

# MedLink System Integrated App

## Group member:

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# Introduction

Do you have the experience  
visiting to a hospital or  
accompanying your family  
members to hospital ?





**Problem??**

# Introduction

Do you have the experience visiting to a hospital or accompanying your family members to hospital ?





# Empathy Phase

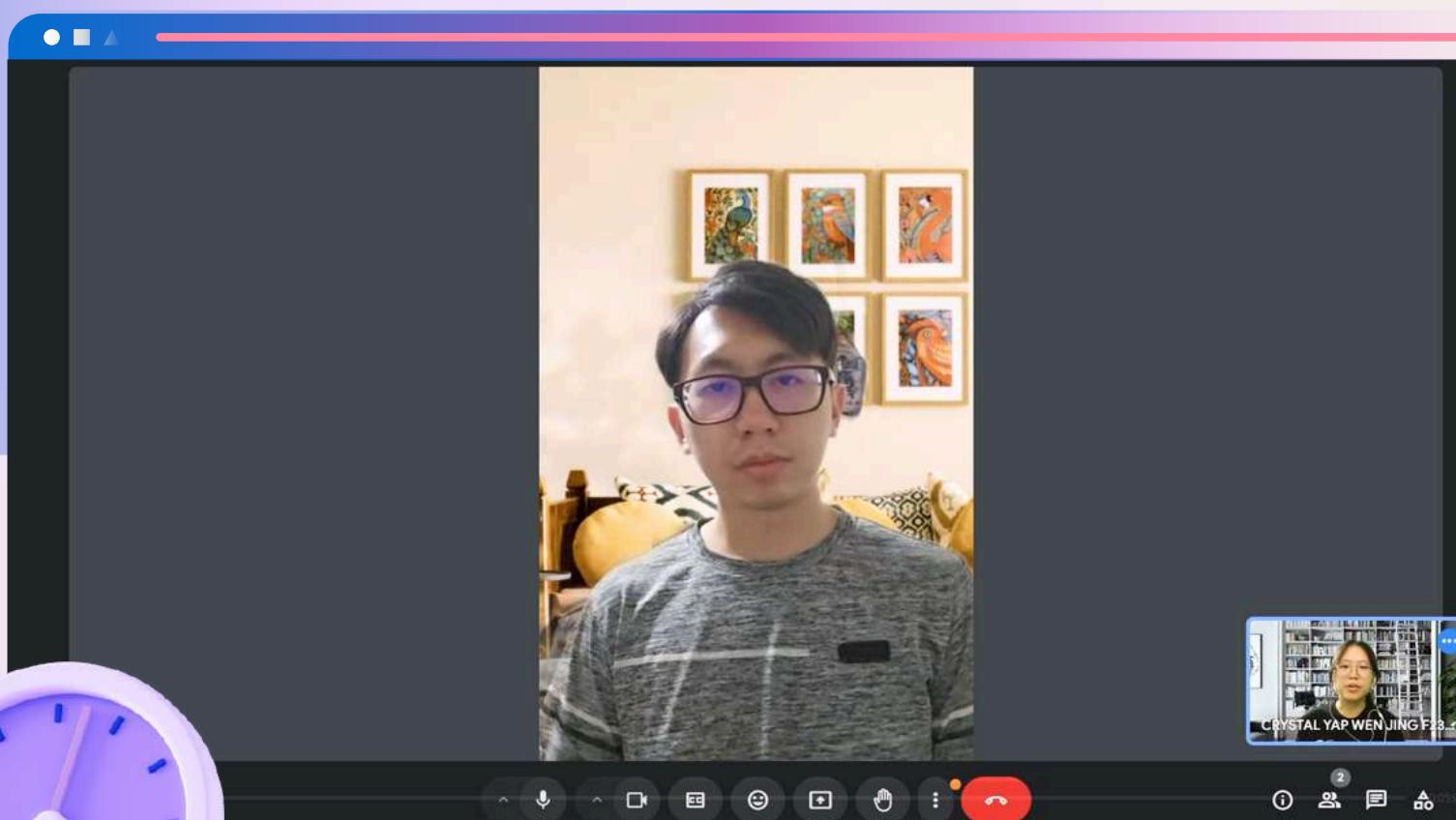
## Understanding The Users' Needs

To explore the users' needs, we conducted interviews and created composite characters as typical users within the healthcare system. We gathered the difficulties from patients and medical staff in government healthcare institutions.





# Interviews



## Jayden

*Office worker who has visited government hospitals for medical consultations and appointments.*

**Can you describe your experience visiting a government hospital or clinic? Did you face any challenges?**

- Faces long waiting periods, disrupting his work schedule
- Needs to bring his medical history when switching between private and government hospitals or different divisions within the same clinic
- Due to a busy workload, sometimes forgets about appointments, leading to missed appointments.





# Interviews



## Crystal Yap

*She has experience accompanying her grandmother, who has mobility issues, to government clinics for medical checkups and medication collection.*

**Can you describe the experience of accompanying your grandmother to the clinic? Did you face any problem?**

- Relies on family members for transport, causing inconvenience sometimes.
- Risk of losing a written appointment card.
- Struggles with unclear post-consultation instructions without accessible records.





# Composite Character

Outpatient  
ward nurse



General  
practitioner





# Joanne, 28

Nurse in a government hospital outpatient ward.

- Handles **manual data entry** for patient registration
- Government hospital is often **overcrowded**
- lack of effective platform** to communicate with other departments





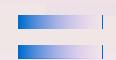
## Dr Syed, 45

General practitioner in a busy government clinic.

Struggled with ***fragmented patient medical records***

Difficult to prioritize patient according to conditions or urgent cases





# Define Phase





# Problems



## Manual processing leads to low efficiency

- Manual data entry by healthcare staffs
- Consume resources and time, limits the number of manageable patients

## Long waiting time in government hospital

- Leads to delay of treatment/follow-up appointments of serious illness patients



## Lack of continuous patient monitoring

- especially for patients with chronic disease or post-surgery recovery
- Patients may not notice health deterioration until serious complications arise



# Problems



## Inadequate communication between patients and doctors

- Inadequate post-consultation records might lead to patient misunderstandings or getting inaccurate information about diagnoses, medications



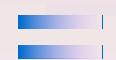
## Limited access of healthcare services

- Limited health access in remote locations and villages
- During emergencies when patients cannot physically reach their usual hospital (especially for post-hospital patients)



## Incomplete and low accessibility of patient medical records

- Leads to fragmented care and delayed treatments
- Patients difficult to track their medical histories (which important to those emergency and chronic illness patients/cases)



# Ideate Phase





# Features



## Digital patient registration system

- Automated Data Entry, smart forms pre-fill by the patients or they can upload their personal info and medical history

## Appointment & Queue Management system

- Smart Appointment Scheduling System: prioritizes patients based on their symptoms
- Real-time queue tracking system
- Reminder function for appointment



## Documentation and reporting

- Centralized patient health record
- Digital medical records for medical staff

## Emergency Button

- for instant notifications to the nearest hospital, complete with location details and secure sharing of medical history for timely care.





# Features

## Post-hospital care

- **Health tracker:** synchronize with wearable devices to record vital data such as blood pressure, and heart rate
- **Telemedicine consultation:** allow patients to consult doctors remotely via video or audio calls.



## Medical outpatient records

- Post-consultation summaries about the treatment plan, medication instructions

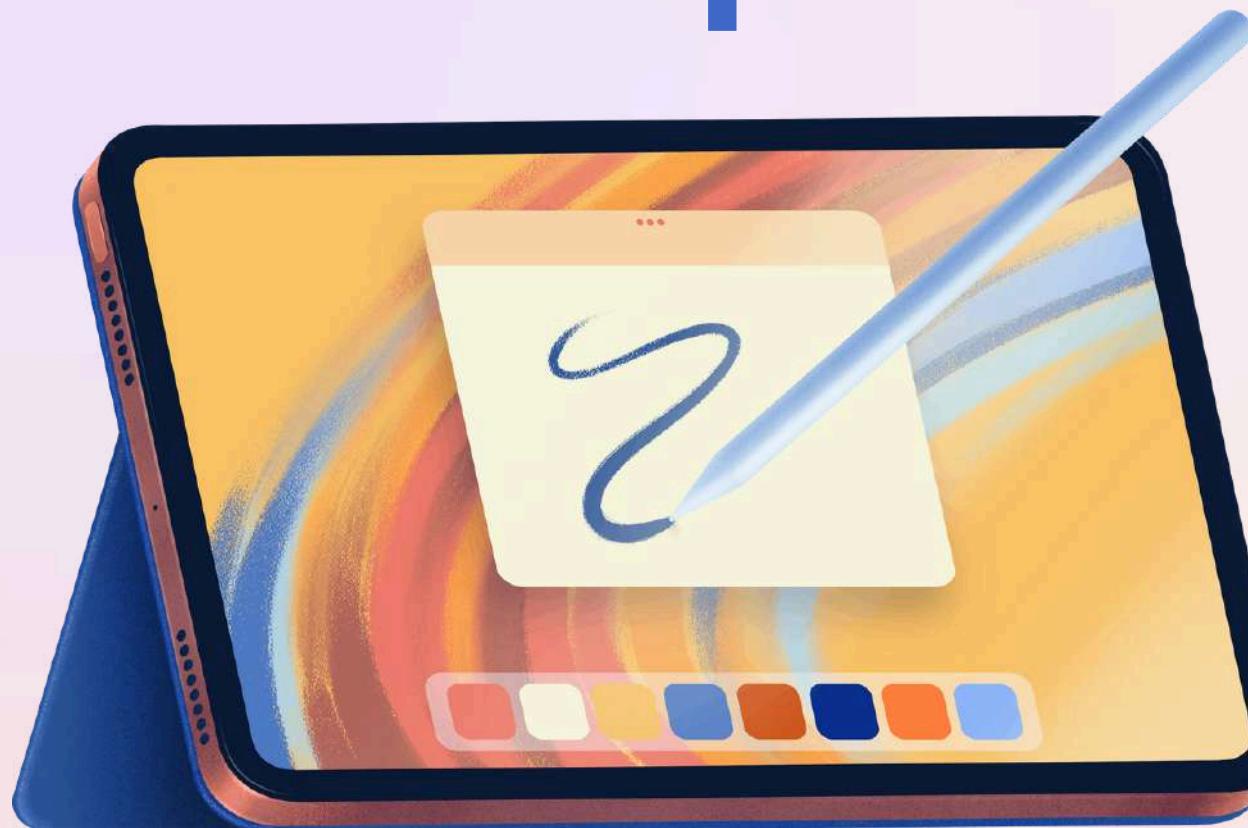
## Educational Resources and Health Tips

- personalized based on patients' profile
- All the content is created or approved by medical professionals to make sure it is accurate and reliable.

