

Cerner®



Experience Studio Fall 2021



Meet the Team



Jared Buls



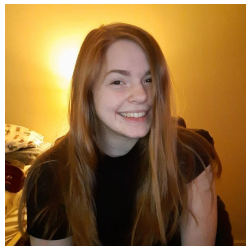
Enya Song



Natasha Chambers



Sarah Palagy



Sarah Deak



Varun Aravapalli



Olivia Eavey



Special Thanks



Paul Parsons



Nancy Rasche



Chorong Park



Gabriella Goss



Nick Gould



Carley Hummel



Katarina Mazanka



David Jacob



About Cerner



Cerner is

U.S. supplier of healthcare information technology solutions that support clinical, financial, and operational aspects within the industry.

Cerner's mission is to

Seek breakthrough innovations that will empower their clients and shape the healthcare of tomorrow.



Opportunity Space



There is a current disconnect between what the portals typically provide and the struggles patients have with the healthcare process.

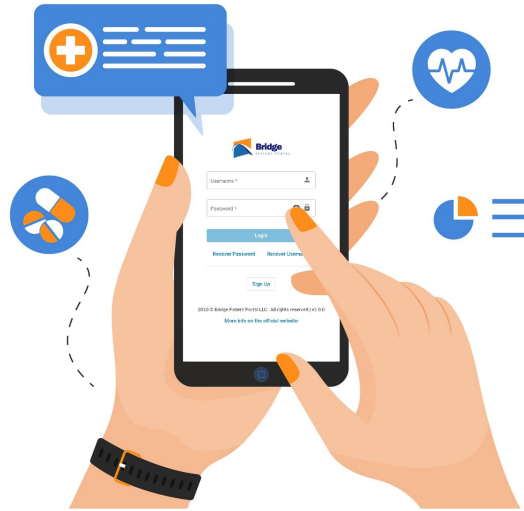
Problem

- Our goal was to research the healthcare space and explore a more proactive approach to empower patients to better manage their health through the assistance of the patient portals

Solution



Recap: What is a portal?



A digital touchpoint that facilitates the seamless transfer of information between patients and any health care professional involved in the process. They typically involve logging into a platform to access medical information, scheduling tools, and contact their care providers.



Presentation Outline

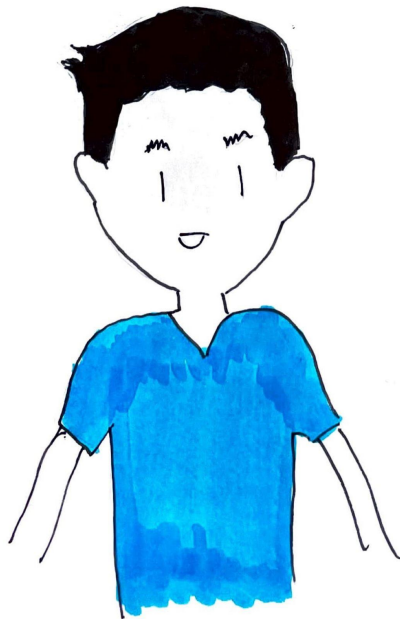


- **User Introduction**
Introduce our primary user and their current pain points
- **Feature Walk Through**
Walk through features alongside our persona and research
- **Next Steps**
Reflect on project process and what we plan to accomplish further



Introducing our user...





Sam (primary user)



New parent of a young child



Internalized Stress



Tight Schedule



Charlie

(Sam's child)



Young child requiring vaccines



Frequent “pop-up” health issues that require Sam's help



What is the appointment journey currently like?





One morning, Charlie wakes up with an earache. It's so painful that Charlie doesn't want to get out of bed.





Sam calls of work and Charlie's school. He then calls the doctor to schedule an appointment for later that day.





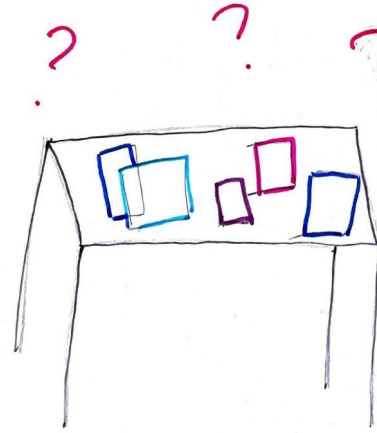
During the appointment, Sam feels stressed about Charlie's health and is also **overwhelmed trying to remember all the information** the doctor is giving.





Additionally, at the appointment the doctor tells Sam that Charlie still **hasn't received a state-required vaccine.**





After the appointment, Sam is given a paper copy of the appointment summary. Although he tries his best to keep track of it, the **busyness of everyday life** leads to it being **misplaced** and for Sam to be **confused** about how to take care of Charlie.



Sam's busy schedule also creates **more anxiety and distractions** about reminding Charlie to take his medication daily.





