imuni

2022 - Mobile app

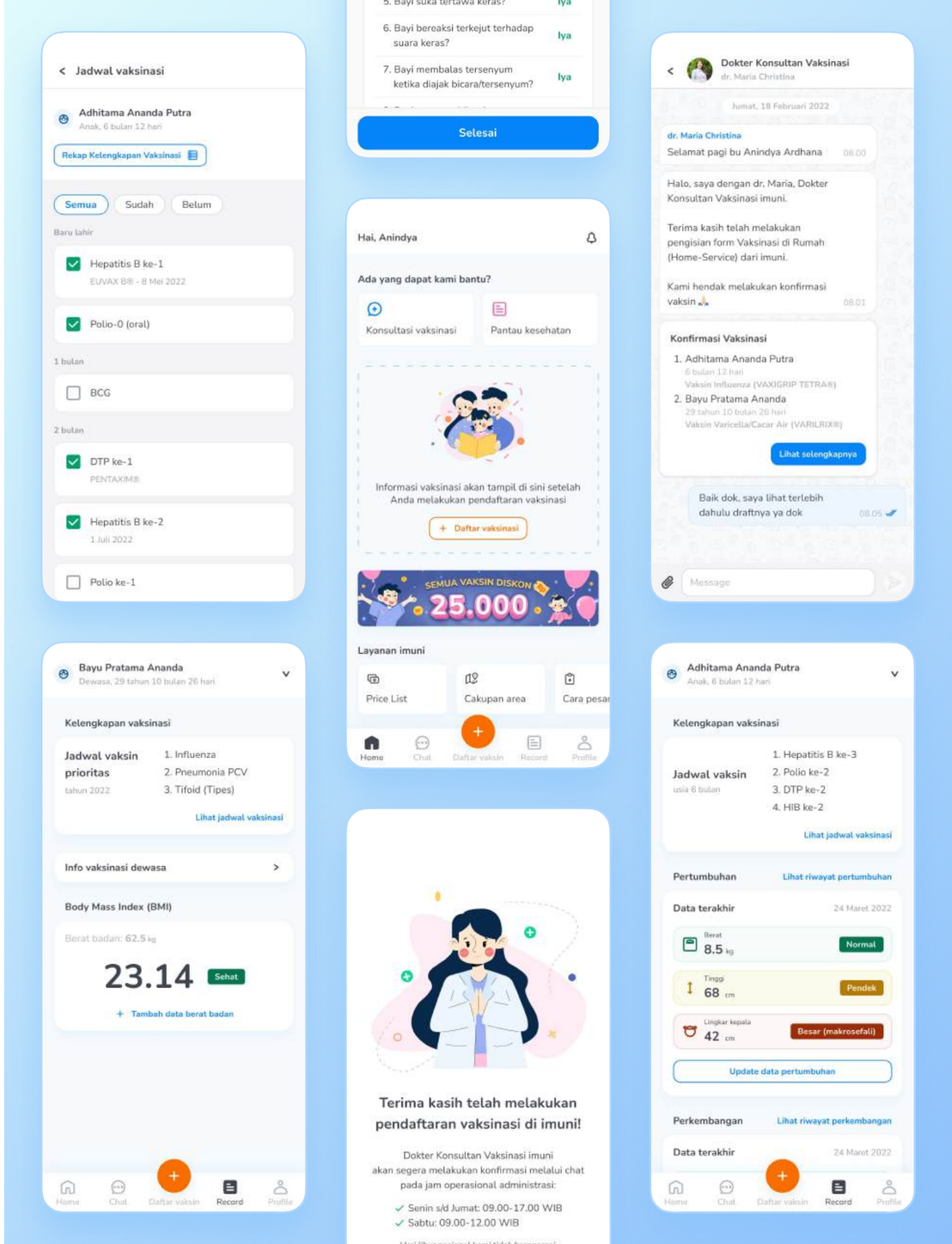
Stakeholders: product manager & company C-level

Background:

imuni, a newborn startup in home-service vaccination, struggled with a manual registration process through Google Workspace and WhatsApp that often frustrated customers.

Objective:

My task was to design the company's very first digital ecosystem, an end-to-end vaccine registration and information platform that simplified the registration journey, ensured clear vaccination information, and transformed the experience into one that built trust and loyalty with customer



How did this project started?

The project began after we recognised the need for a digital system to enhance service quality. Feedback from frontline doctors (who regularly interact with customers) highlighted the need for improvements at various touchpoints.

Current pain points:

Repeated re-registration

Frustration with repetitive forms revealed a clear need for vaccination history tracking to enable **smoother re-registration**.

> “
>
> It’s tedious to fill out the forms every single time.
> Don’t you have a system to track our vaccination history?

Tricky scheduling process

Customer frustration with unclear scheduling revealed a critical need for **transparent and dependable appointment flows**.

> “
>
> My preferred time often changes to match the doctor’s availability.
> It would be better if I only got truly available slots.

Struggling to communicate effectively

Scattered contact points ed to frustration, reinforcing the value of **one unified channel** for all customer interactions.

> “
>
> I get calls from multiple numbers.
> This is confusing, isn’t there a unified number for every department at imuni?

Limited payment options

Customers need better payment flexibility, like instalment plans & e-wallet choices.

> “
>
> I wish there were more flexible payment plans, so I could split the payment with my credit card.

How we operated our services

Since its inception in 2021, imuni has operated its vaccination services as a Minimum Viable Product (MVP) using a suite of digital tools to manage its processes.

For vaccination registrations

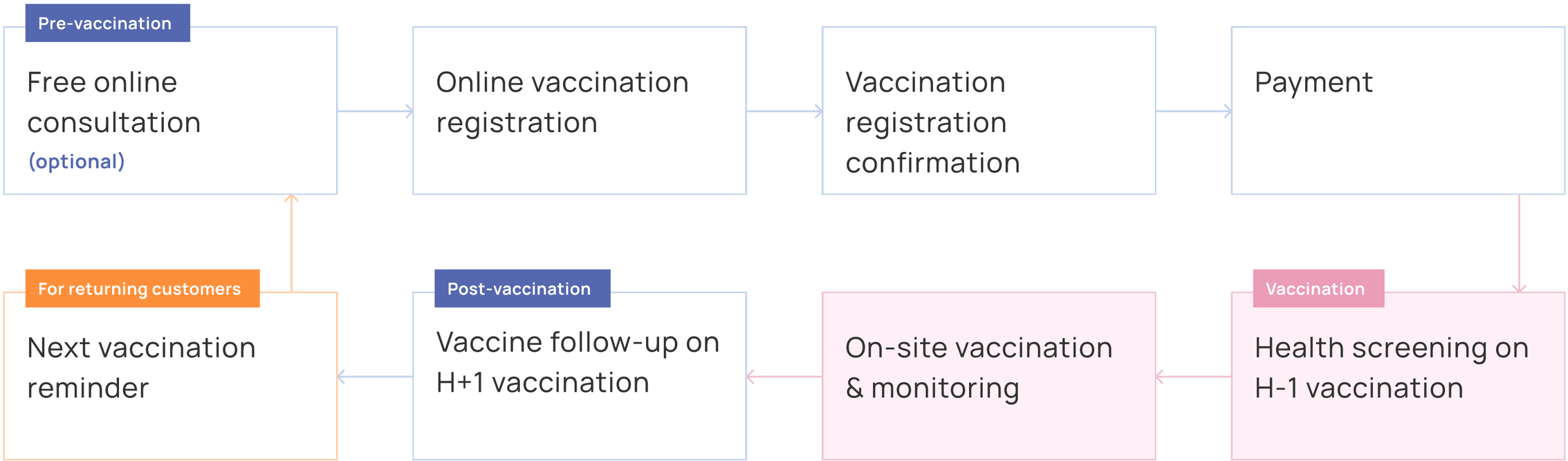
To manage incoming orders

For coordinating vaccination doctors' schedules

As a communication tool between us & customers

Current customer journey

This is how the current journey works, where returning customers have to re-enter all data in the vaccination registration spreadsheet as if they were new customers.



Problem statement

While our existing service operations have successfully provided value to our customers, they lacked the efficiency needed for our growing services, driving the need for digital transformation.

Effects on our customers:

1. **Inefficient processes**

   Customers faced complicated journeys, particularly in:

   - Registration
   - Scheduling
   - Payment.