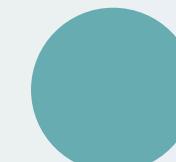




# Prototype's Concept



## Theme Colour



B



B



B

## Style

- Attractive and easy-to-understand icons are used for better users' experiences.



B

B

B

- Minimalist Interface and Intuitive Navigation

An interface with clean lines, ample white space, and a limited color palette is used. Navigation is straightforward, with clearly labeled menus and buttons.

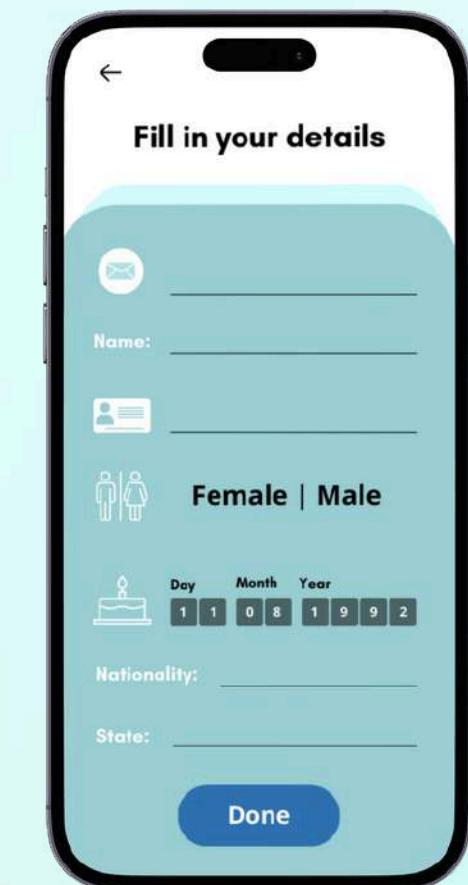
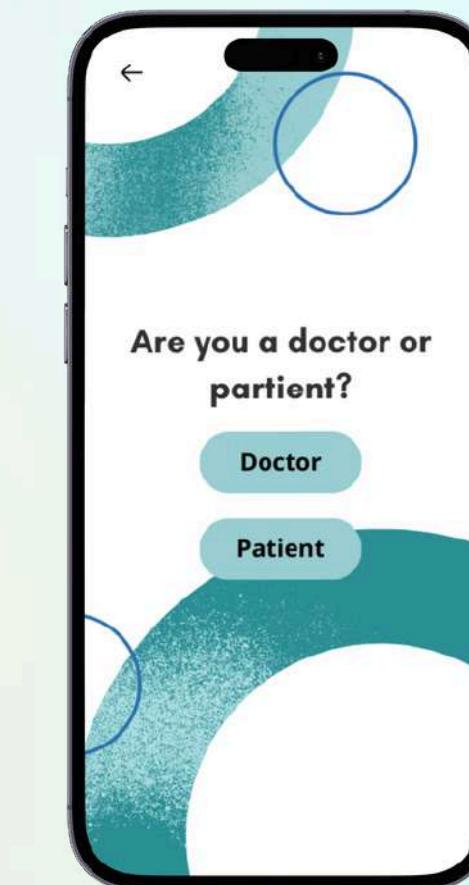
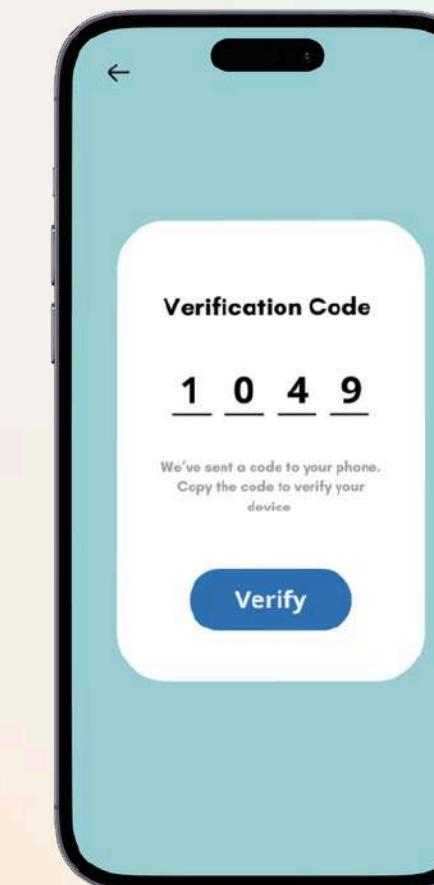
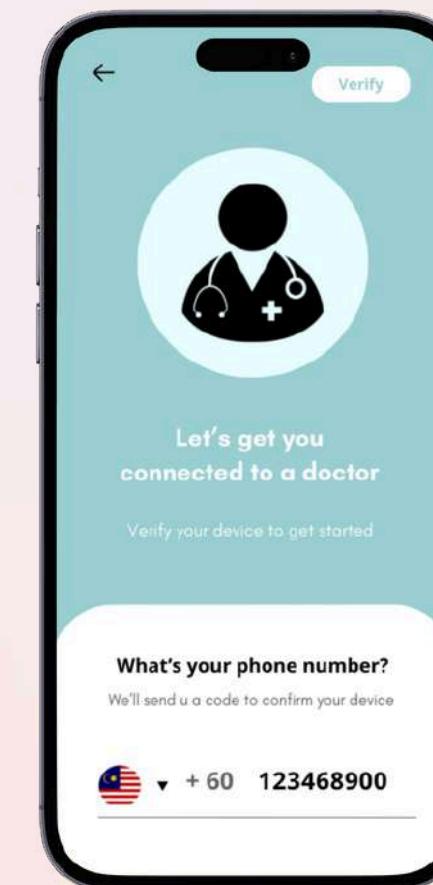
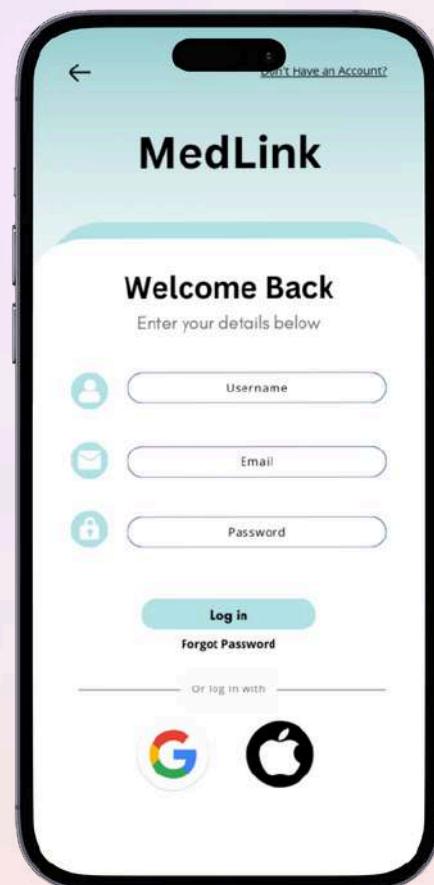
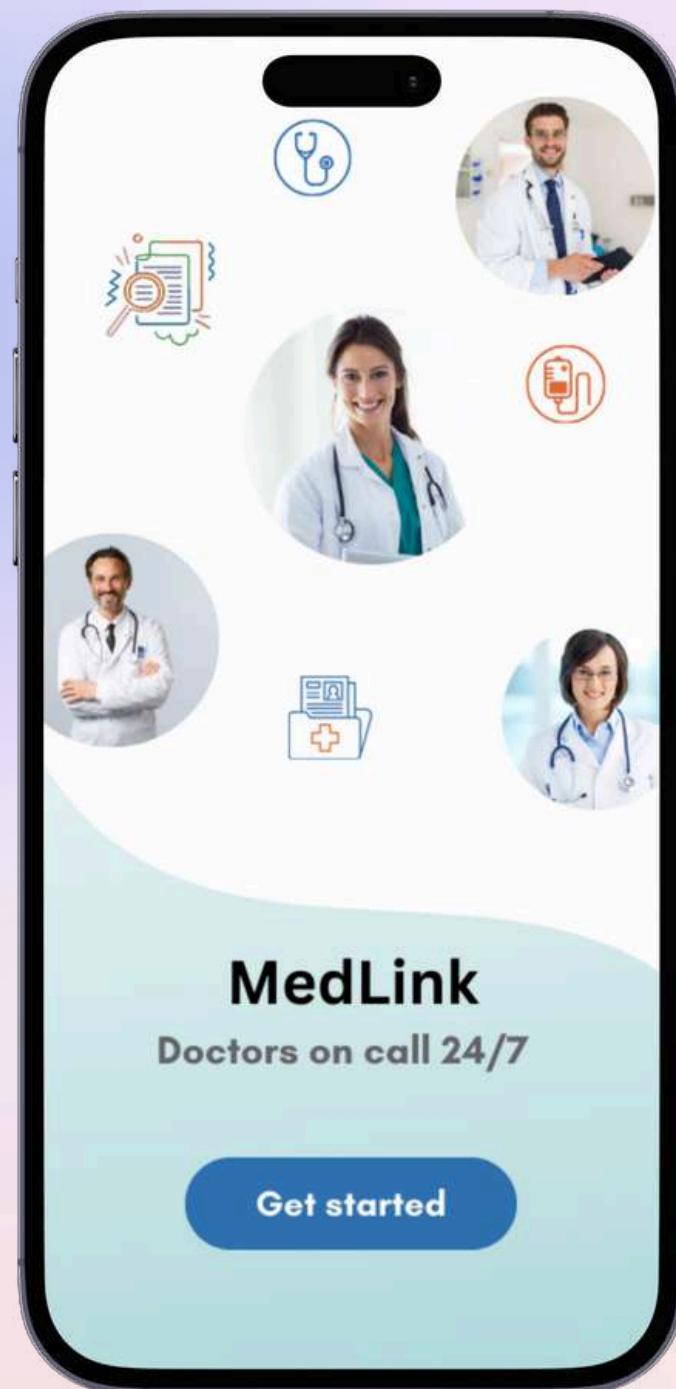
- Consistent Design Element

The app uses consistent fonts, button styles, and iconography throughout.