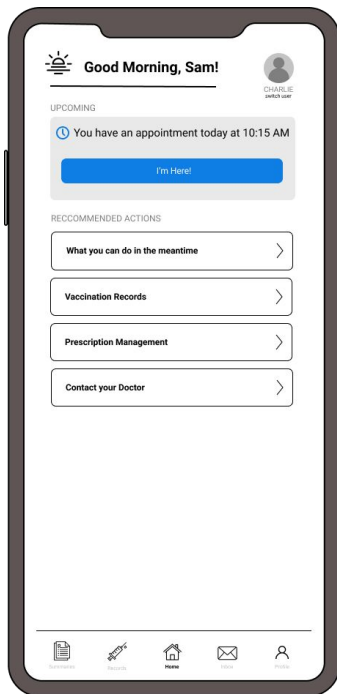
Because of the current system, Sam is left stressed, overwhelmed, and distracted.



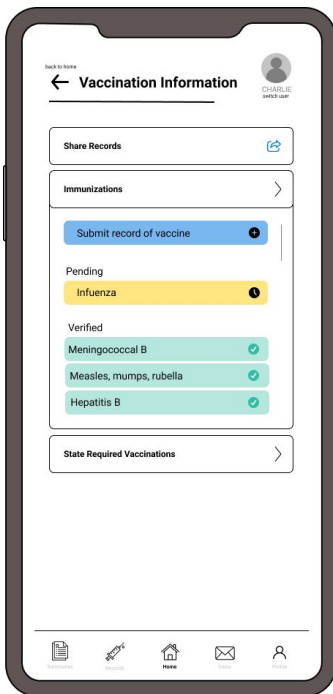
**How might a patient portal app benefit Sam
and his appointment journey?**