2. **Communication gaps**

   Ineffective interactions between patients and imuni's team due to too many contact points.

3. **Improper data management**

   Lack of integrated records regarding the patient's vaccination & child development.

Effects on our team:

1. **Data management issues**

   The absence of advanced features led to inefficient data management and analysis.

2. **Scheduling issues**

   Google Calendar was inadequate for scheduling doctors, causing delays.

Characteristics of our customers

Due to time and budget constraints, I couldn't conduct research with our customers. Therefore, I gathered insights from imuni's executives and doctors for insights about our customers.

Age

Mostly young mothers, aged 25-35, with 1-2 infants

Traits

- Well-educated
- Affluent
- Tech-savvy
- Convenience-driven
- Health-conscious

Expectations

Reliable, user-friendly app providing accurate information

Benchmarking against other competitors

While no direct vaccination registration competitors existed at the time, I conducted benchmarking on indirect competitors to learn about industry standards & uncover further opportunities.

PrimaKu

PrimaKu acts as a digital child book with vaccination registration, partnering with the Indonesian Pediatric Society (IDAI) to provide quick and easy access to child health and development information.

Pros:

1. Intuitive and user-friendly design, offering a seamless experience.
2. Comprehensive information on child growth and development, efficiently organized for users.

Cons:

1. Users report delays and bugs when updating data, sometimes resulting in data loss, especially in growth and development tracking.
2. The app can be slow, making it unresponsive and difficult to use.

Vaccination registration	Vaccination information	In-app consultation with a doctor	Child-growth monitoring
✗	✓	✗	✓

Tentang Anak

Tentang Anak offers pregnancy and child growth tracking, doctor Q&A, and health articles, serving as a comprehensive parenting guide for optimal child development.

Pros:

1. Provides extensive information for parenting, serving as an all-in-one tool.

Cons:

1. The UI can seem outdated and not very user-friendly.
2. Certain features may be too complex, requiring more expertise to use effectively.

Vaccination registration	Vaccination information	In-app consultation with a doctor	Child-growth monitoring
✓	✓	✓	✓

Main features in our app

We looked at two things: the services we already provide and what our customers truly need. From this, we identified opportunities to go beyond basic vaccination registration and introduce new features that make the app more comprehensive, user-friendly, and aligned with customer expectations.

Streamlined vaccination registration

Improved communication (single communication channel)

Flexible payment options

Digital vaccination records

Health Monitoring (for both children and adults)

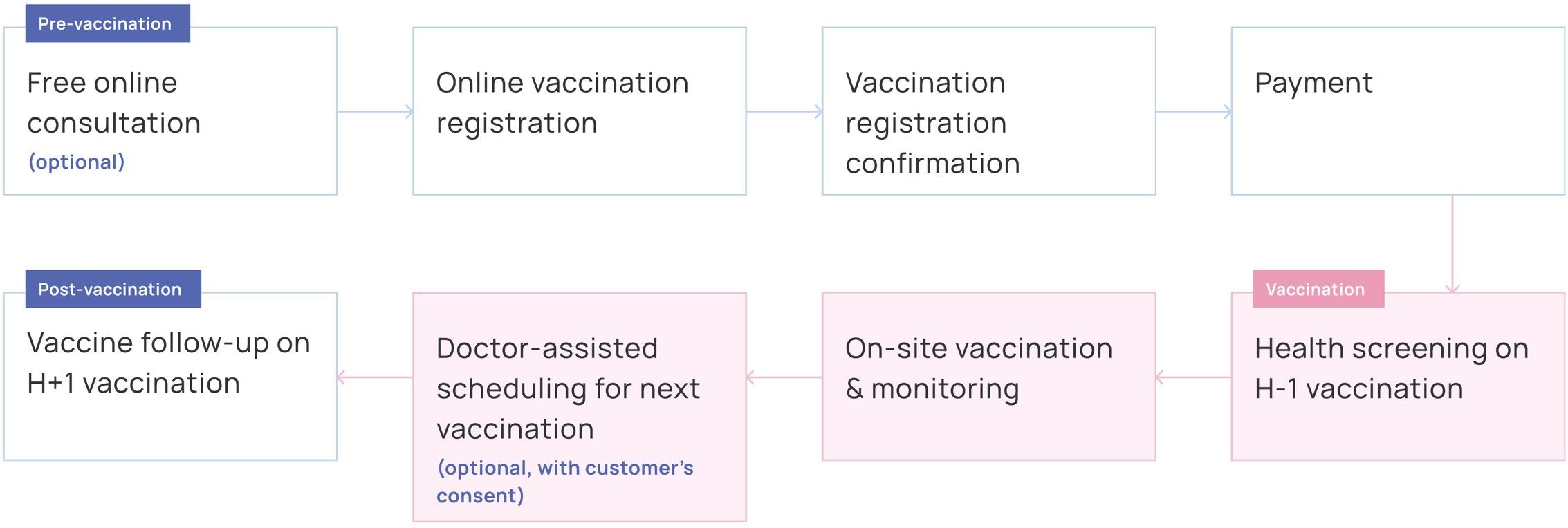
Streamlined next vaccination reminders

While the project spans both dashboard web and mobile platforms, this writing highlights the **end-to-end vaccine registration flow** on the imuni mobile app.

New customer journey

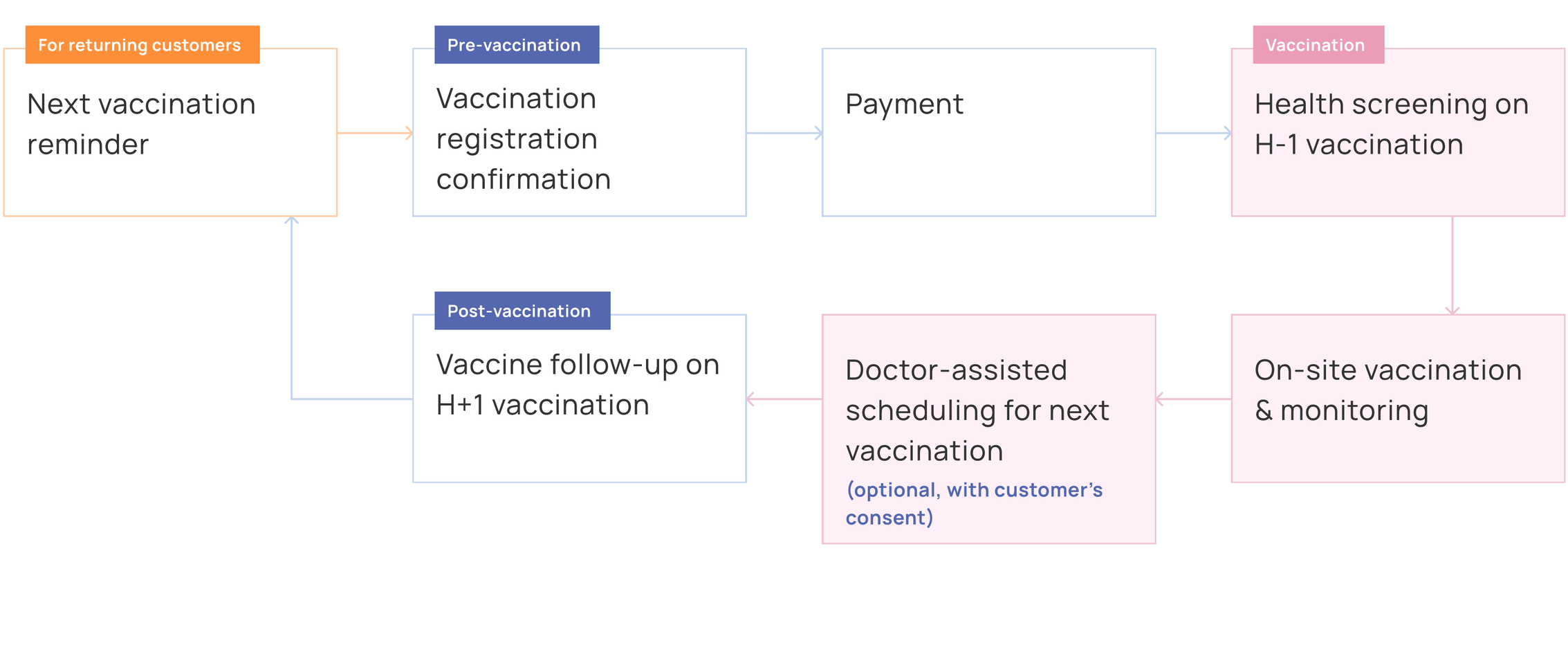
Through careful analysis, we realized not all users experience our service the same way. New users without vaccination records need a different journey compared to returning customers with saved data. To address this, we mapped out two distinct journeys: one for First-Time Customers and one for Returning Customers.

