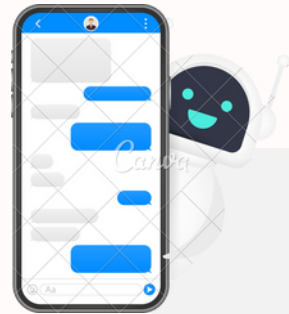
MVC offers structured organization and separation of components, enhancing modularity, scalability, and reusability. It accommodates our main services, like the AI chatbot with machine learning modules.

However, the inclusion of an external API for image processing posed a modularity challenge. To address this we integrated **Blackboard architecture**, enabling collaboration among independent components and promoting modularity and extensibility. This approach allows our system to iteratively combine knowledge and functionalities without tight coupling, ensuring efficient performance and adaptability.

ARCHITECTURE STYLE



FUTURE WORK



Chatbot support for
different Arabic
accents



Integration with
Sehhaty



Alternative medicine
suggestions

THANK YOU

- Rafeef Alowayed
- Najlaa Alhazani
- Munirah Al Obaid
- Sara Alaiban
- Lama Almazyad
- Ruba Alrabaih