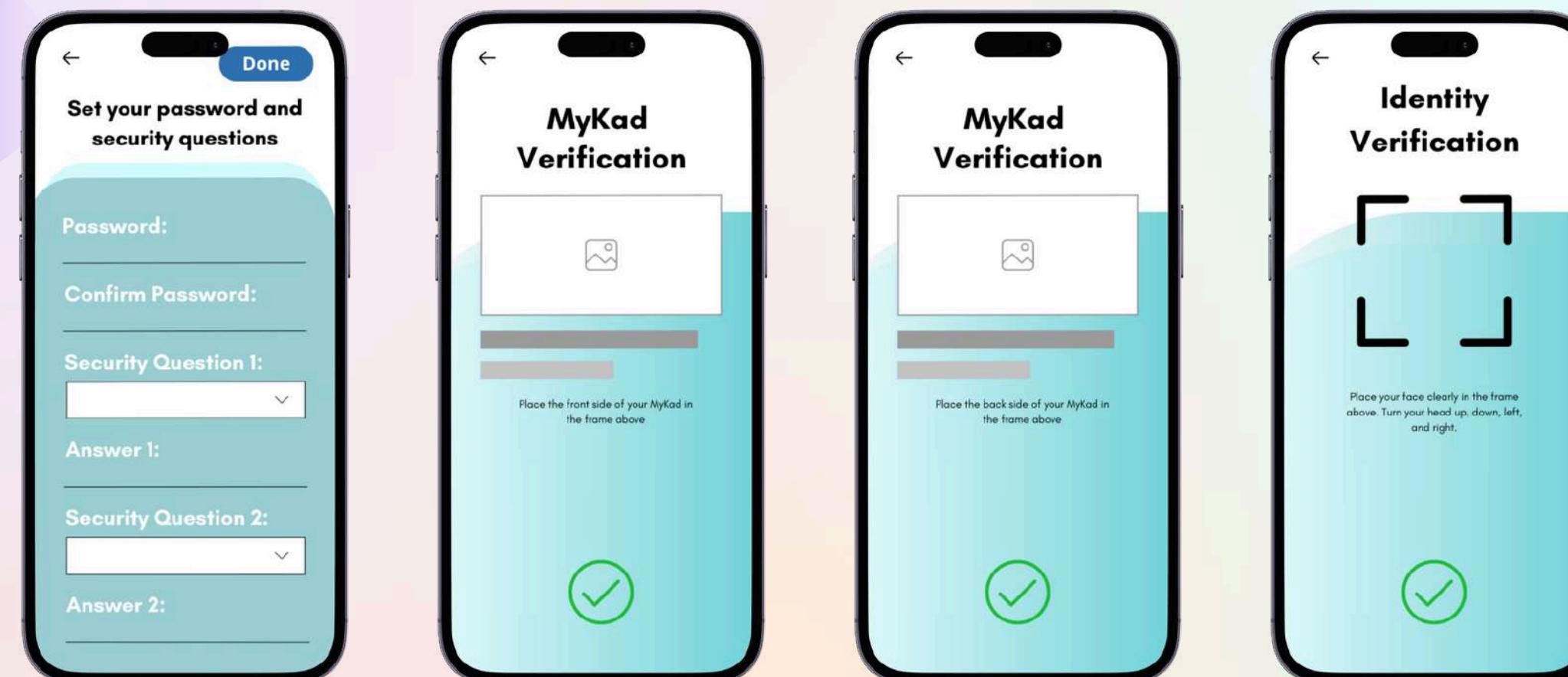


# Log In Page





# Security and Privacy

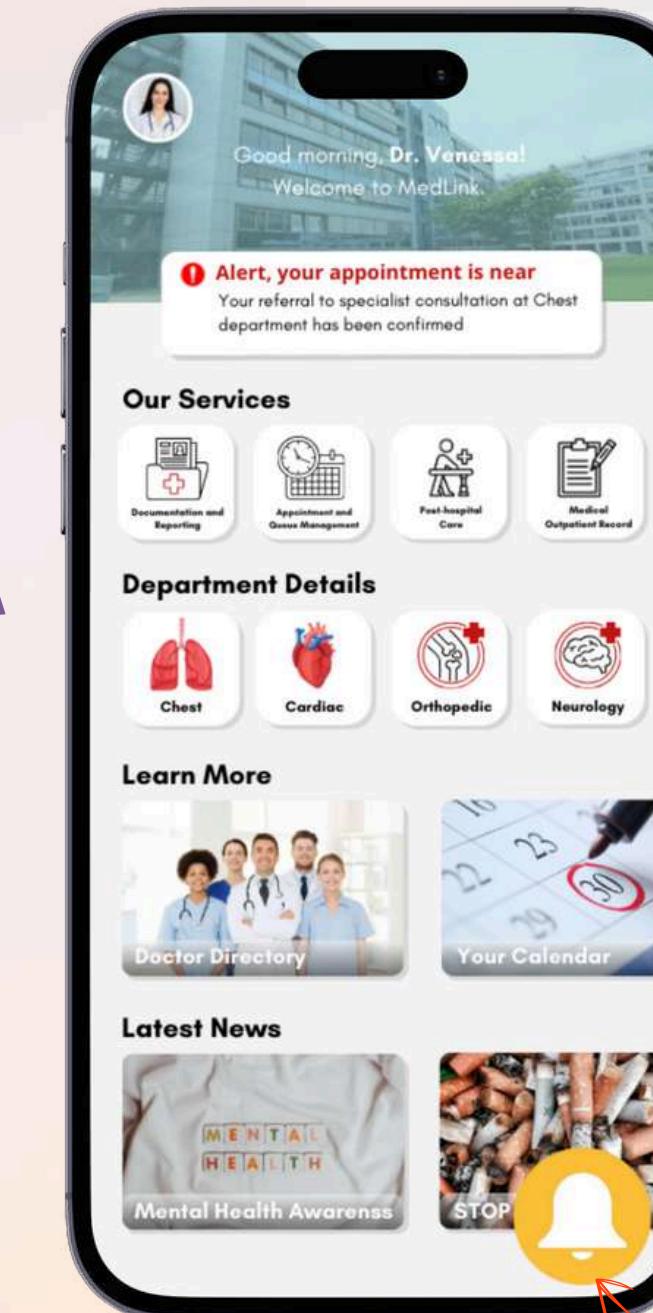




# Home Page of Doctor

## Department Details

- Share details about every departments
- Update any related infos of the department



## Main Services

- Documentation and Reporting
- Appointment and Queue Management
- Post-hospital care
- Medical Outpatient Records

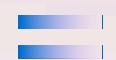
## Learn More

- Doctor Directory:  
Shows all doctors' informations
- Your calendar:  
To check your appointment of the day

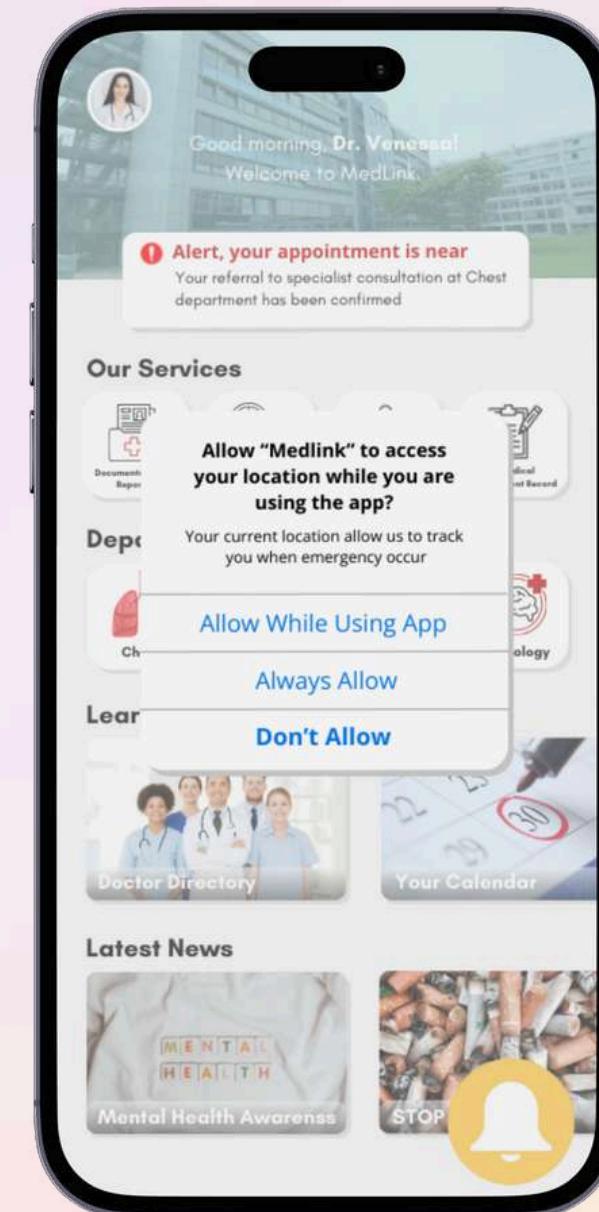
## Notifications button

- Get notified when the patient's health record updated is abnormal.