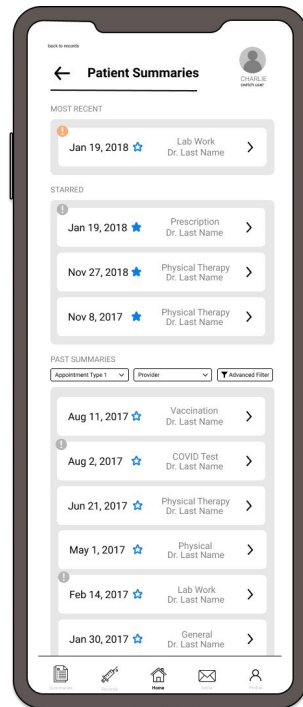
Solution Overview



HOME



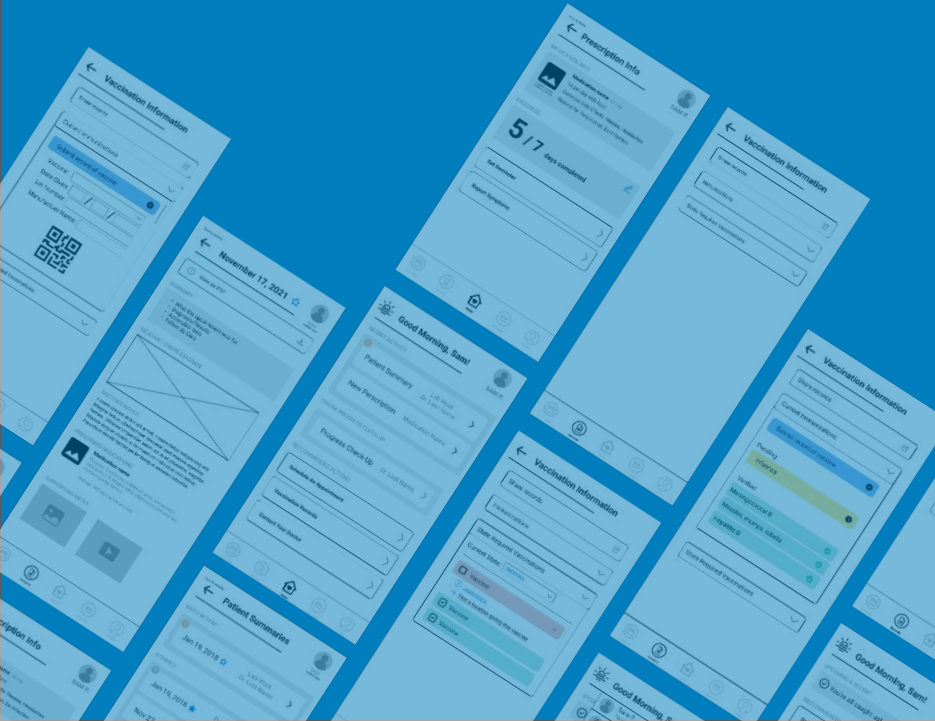
VACCINE INFORMATION



PATIENT SUMMARIES



Home Page



Home page & timely information

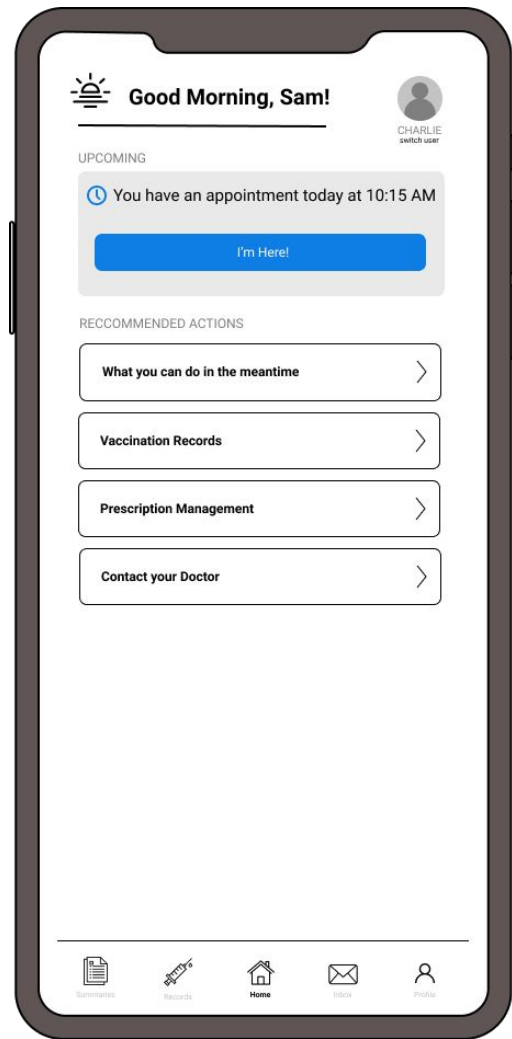


Vaccination information



Patient Summaries





Why Home Page With Time-Based Information

Clunky and **hard to navigate**

Parents value **time** when it comes to their children's health

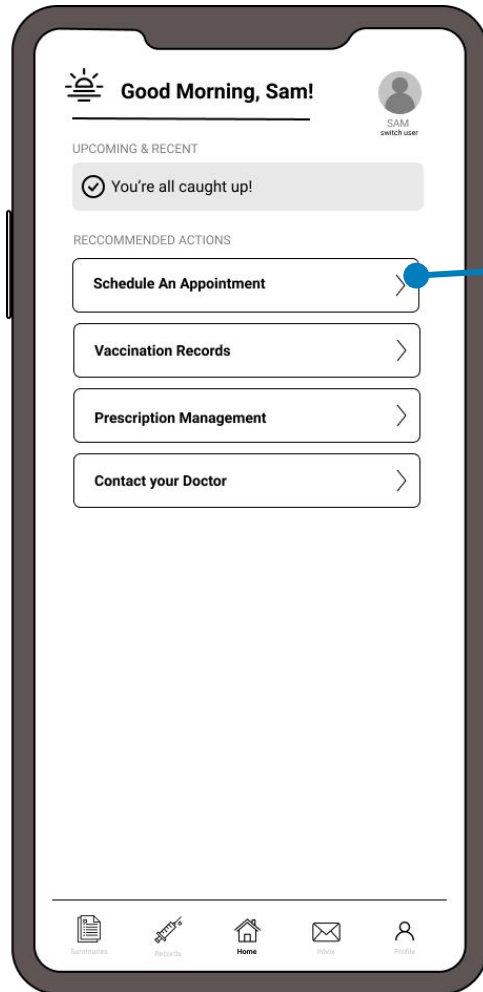
Parents struggle most with the **unknown** when their children are sick

Increase engagement by giving portals more **purpose**



Home Page

No Current Scheduled Appointment

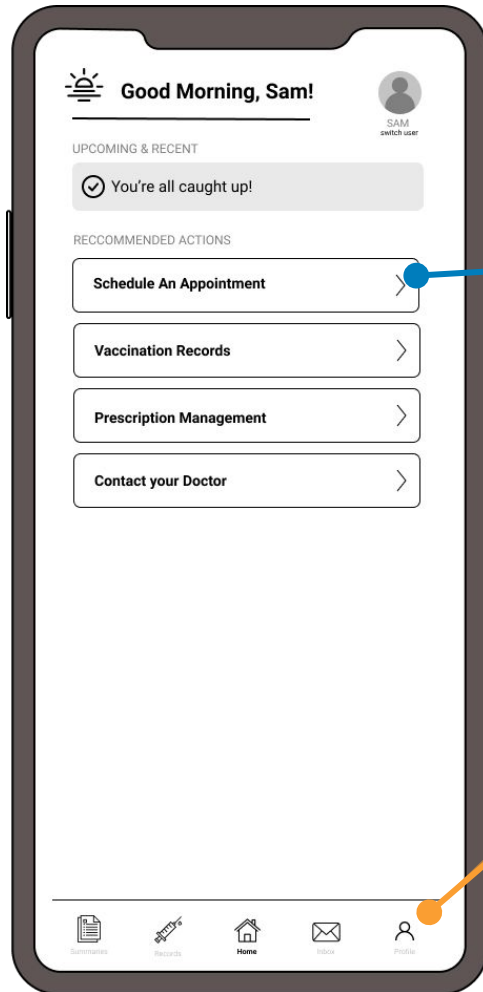


The Recommended Actions section gives users quick actions to take in simple terminology.