First-Time Customers



Returning Customers

For returning customers, this updated journey eliminates repetitive steps by allowing them to confirm their next vaccination (pre-scheduled by doctor with their consent) without needing to re-register.



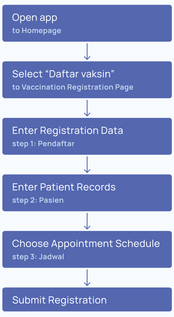
Results

Highlight 1: Optimized vaccination registration

The existing vaccination registration using Google Forms required substantial effort and often led to errors, resulting in negative user experiences.

We improved this by storing previous data and automating form completion to simplify the process.

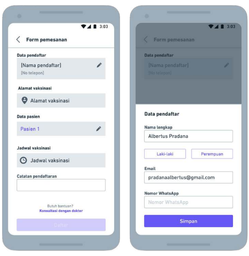
User Flow



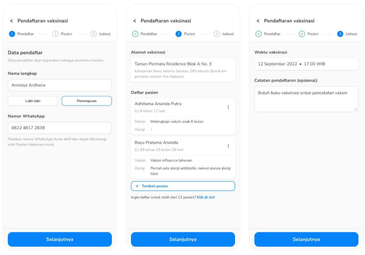
Design process

1. Overview of Vaccination Registration

Wireframe



Hi-fi design



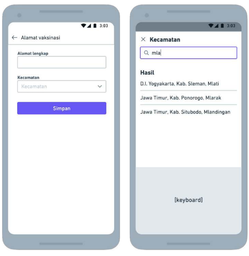
Designed for ease, the vaccination registration is split into 3 straightforward sections:

1. **Registration data:**
   Gathers essential customer info—name, gender, and WhatsApp—for invoicing purposes.
2. **Patient records:**
   Collects key patient data (name, gender, age, selected vaccine, allergies, and vaccination address) to support vaccine & logistics prep .
3. **Vaccine appointment schedule**:
   Enables users to select available time slots, aligning schedules efficiently on both ends.

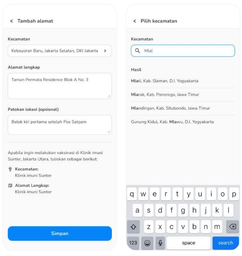
Users can submit their registration after completing the form, streamlining the process compared to manual methods.

2. Vaccination Address Details

Wireframe



Hi-fi design (add new address)



Hi-fi design (choose existing address)

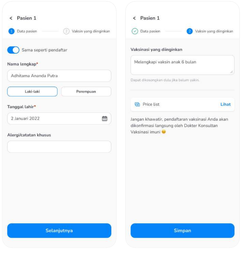
The vaccination address section simplifies location input through 3 key features:

1. **District selection:**
   A smart search lets users type just 3 characters to quickly find and select their district.
2. **Address input:**
   Users can enter their full address (and landmarks, if any) to help doctors locate them easily —or use our clinic's address if they prefer to visit us instead.
3. **Saved addresses:**
   Users may also select from previously saved addresses for faster registration.

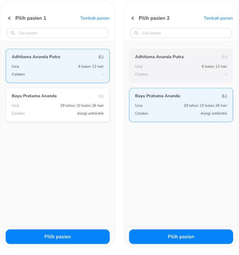
3. Patient Records

Wireframe

Hi-fi design (add new patient)



Hi-fi design (choose existing patient)



This section is built to streamline the input of vaccination-related patient data:

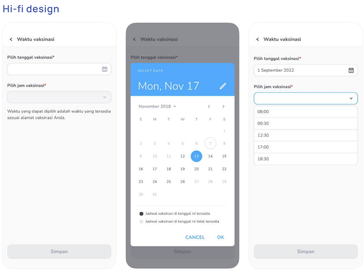
1. **New patient entry:**
   Users enter full name, gender, age, and allergies—ensuring complete medical records.
2. **Reuse existing data:**
   Returning users can select from saved patient profiles and update vaccination details—reducing repetitive work.
3. **Vaccination selection:**
   Users can fill in their preferred vaccines or vaccination purposes. Updated pricing information is also displayed for transparency.

This setup ensures accurate data capture while saving time and enhancing overall usability.

4. Vaccine Appointment Schedule

Wireframe

Hi-fi design



To schedule a vaccination, users first select a preferred date. The system filters available dates based on the chosen district. Once a date is selected, users can choose a time slot from the available options.

This two-step flow ensures a clear and streamlined scheduling experience.

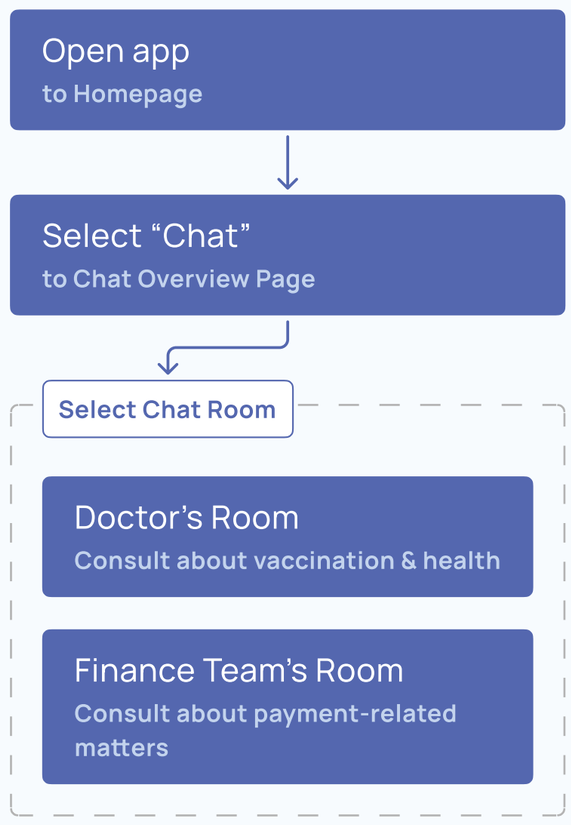
Results

Highlight 2: Improved communication through a single, unified channel

Previously, users had to coordinate with three separate contacts (consulting doctor, finance team, and vaccinating doctor) which complicated the process.

With centralized in-app chat, communication is now streamlined for a smoother consultation experience.