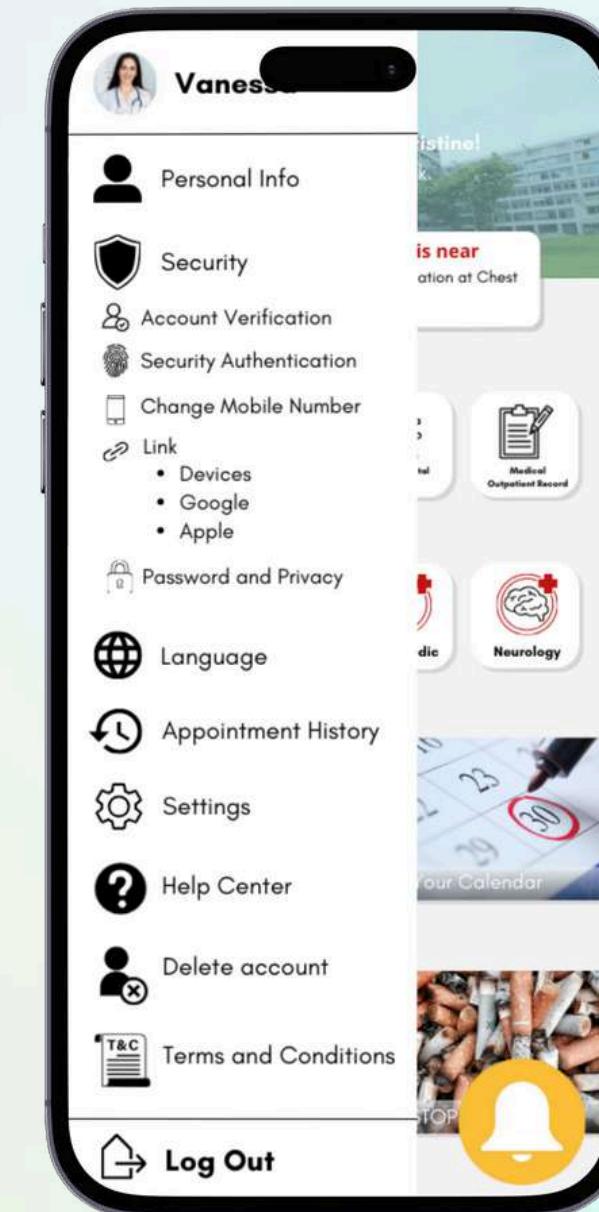




# Location Tracking Permission

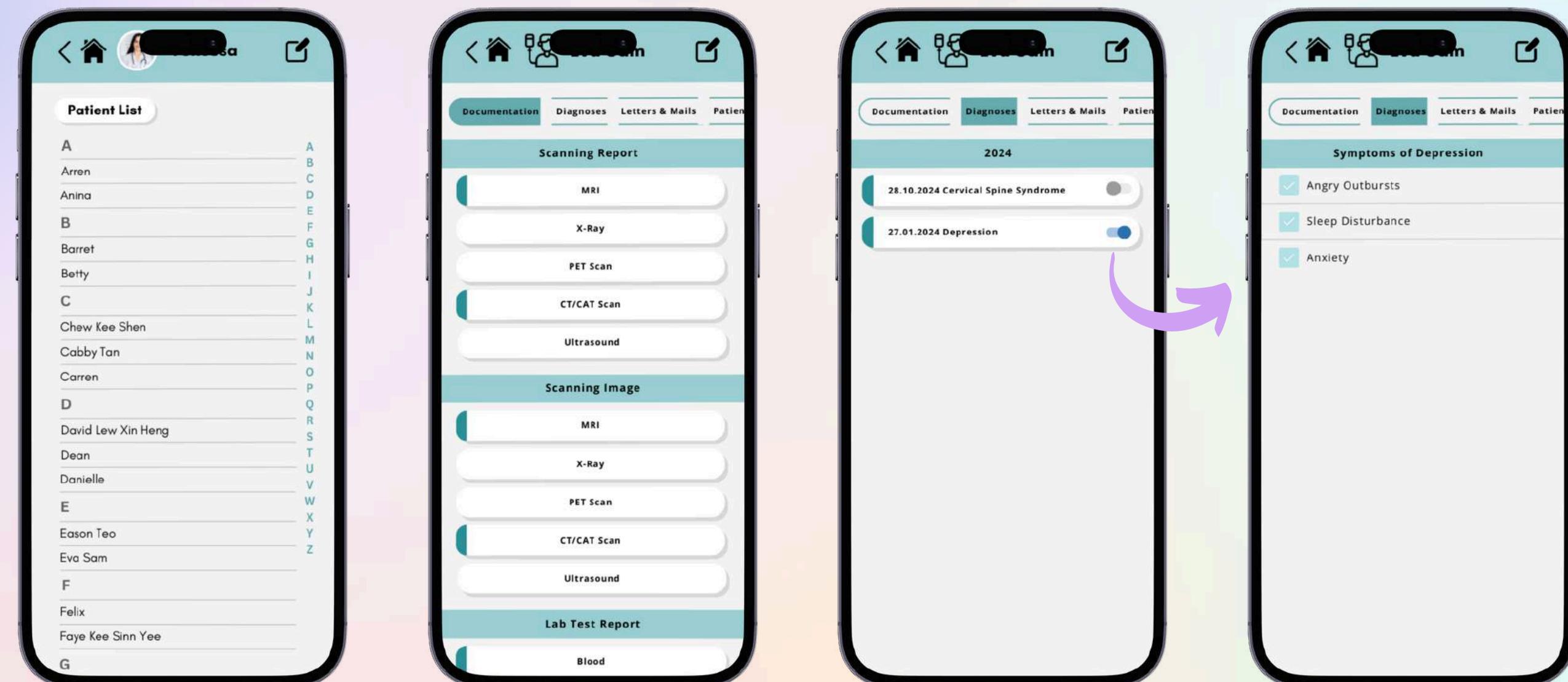


# Profile Infos Shown



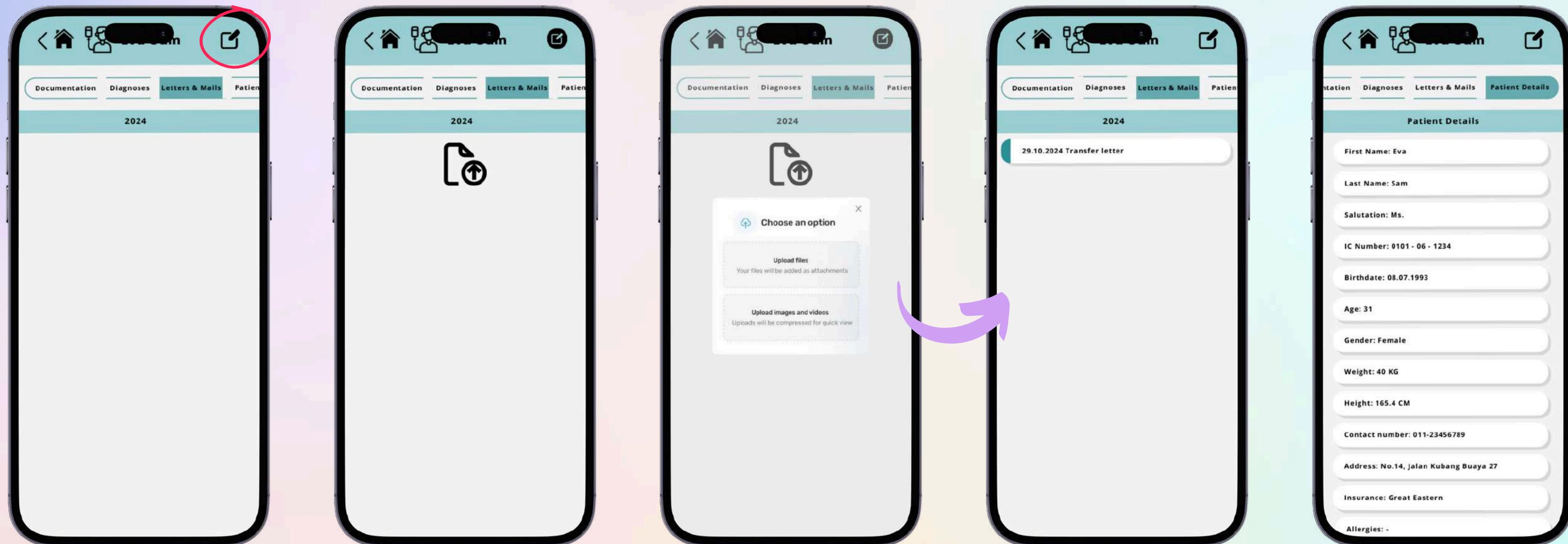


# Documentation and Reporting



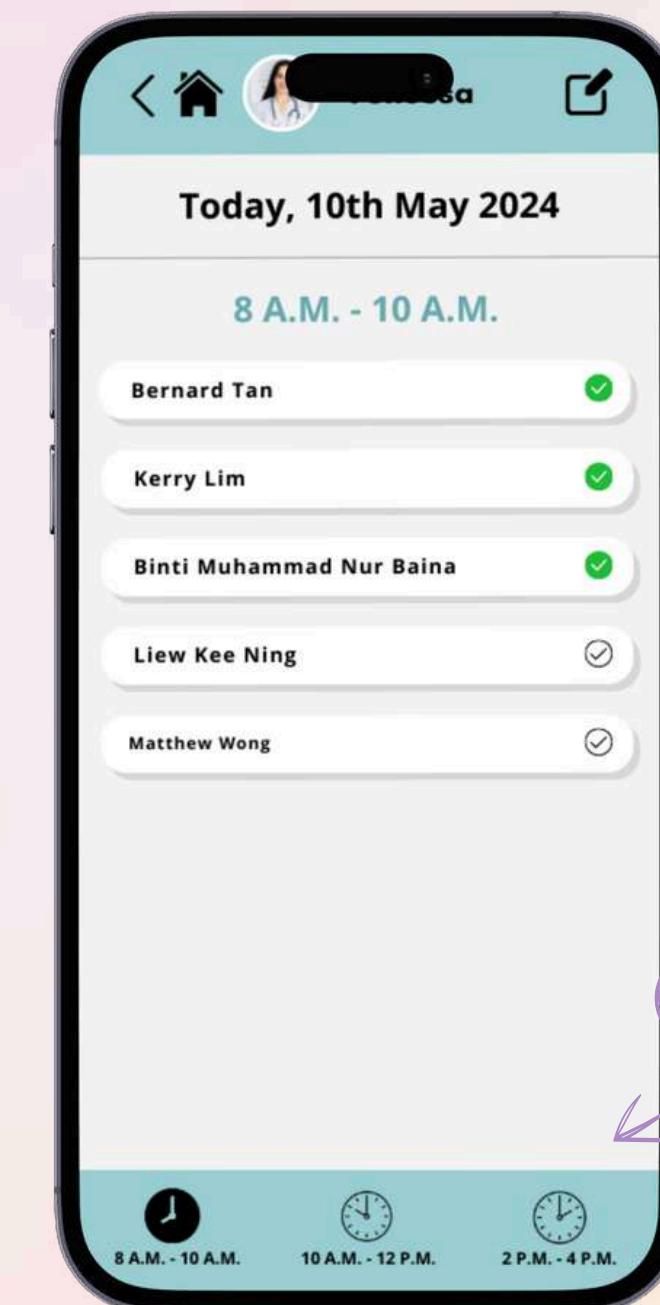


# Documentation and Reporting





# Appointment and Queue Management



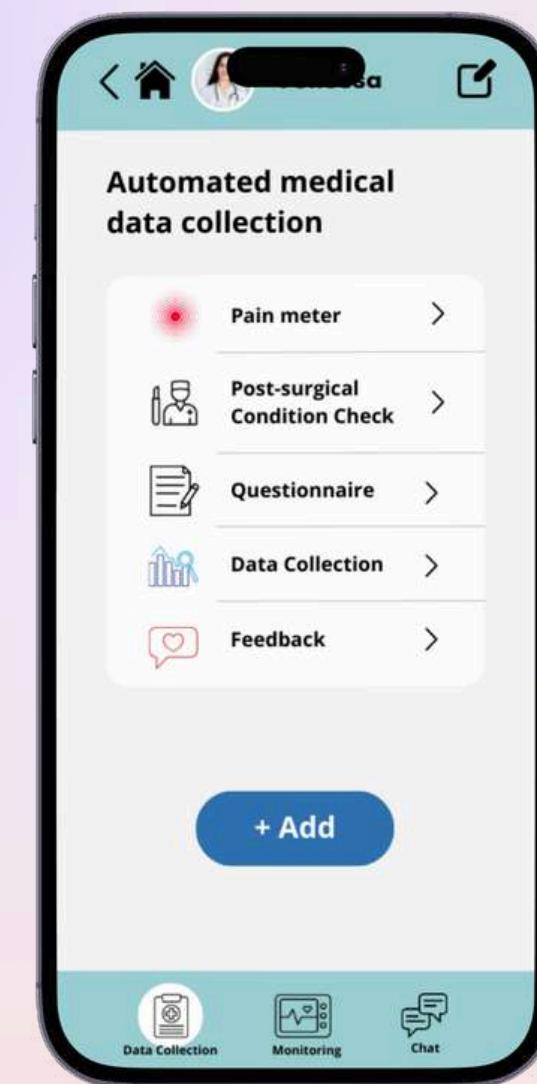
- ✓ Green Ticks: Done
- ✗ Blank Ticks: To be done