Home Page

No Current Scheduled Appointment



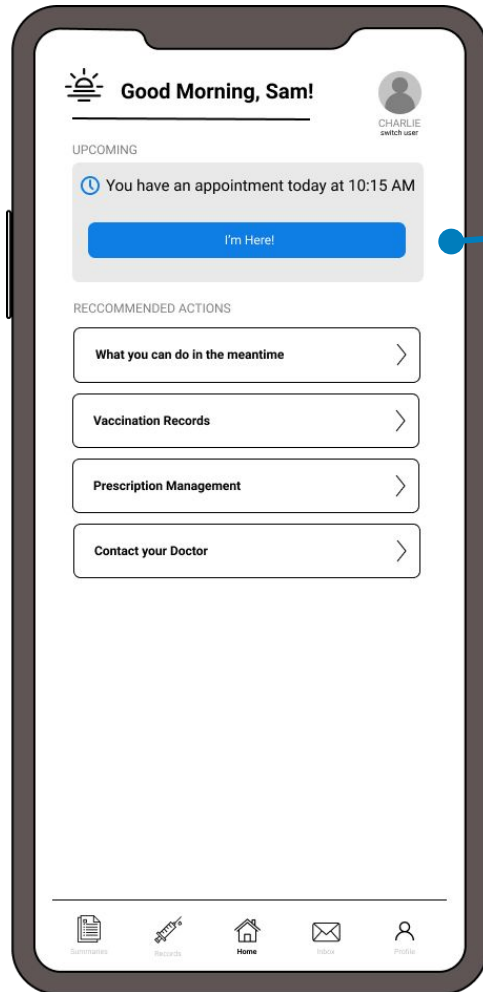
The Recommended Actions section gives users quick actions to take in simple terminology.

Clean, simple bottom navigation. Gives users a clear mental model of the app and its functions.



Home Page

Upcoming Scheduled Appointment

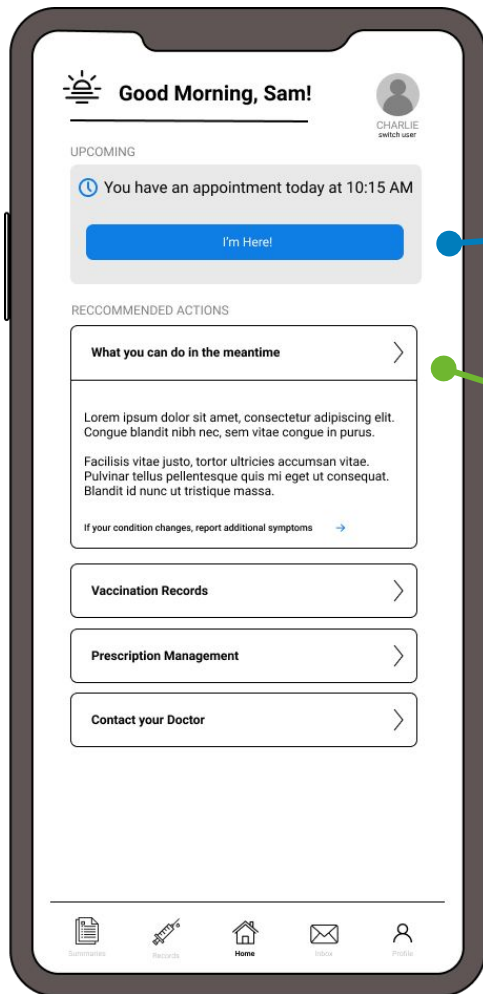


The upcoming appointment notification allows parents to check in through the app, minimizing time.



Home Page

Upcoming Scheduled Appointment



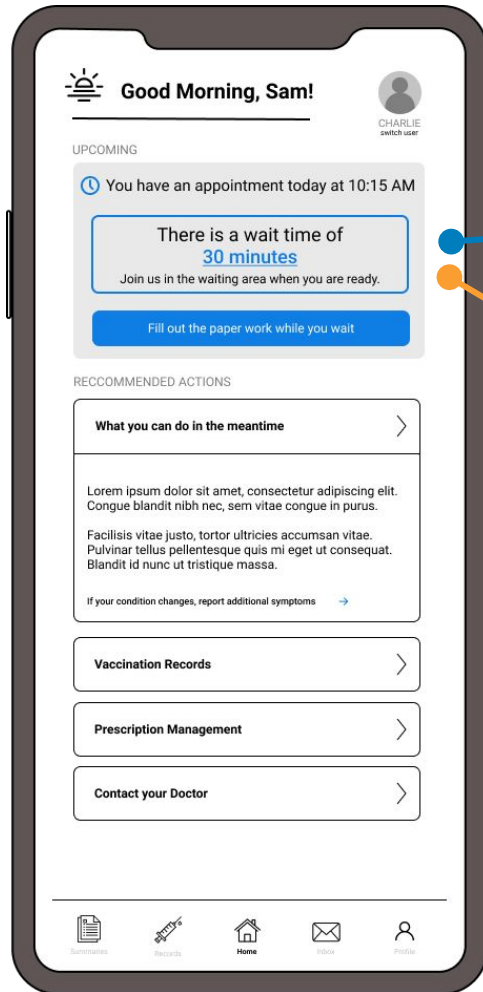
The upcoming appointment notification allows parents to check in through the app, minimizing time.