User Flow

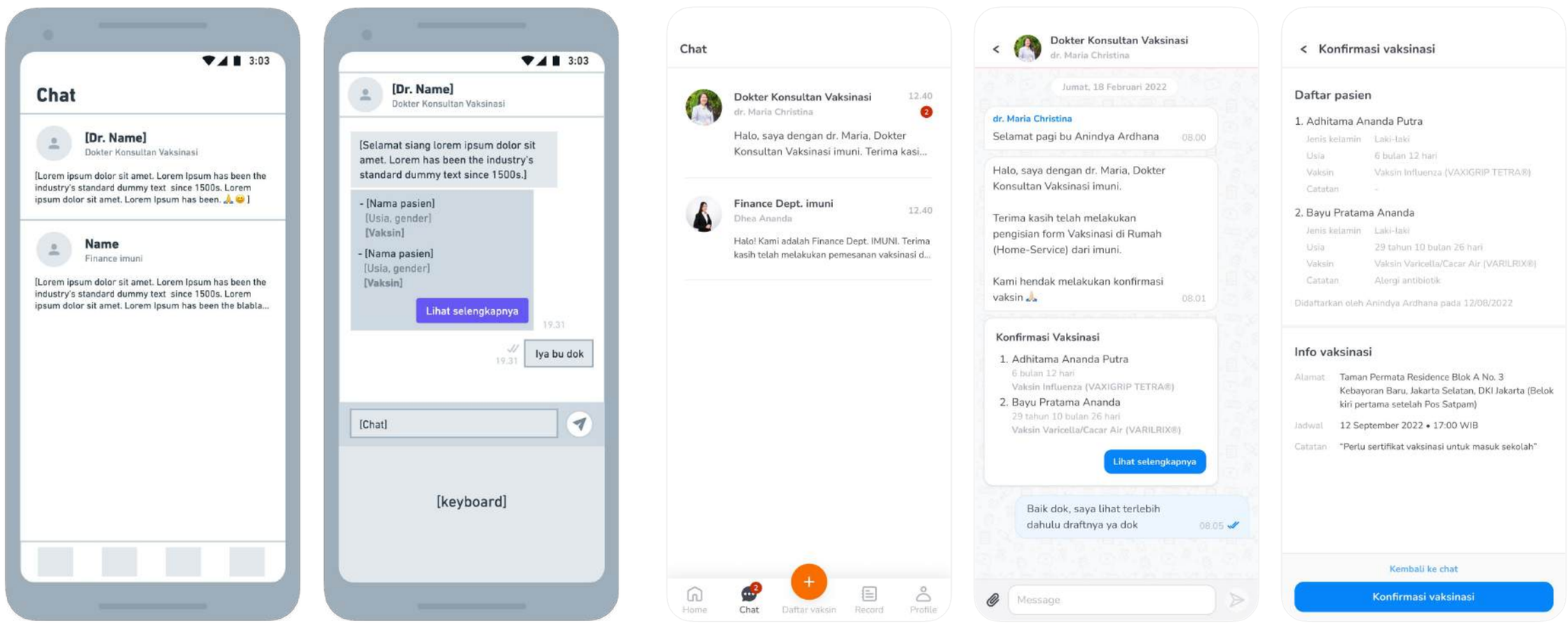


Design process

1. Centralized Chat Communication

Wireframe

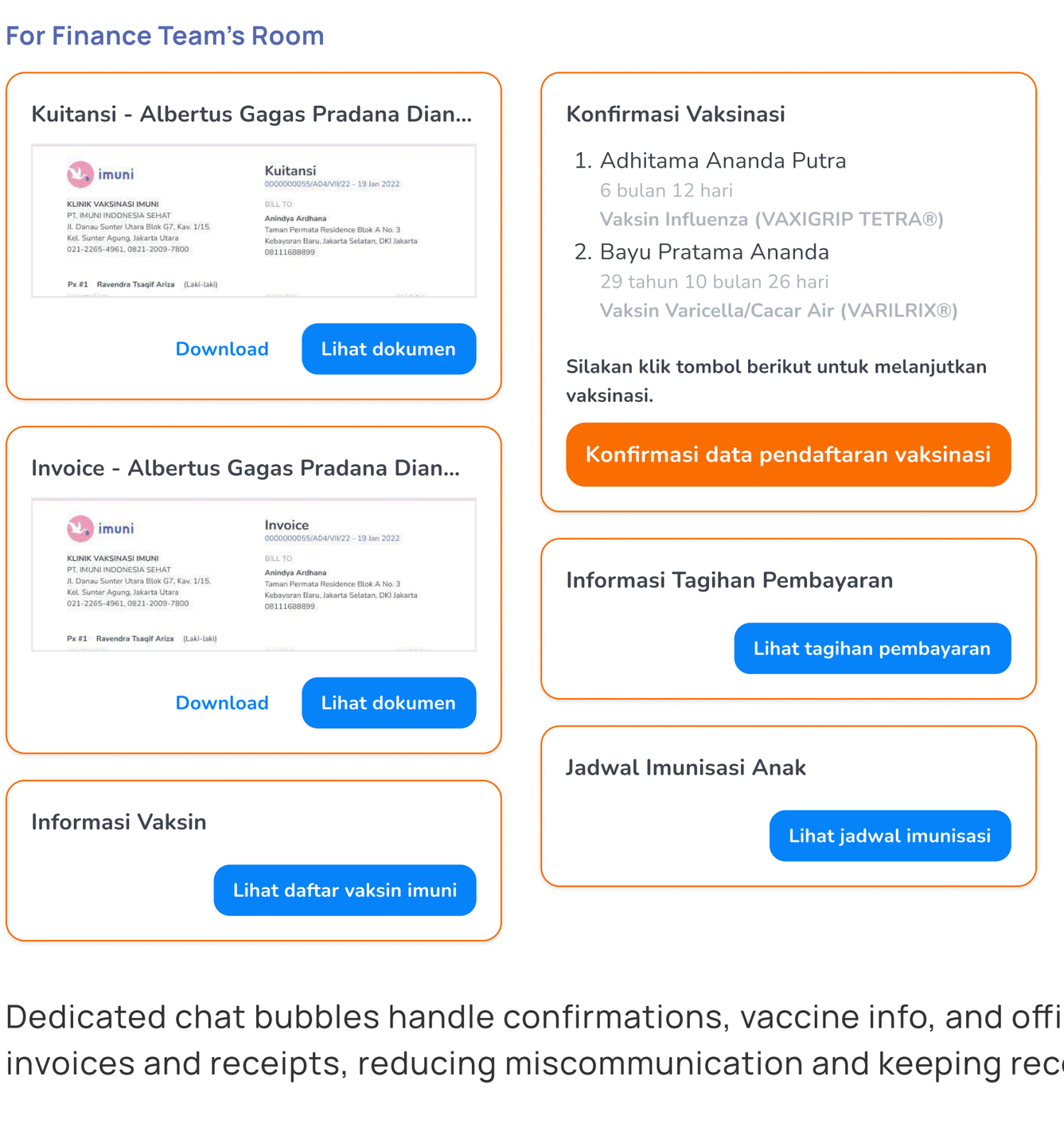
Hi-fi design



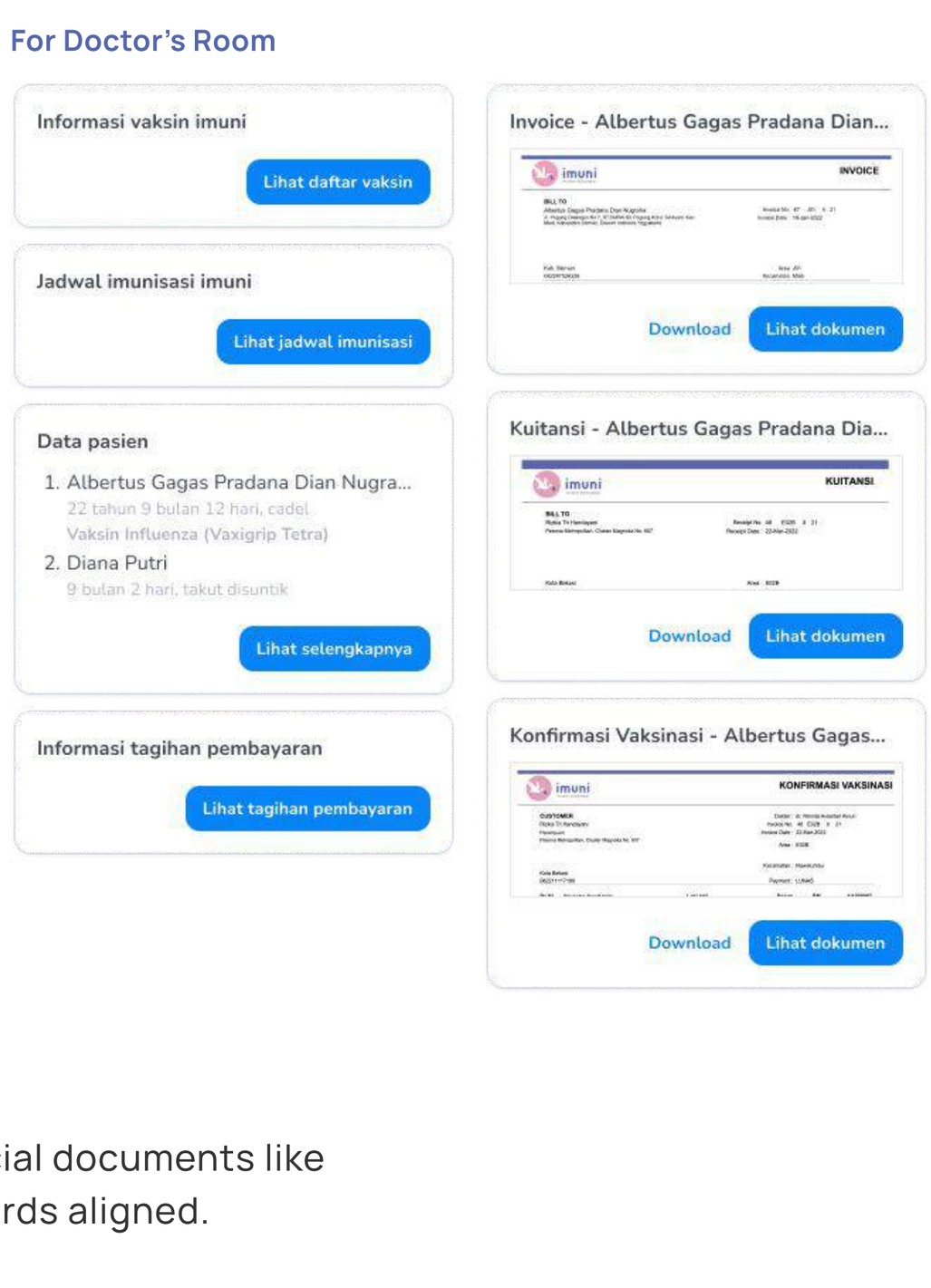
To eliminate fragmented communication, I created a unified chat feature with distinct rooms for medical and payment support. This ensures clarity, reduces user confusion, and consolidates all messaging in one place.