Choose the slot you want to check

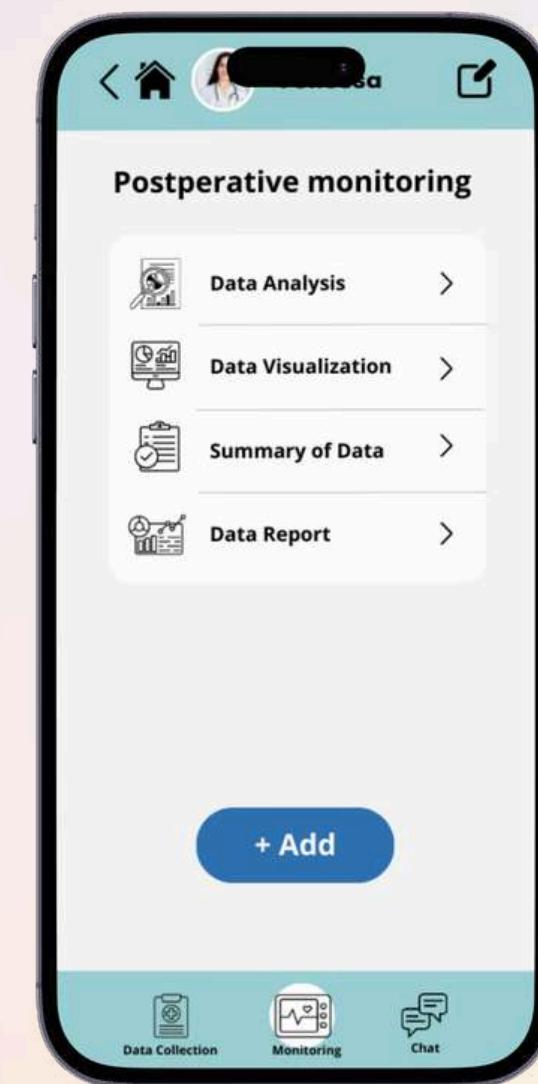




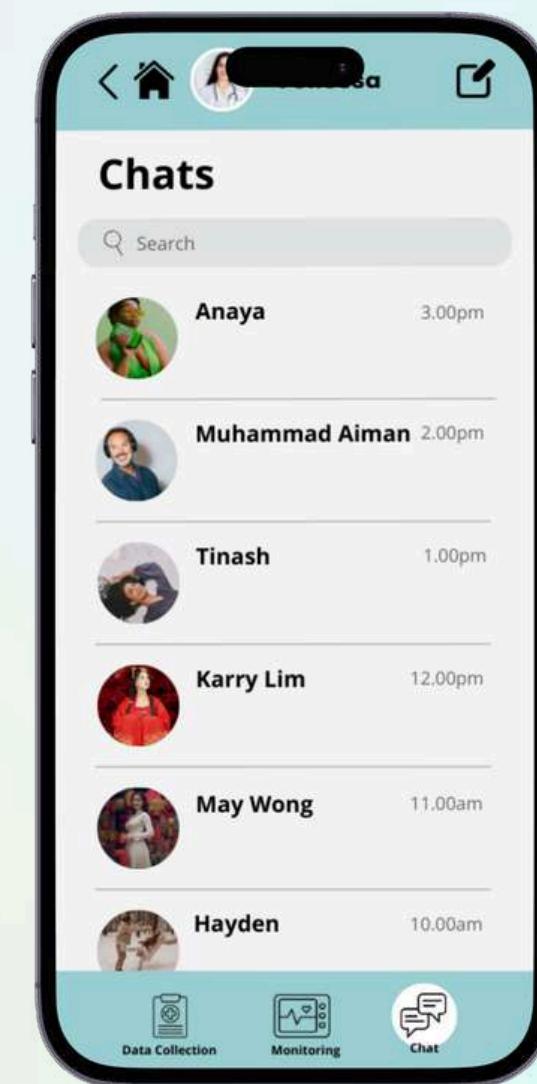
# Post-Hospital Care



Data updated by patients will be shown



Analysis of data collected

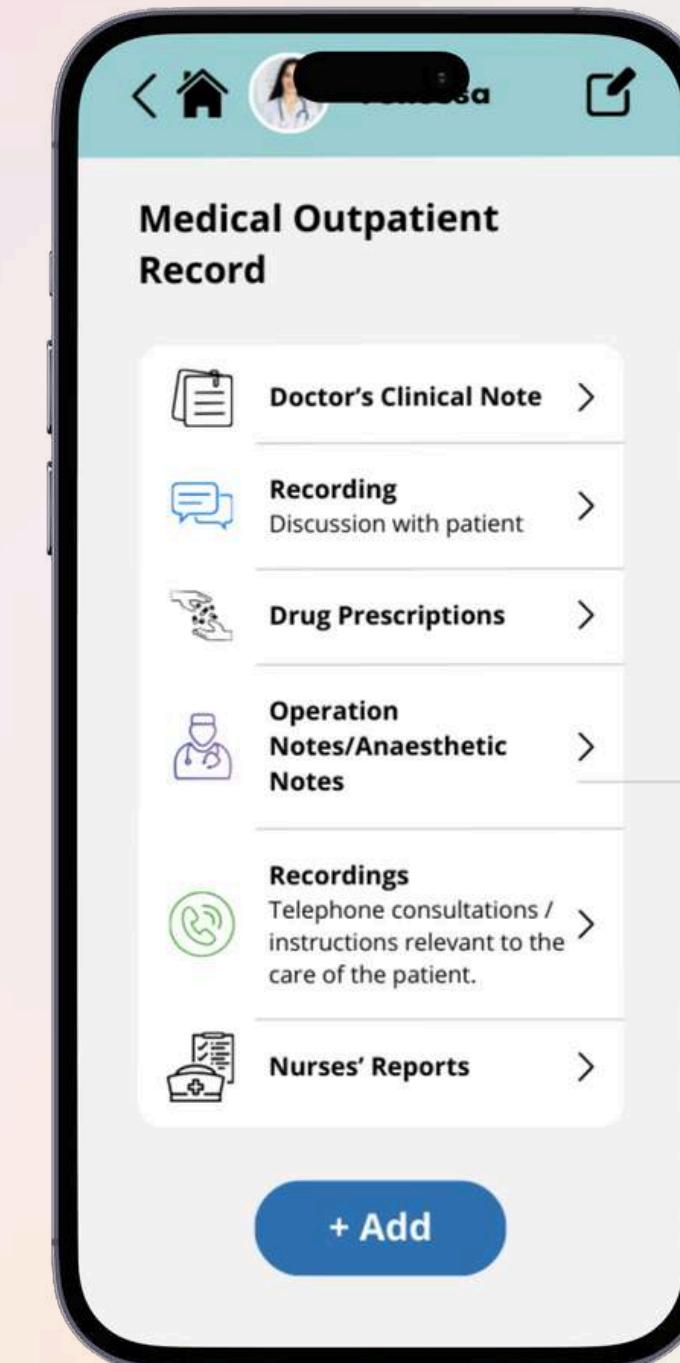


Live chat with patients





# Medical Outpatient Record

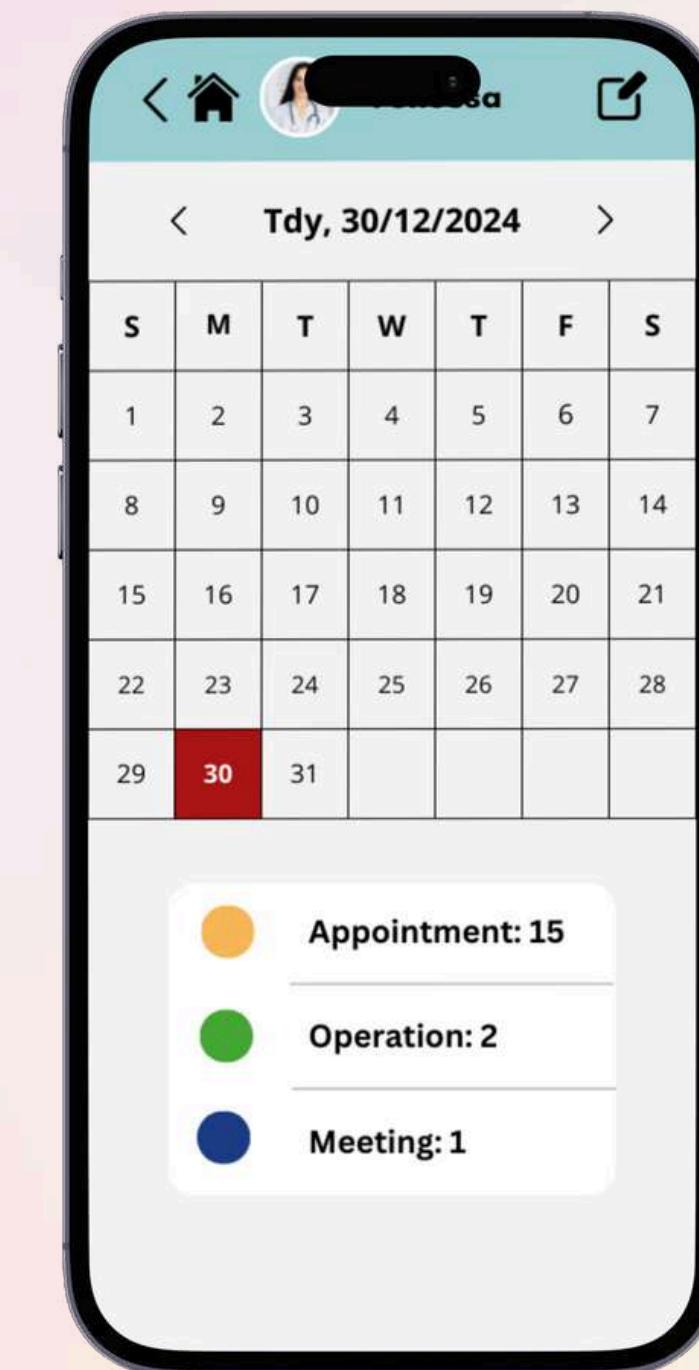


Data uploaded by doctors and synced on the patients side





# Your Calander



**Doctor's schedule of the day**

Shows number of appointment, operation, and meeting of the days