"What to do in the meantime" gives parents actions to take to help their child based on inputted symptoms.



Home Page

Upcoming Scheduled Appointment



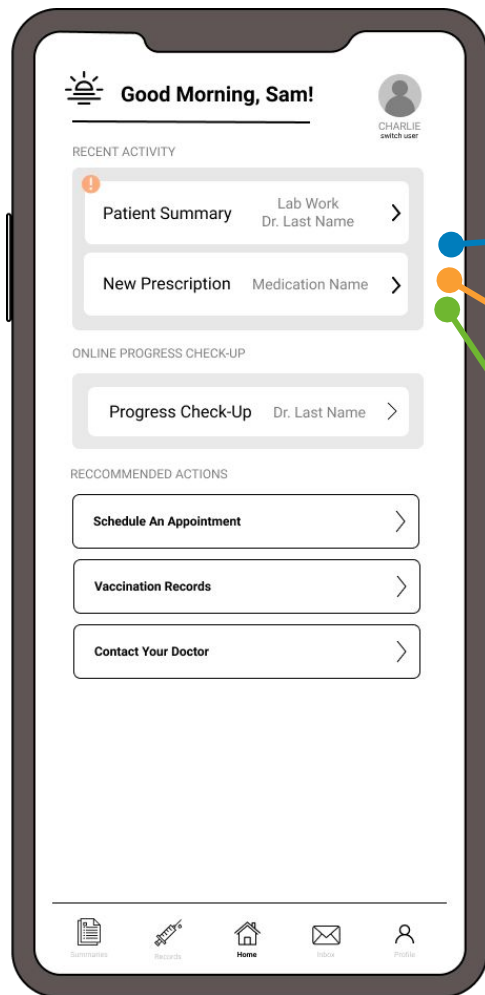
The upcoming appointment notification allows parents to check in through the app, minimizing time.

Once they are ready to check in the day of their appointment, the app will show them the current wait time, so users can prioritize time.



Home Page

After Scheduled Appointment



The upcoming appointment notification allows parents to check in through the app, minimizing time.

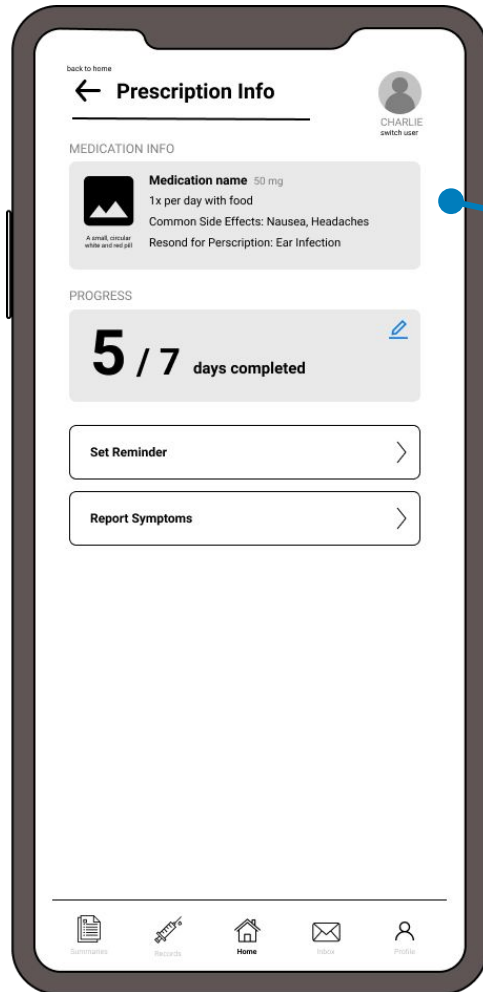
Once they are ready to check in the day of their appointment, the app will show them the current wait time, so users can prioritize time.

Once the appointment is completed, the portal will provide quick and simple actions to view their patient summary and any medication information



Home Page

After Scheduled Appointment



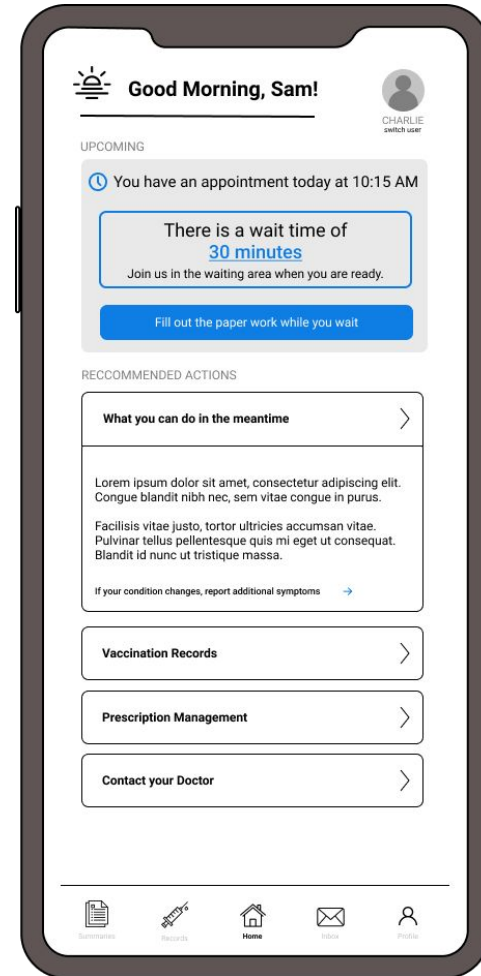
Prescription info helps parents keep track of their children's medication and health overtime.