2. Dedicated Chat Bubbles Chat Communication

For Finance Team’s Room



For Doctor’s Room



Dedicated chat bubbles handle confirmations, vaccine info, and official documents like invoices and receipts, reducing miscommunication and keeping records aligned.

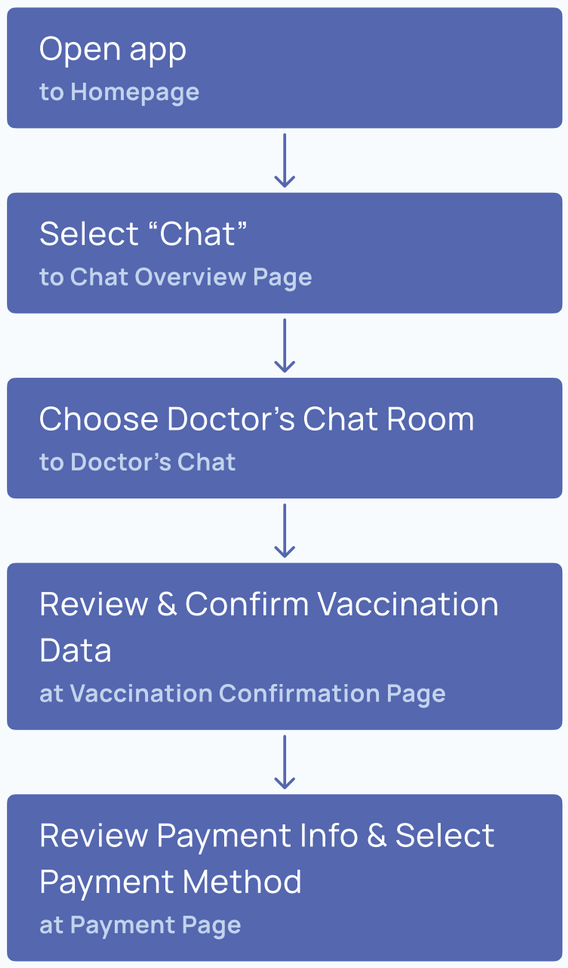
Results

Highlight 3: Designed a multi-method payment system

Previously, users had to manually transfer payments, making the process inconvenient.

By designing a flexible, multi-channel payment solution integrated with a payment gateway, users can now pay via virtual accounts, credit cards, or paylater—streamlining the process.

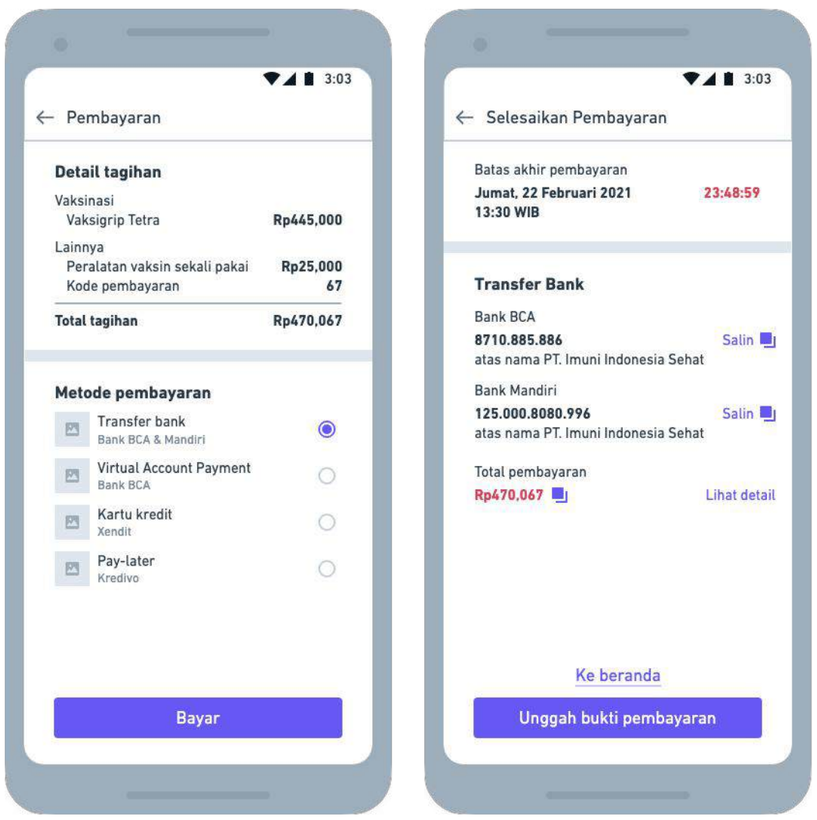
User Flow



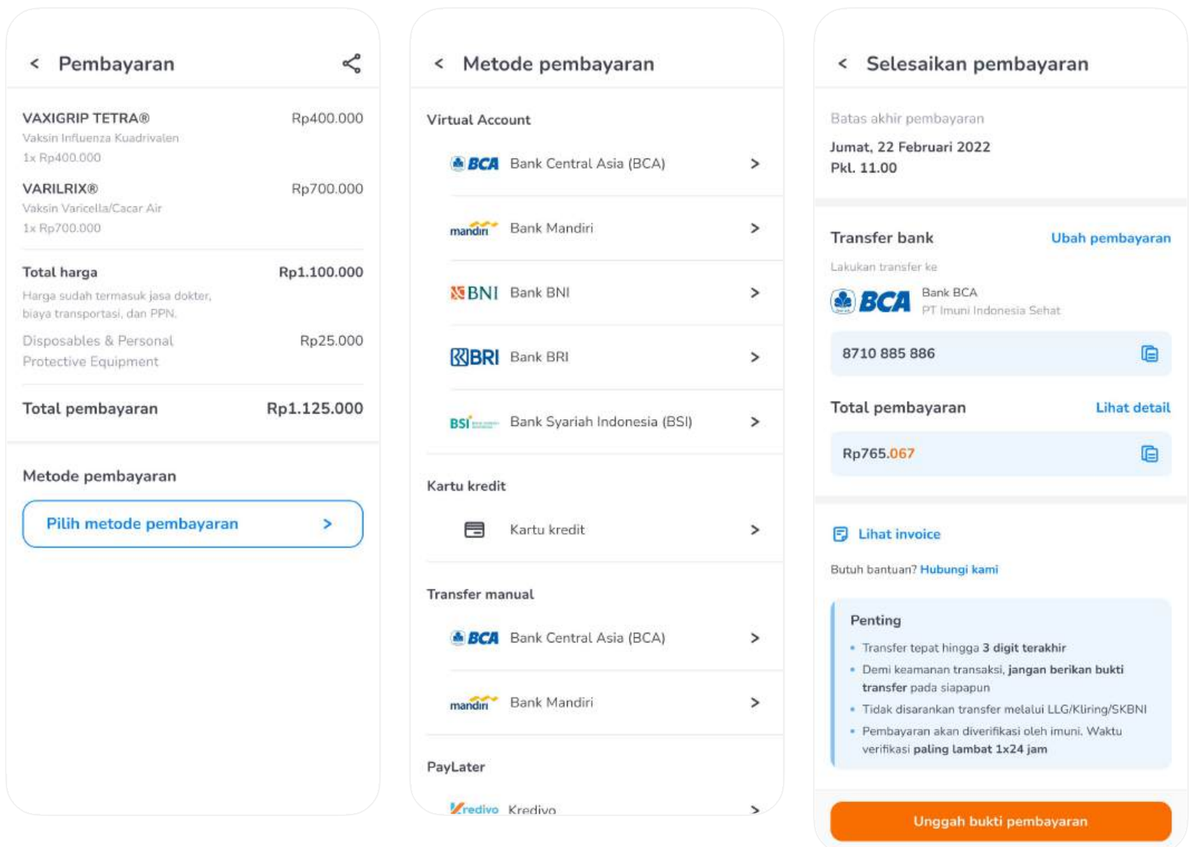
Design process

Payment

Wireframe



Hi-fi design



The payment feature addresses the inflexibility of manual bank transfers, which were inconvenient for users, especially with high vaccination bills.