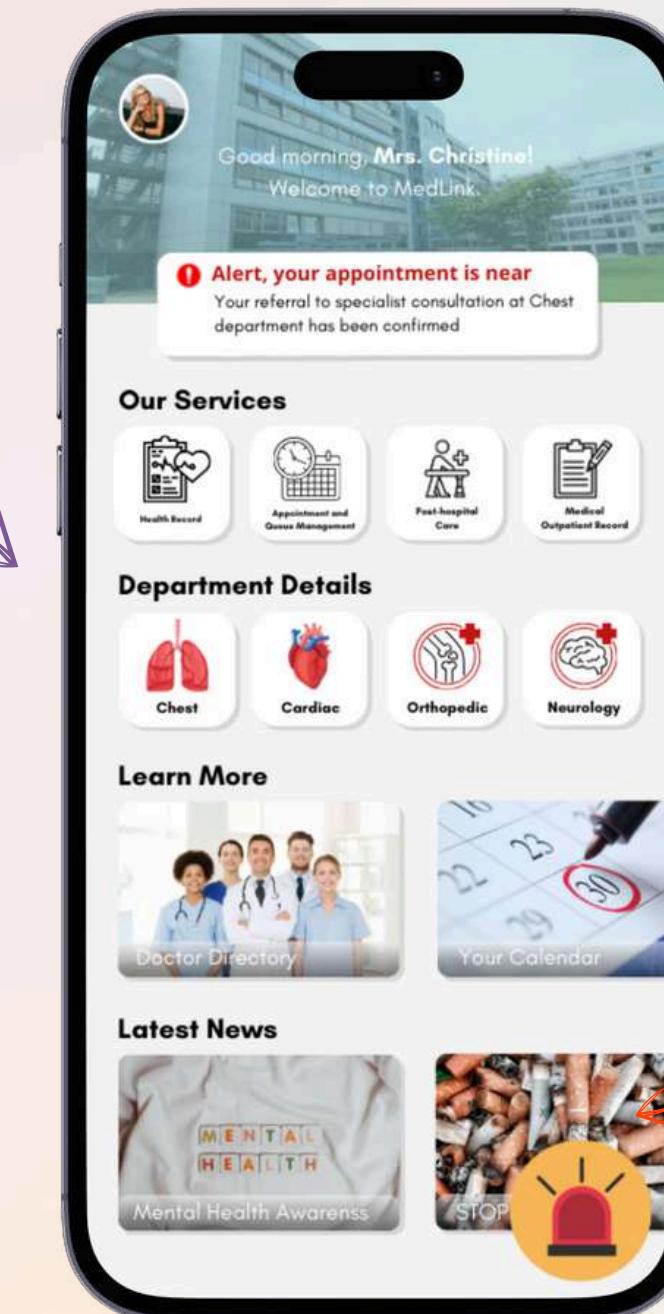
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To check your appointment of the month



## Main Services

- Health Record
- Appointment and Queue Management
- Post-hospital care
- Medical Outpatient Records

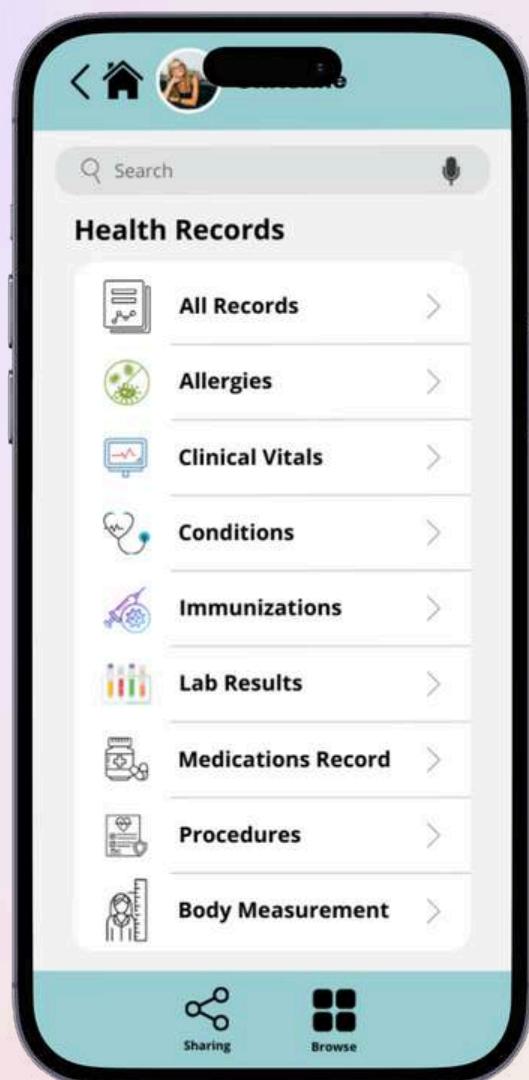
## Emergent Button

- Press this button when an emergency occurs.
- Your location will be tracked, and an ambulance from the nearest hospital will be sent.
- Your medical record that is required will be shared simultaneously.