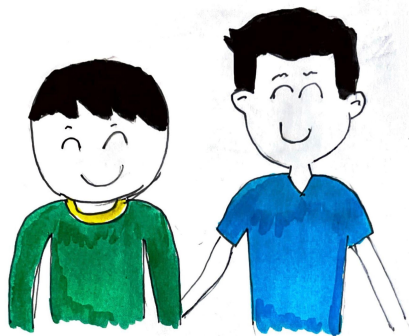
Let's Check Back with Sam & Charlie



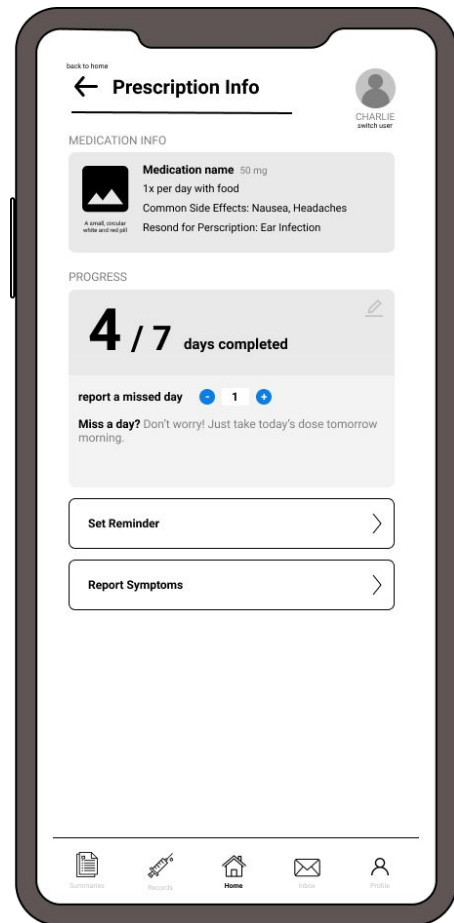
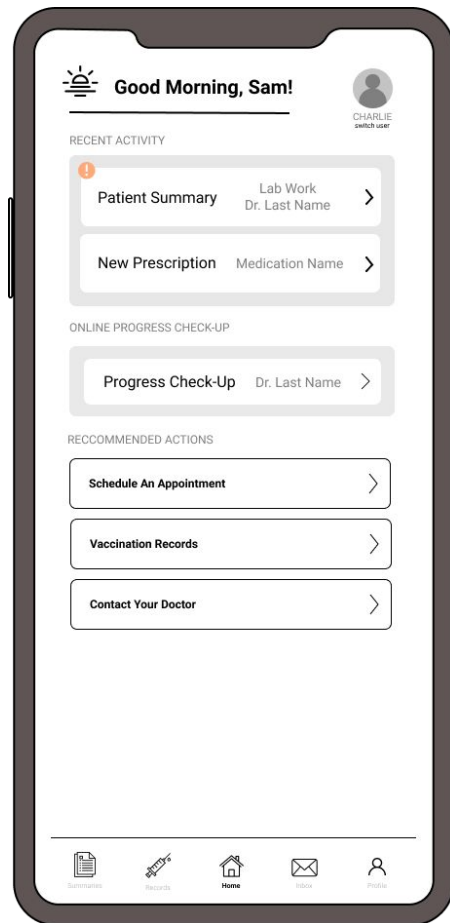
These features allow Sam to **receive credible information and save time** from searching on the internet about how to care for Charlie before the appointment.