The app now offers a variety of payment options through a payment gateway, including virtual accounts (VA), credit cards (CC), and paylater. This flexibility makes payments more convenient and user-friendly.

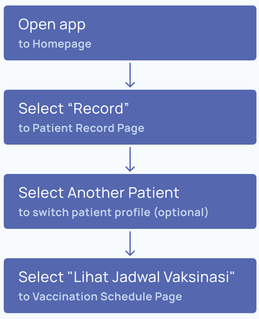
Results

Highlight 4: Digital vaccination records

The digital vaccination records feature addresses the impracticality and vulnerability of physical vaccination booklets and Google Sheets, which were prone to damage, loss, and other issues.

Storing data in the app ensures automatic updates and easy access for users, eliminating concerns about damage or loss. This also allows the imuni team, including doctors, to effortlessly revisit patient records, enhancing efficiency and reliability.

User Flow



Design process

Vaccination records

The digital vaccination records feature offers a more practical and reliable solution by storing data within the app. Here's how it addresses key issues:

Automatic updates

Records update instantly after every vaccination.

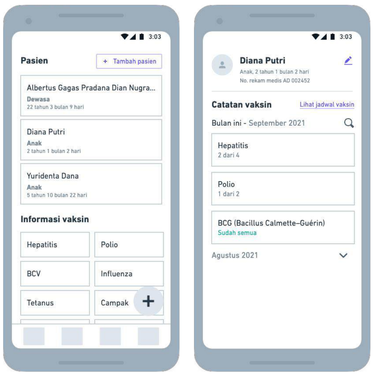
Easy access

Vaccination history available anytime, worry-free.

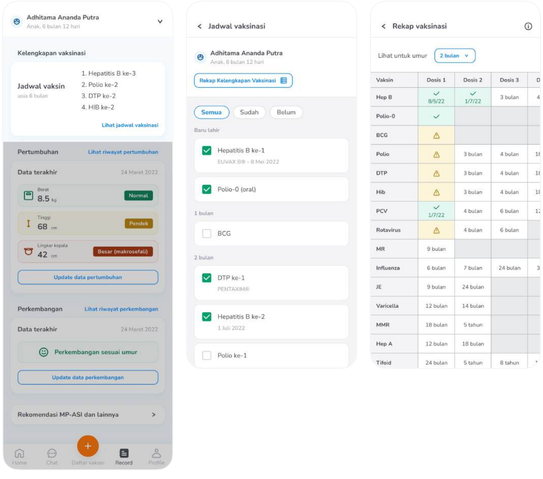
Effortless management

Doctors can review and manage records quickly.

Wireframe

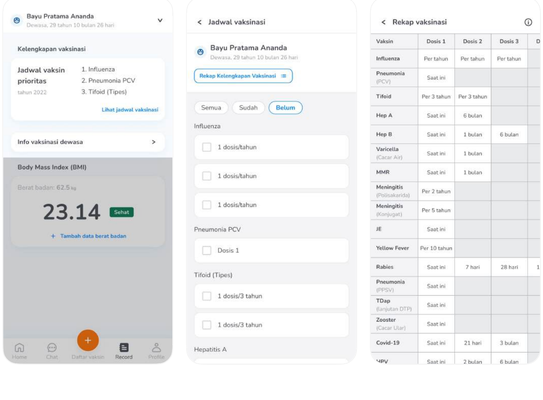


Hi-fi design (for children)



- **Record page:**
  Displays information about required vaccinations based on the child's current age.
- **Vaccination schedule page:**
  Shows the patient's vaccination schedule and indicates whether the vaccination has been administered.
- **Vaccination summary page:**
  Provides a summary of all vaccinations received by the patient.

Hi-fi design (for adults)



- **Record page:**
  Displays information about recommended vaccinations based on the patient's gender.
- **Adult vaccination information page:**
  Shows recommended vaccinations and indicates whether the vaccination has been administered
- **Vaccination summary page:**
  Provides a summary of all vaccinations received by the patient.

These features collectively ensure a comprehensive and user-friendly digital vaccination record system, enhancing the overall experience for both users and the imuni team.

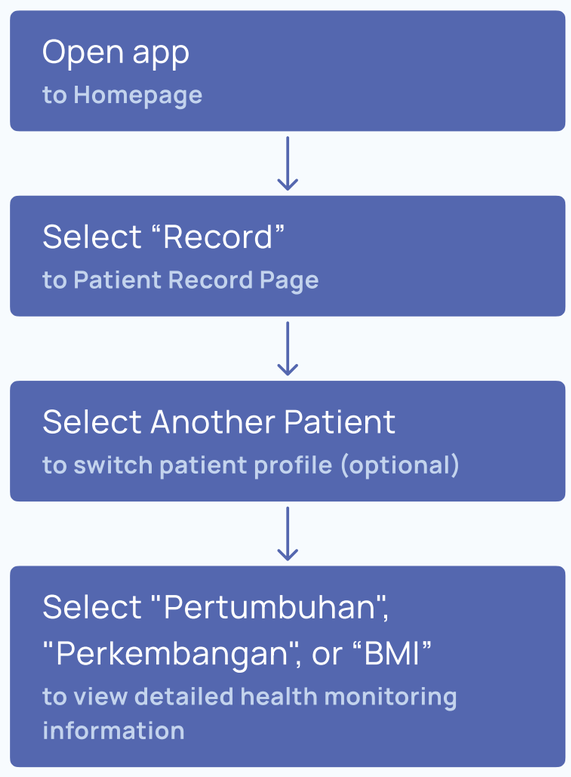
Results

Highlight 5: Health Monitoring (for both children and adults)

For children under 20 years old, this feature includes monitoring of vaccinations, growth, and development, with additional parenting tips.

For adults, it offers health check features, including tracking vaccination completeness and BMI self-monitoring, catering to the health needs of the entire family.