# Health Record



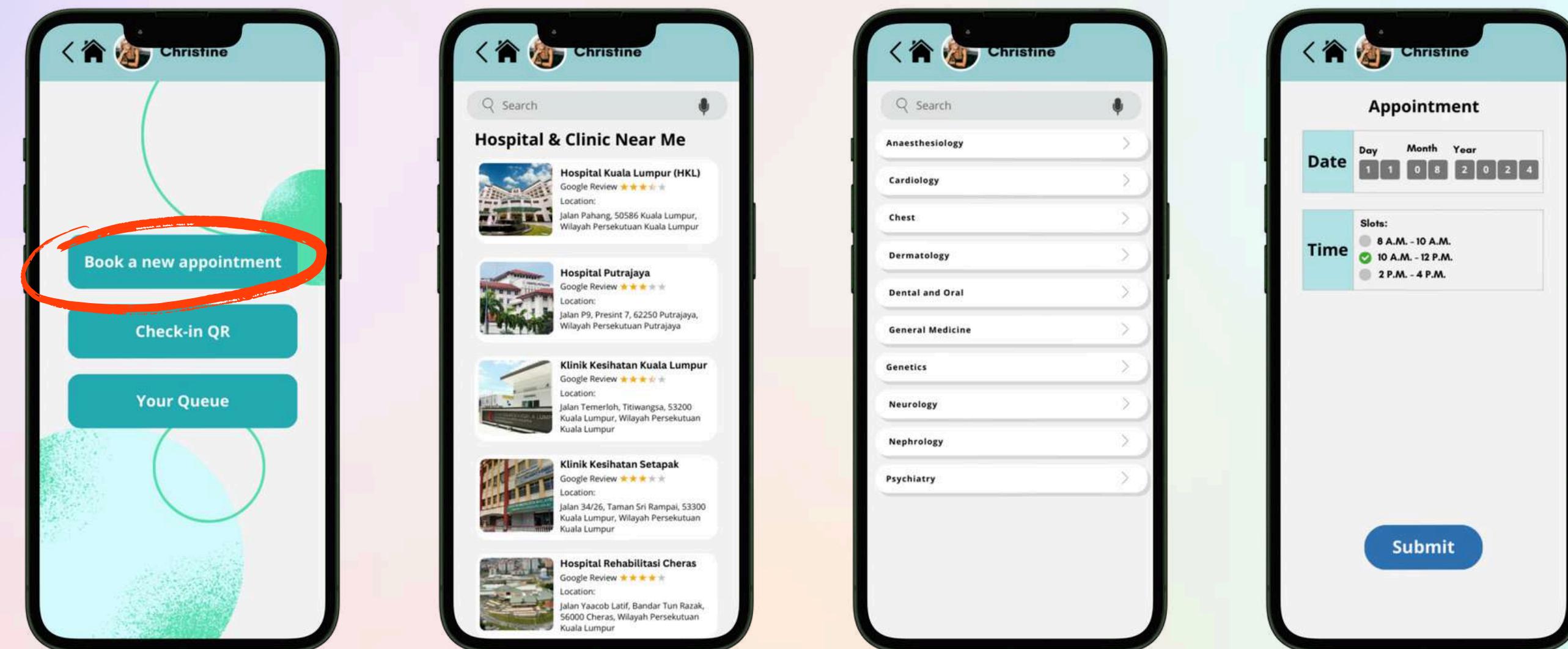
Physical indicators self-recording and the medical report uploaded by doctors are available here.

Sharing permission of your physical indicators self-recording to your doctor



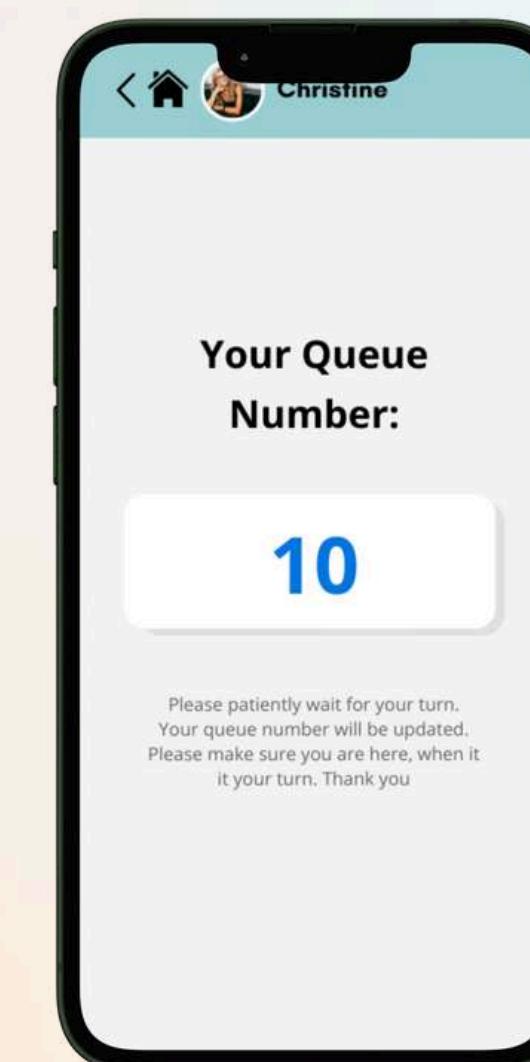
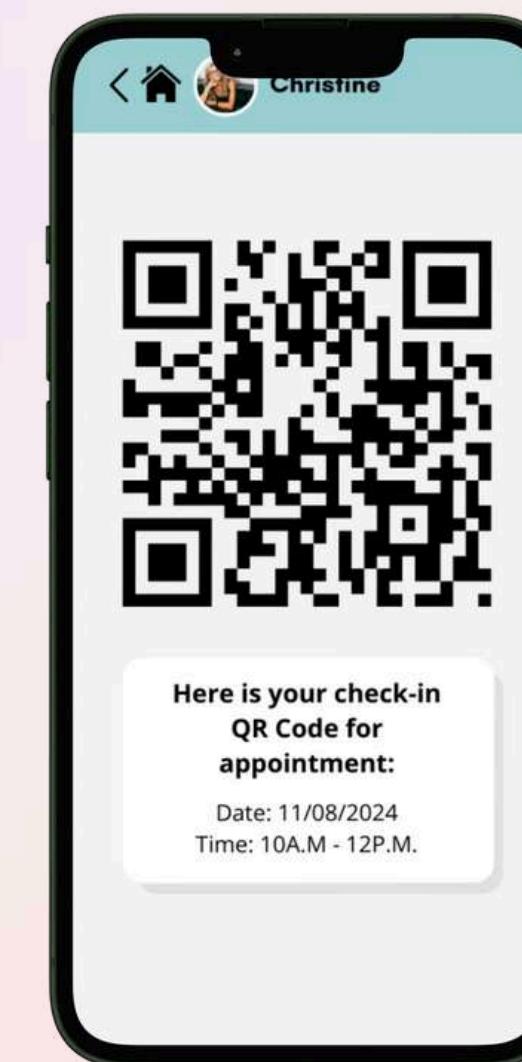
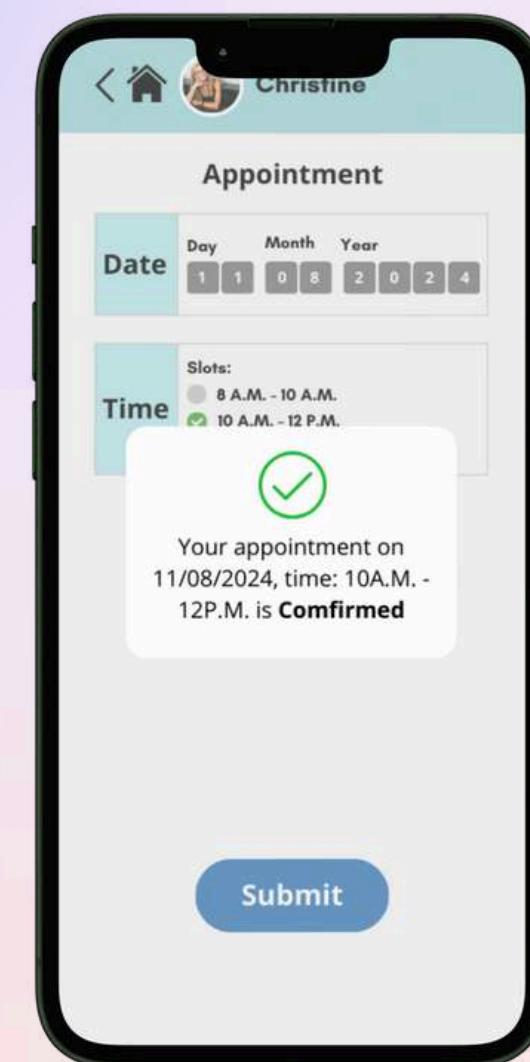


# Appointment and Queue Management





# Appointment and Queue Management

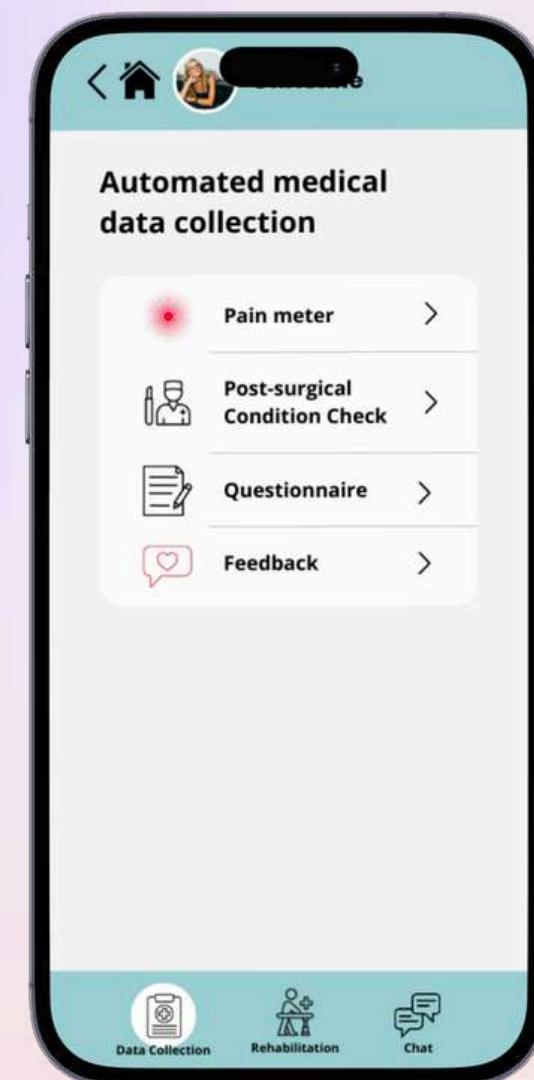


Once you've checked in on that day, you will get your queue number. It is real-time updated.