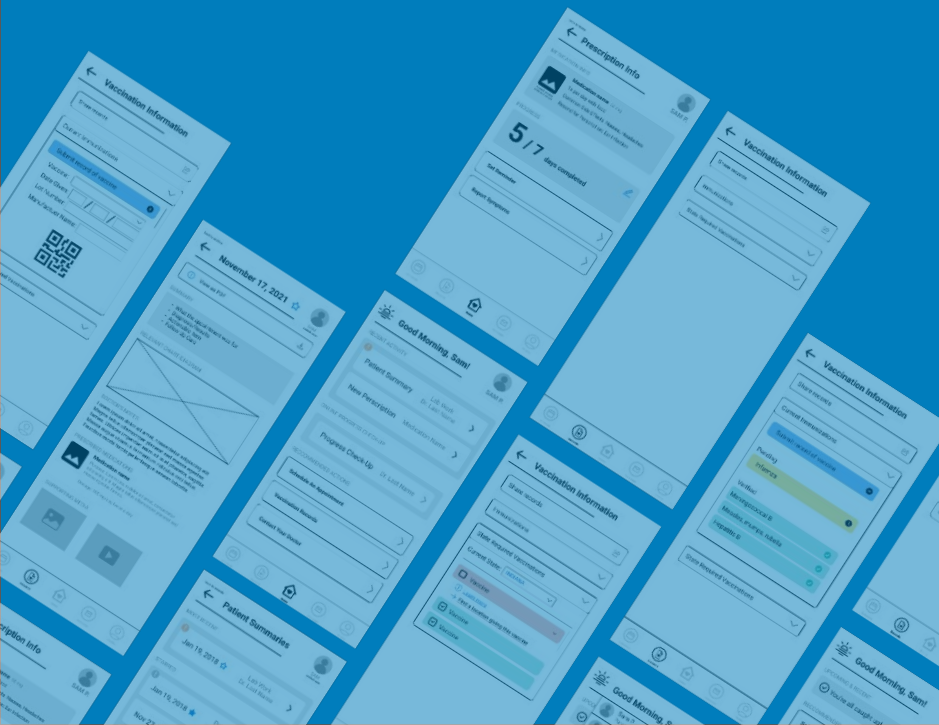
Let's Check Back with Sam & Charlie



By having a set location to **personally track medications**, Sam can stay on top of his tasks and Charlie's health.



Vaccination Organization



Home page & timely information



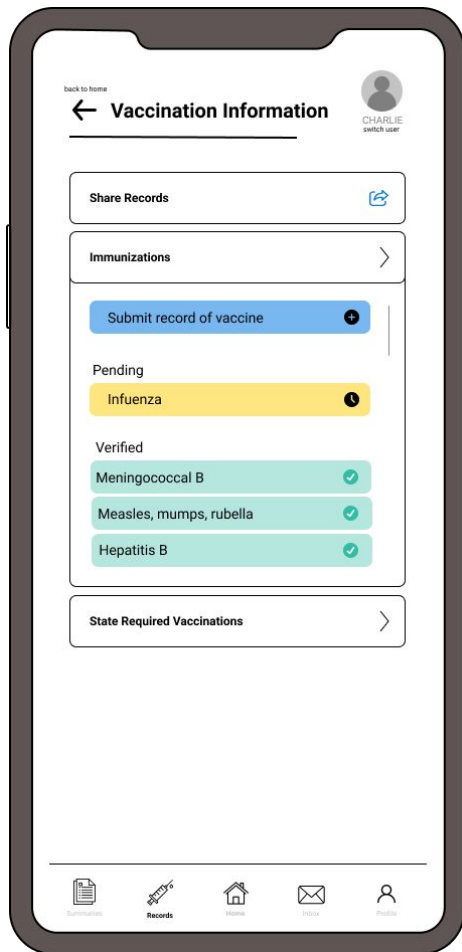
Vaccination information



Patient Summaries



Why Vaccination Records?