User Flow

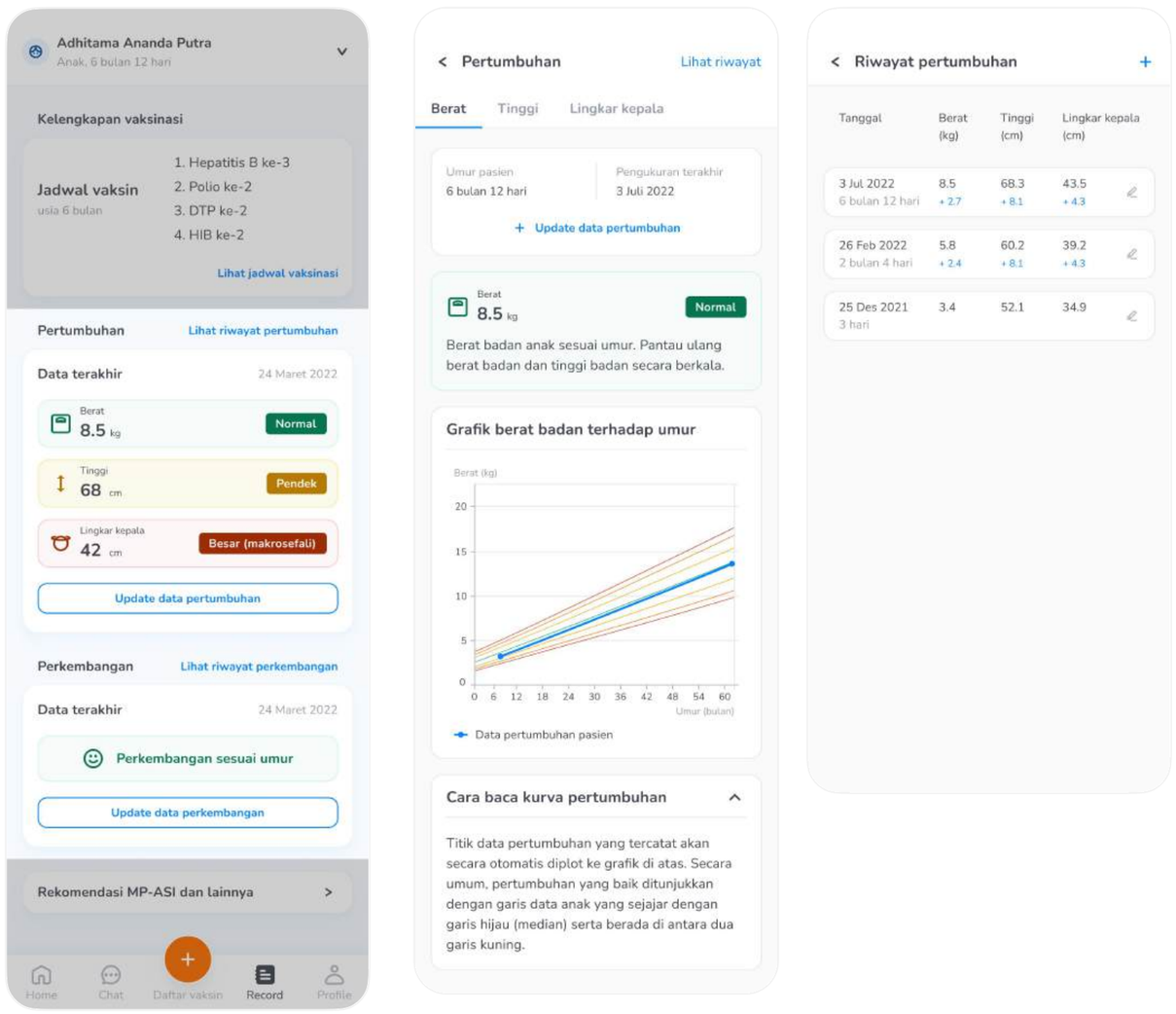


Design process

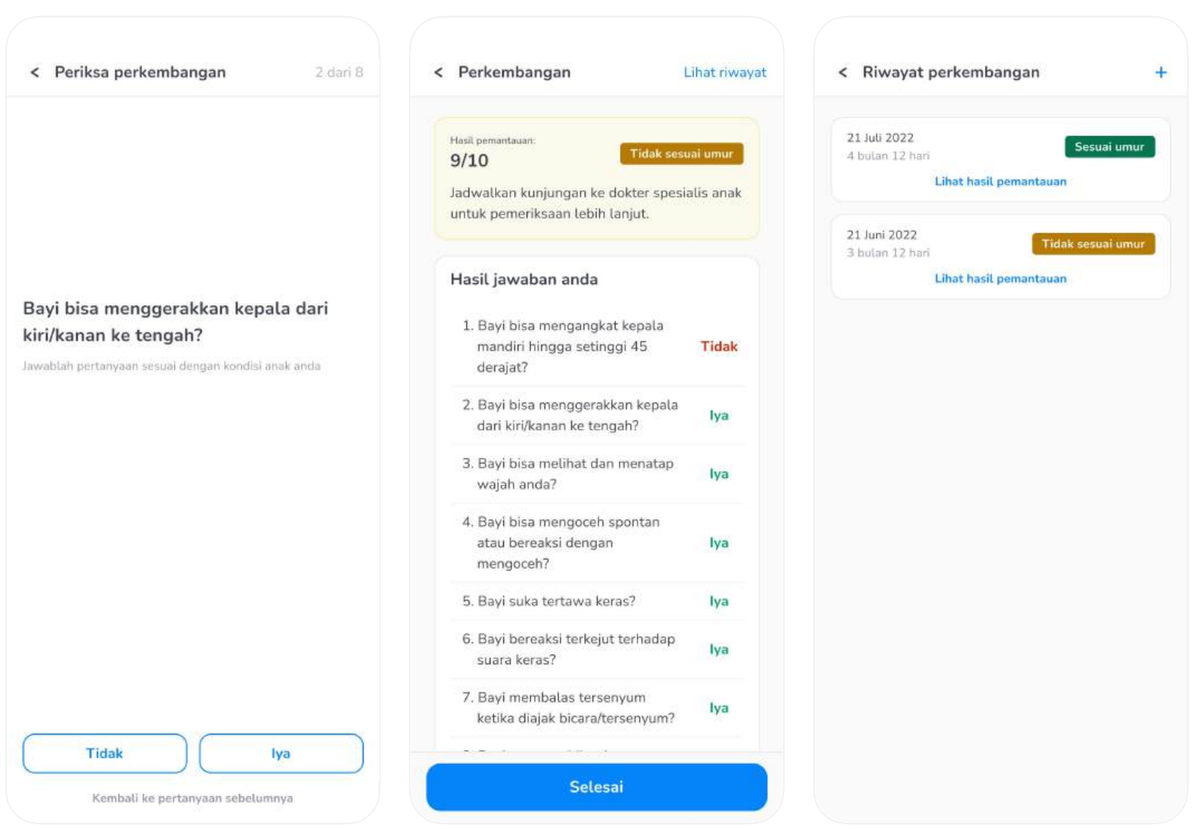
Children growth & development monitoring

Hi-fi design

Growth monitoring



Development monitoring



As an additional value for our users, we have included a feature for monitoring the growth and development of children:

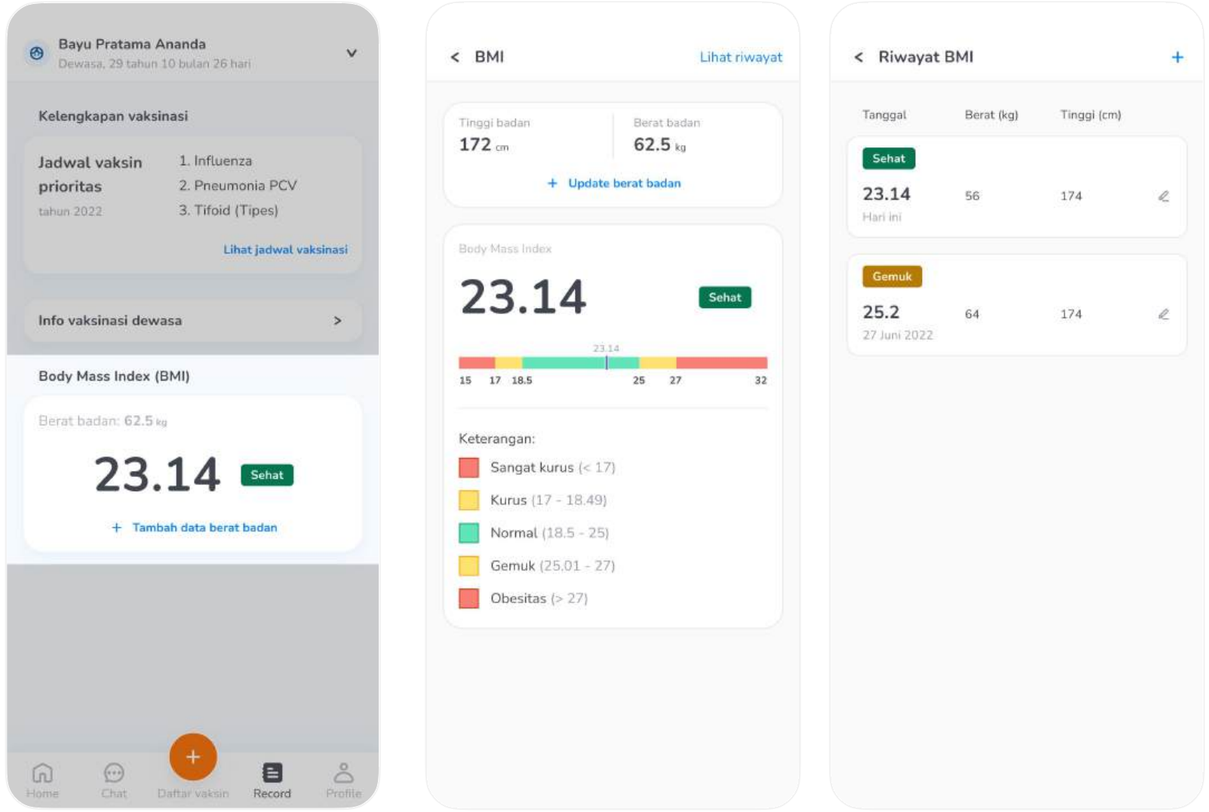
1. **Growth monitoring:**
   Users can input data such as weight, height, and head circumference. This data is compared with standards from our doctors to determine if the child's growth is within the normal range for their age.
2. **Development monitoring:**
   Users answer questions about their child's developmental milestones. The answers will determine if the child is achieving motor skills and developmental milestones appropriate for their age.