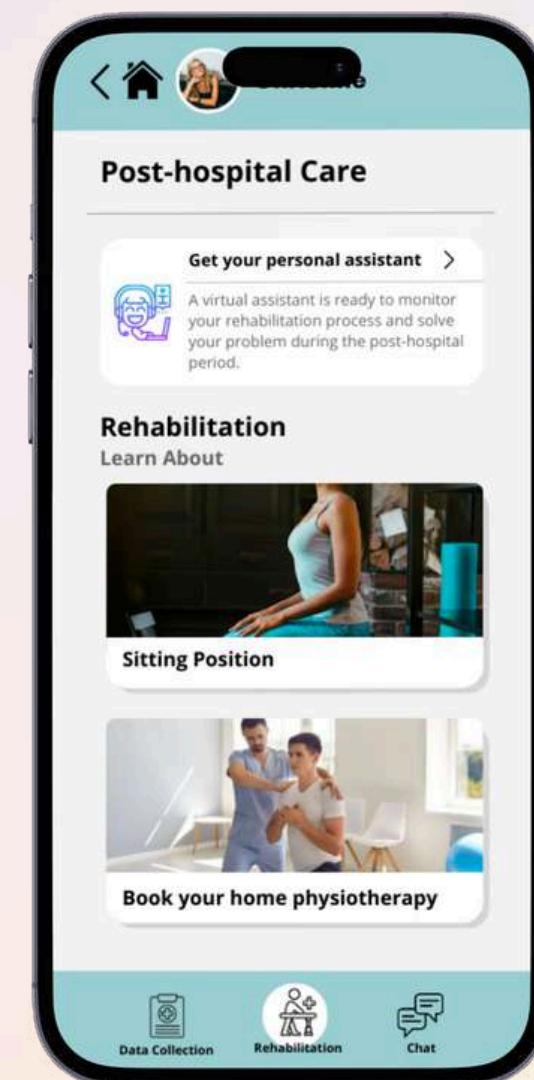




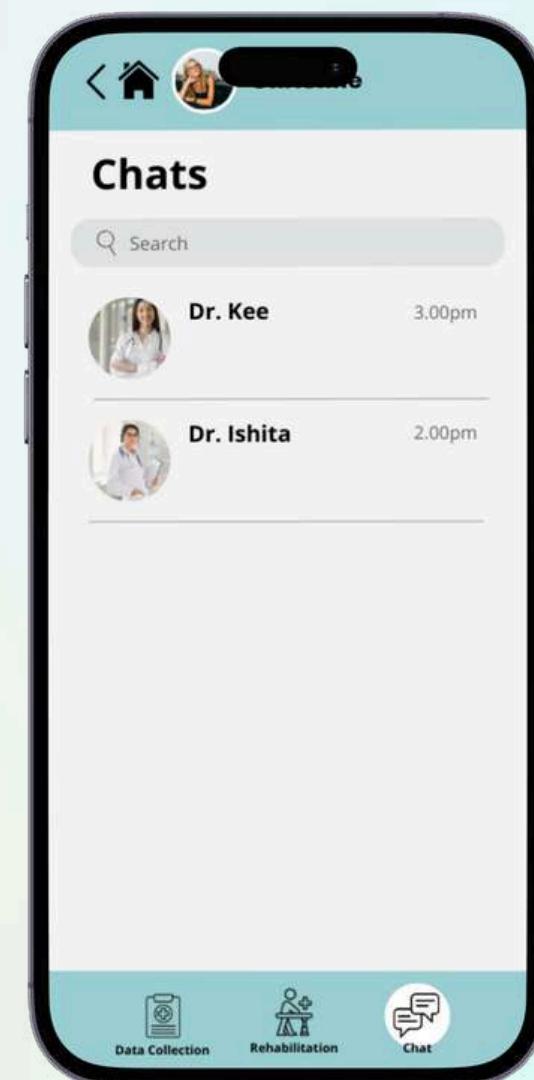
# Post-Hospital Care



Update your data here



Knowledge to know for post-hospital care

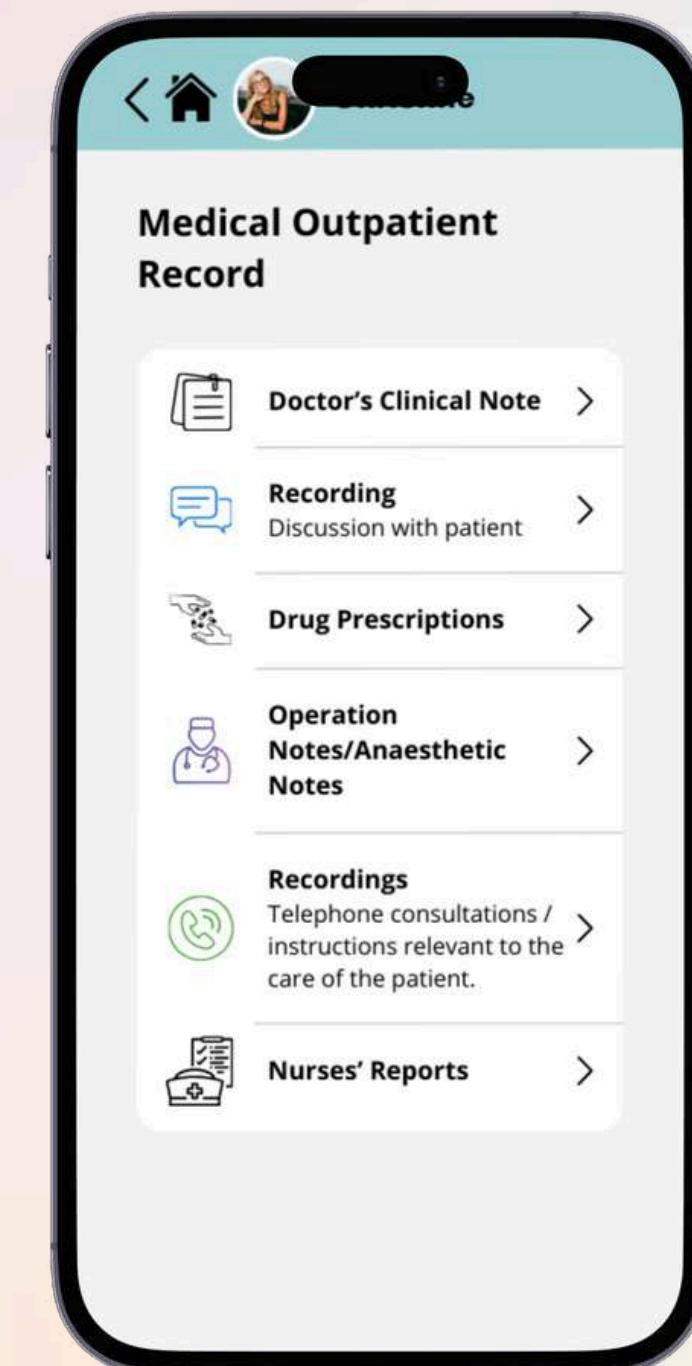


Live chat with doctors





# Medical Outpatient Record

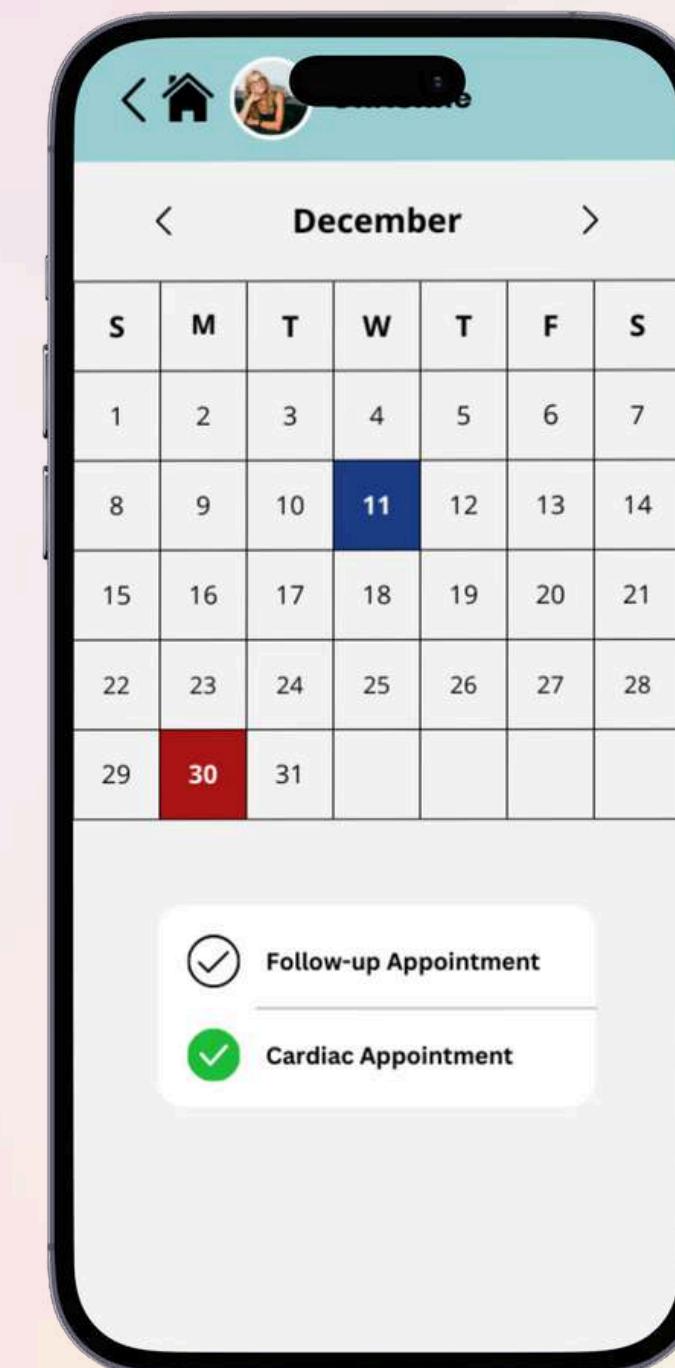


Records and documents uploaded by doctors can be checked here.





# Your Calander



**Patient's appointment of the month**

- ✓ Indicates the appointment you've attended
- ✓ Indicates the coming appointment





# Assessment point

- Review articles and news
- Interviews public
- Understand challenges face

## Define



- Brainstormed and selected optimal solutions

## Prototype



- Tester provide positive feedback
- recommends focus on certain areas



## Empathize

- Converted issues into actionable problem statements.

## Ideate



- design with Canva
- tested with marvel



## Test





# Medlink System:

addressing issues in the government healthcare system



Streamlines registration,  
manages queues,  
reduces waiting time



Centralized records preserve  
patient data for better  
accessibility



Ensures continuity of care  
by real time chat between doctor  
and patient after hospitalization





# Conclusion

**“Your hospital care,  
delivered with love”**





Thank You.  
Thank You.  
Thank You.

From Group 2 Technology & Information System