These features offer parents valuable insights into their child's growth and development, allowing them to monitor their child's health and seek immediate medical advice if necessary.

Adults health monitoring

Hi-fi design

(BMI monitoring)



For adults, we have included a health monitoring feature focused on BMI (Body Mass Index) checks. Users can enter their weight and height to calculate their BMI and determine if they have an ideal weight based on their BMI score.

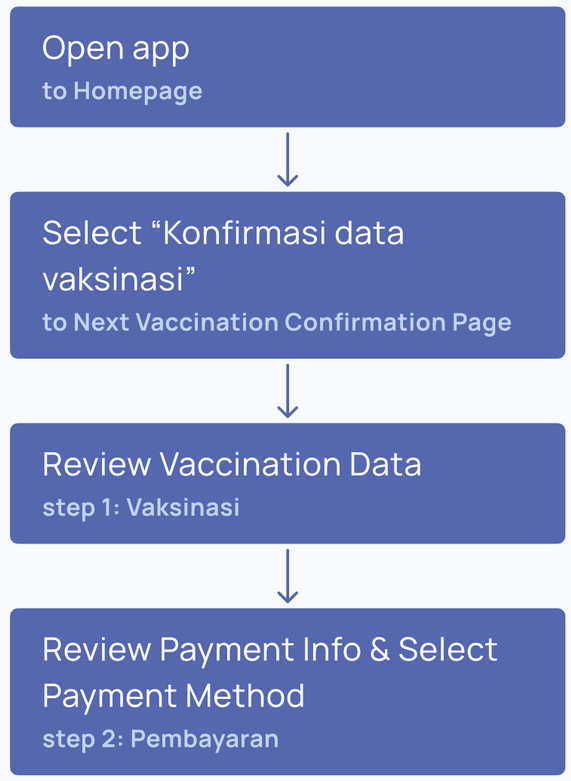
Results

Highlight 6: Streamlined next vaccination reminders

Previously, we manually reminded users a week before their next vaccination, requiring labor-intensive re-registration for each patient.

Our app's dedicated next vaccination reminder feature automates this process, allowing users to input details, review, and directly proceed with payments, significantly simplifying the process.

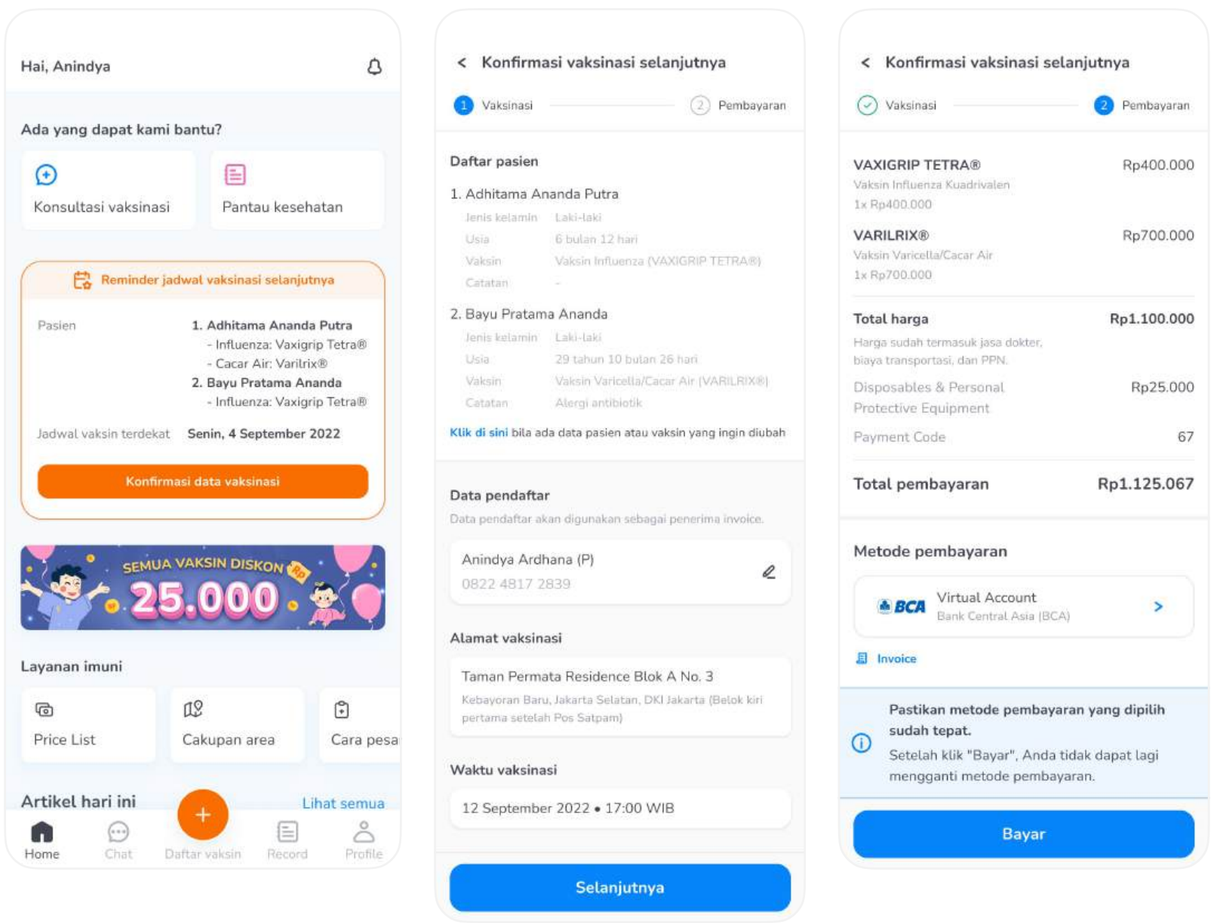
User Flow



Design process

Next vaccination reminders

Hi-fi design



For each upcoming vaccination, the doctor inputs the details of the patients who need to be vaccinated and the specific vaccines required, based on the agreement made during the previous visit. This pre-filled information allows users to simply confirm the details: the registrant, vaccination address, and the schedule.

Once all the necessary information is confirmed and complete, users can review the data and proceed to payment. This design reduces the effort from users, ensuring a more efficient process for scheduling and confirming their next vaccination appointment.

Results

Highlight 7: Homepage

The homepage of the app is designed to highlight all user needs and display important information accessibly.

Design process

Homepage

Wireframe

Hi-fi design

Homepage allows users to easily access imuni's core services, such as vaccination consultations with doctors and patient health monitoring. Users can also view real-time updates on their vaccination process from our homepage.

Additionally, our homepage features the latest information about imuni, including available promotions. It also provides details about our various services, ensuring our users are aware of all their options. Finally, our homepage includes health-related articles.

Achievement

Achieved **80% of our sales revenue** through our new digital system

As a result of our innovative digital system (which consists of our user mobile app and dashboard), we were able to achieve 80% of revenue through digital channels.

Other impacts

Our initiative to create an integrated digital system, consisting of a mobile app for users and a back-office web for our team, has led to several significant impacts:

1. **Better onboarding**

   Faster and more user-friendly new user registration, resulting in rapid growth of our users and orders.

2. **Efficient order processing**

   Centralized vaccination records have reduced errors and data loss, making the order processing more efficient.

3. **Scalability**

   Designed for our growing user base & order volume, this system able to accommodating our expanding operations.

4. **Data-informed decision making**

   The system provides valuable insights, allowing us to make data-driven improvements in our services and user engagement strategies.

Things I’ve learned from this project

1. **Interdisciplinary collaboration**

   Learned how to communicate effectively across disciplines and leverage diverse expertise to create stronger solutions.

2. **Alignment with developers**

   Built mutual understanding with the tech team, aligning goals to ensure both quality and feasibility of the product.

3. **Efficient customer journey**

   Designed streamlined and flexible user flows that improved usability across different customer scenarios.