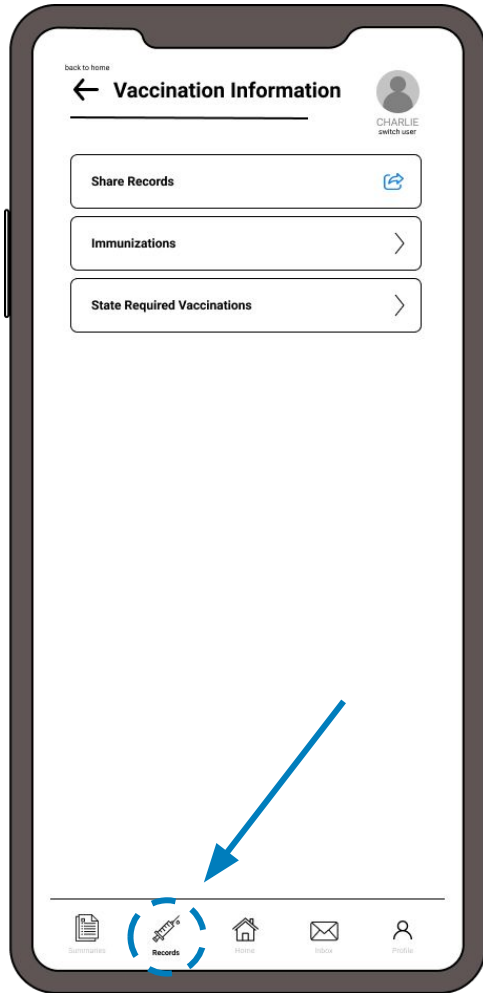
Started with **medical history**

Parents value **time** and **safety** over anything else

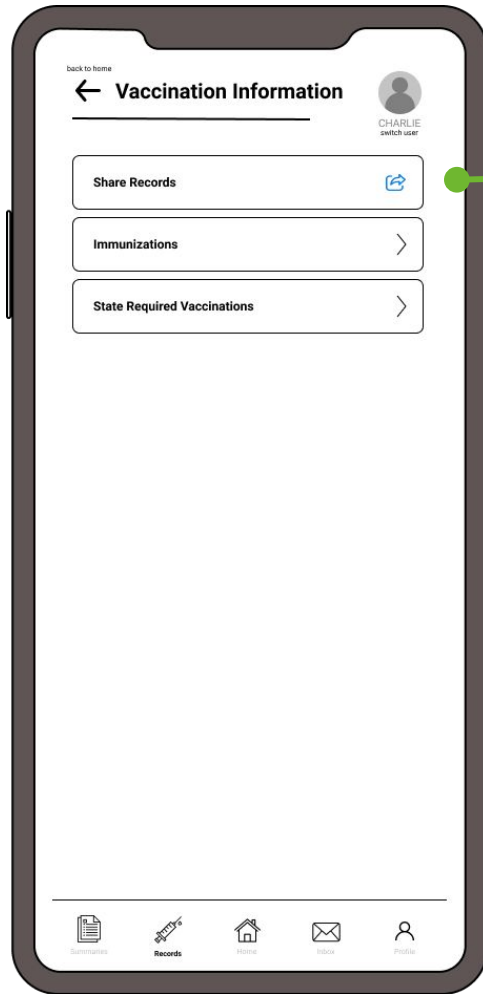
Primary users showed an innate interest toward **vaccination management**



Vaccination Walkthrough



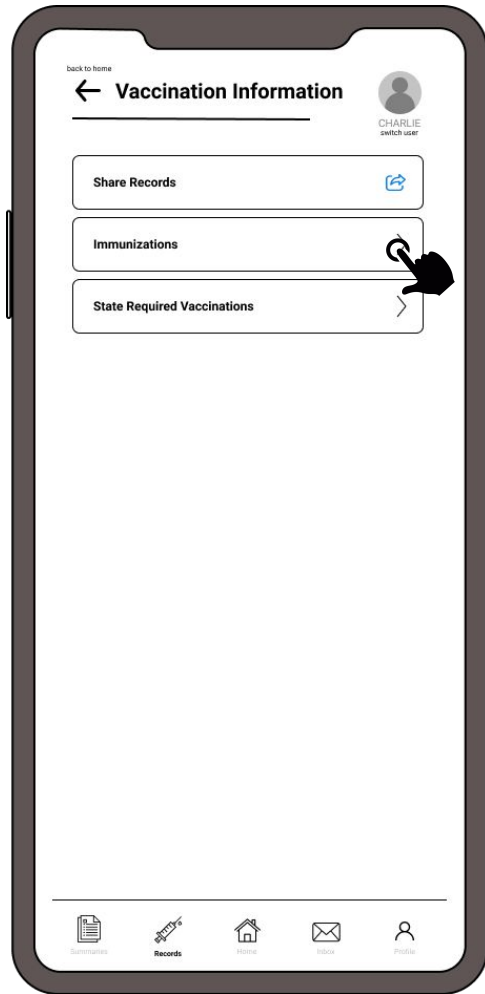
Vaccination Walkthrough



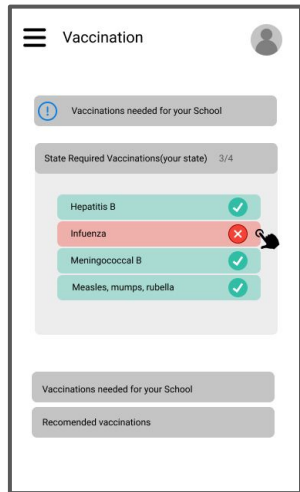
Easily share vaccination records to schools or other hospitals



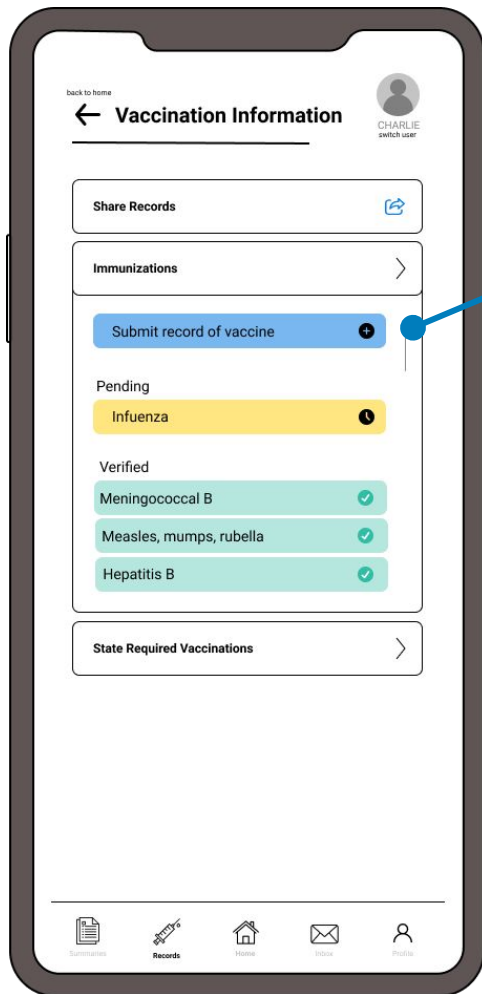
Vaccination Walkthrough



Vaccination Walkthrough



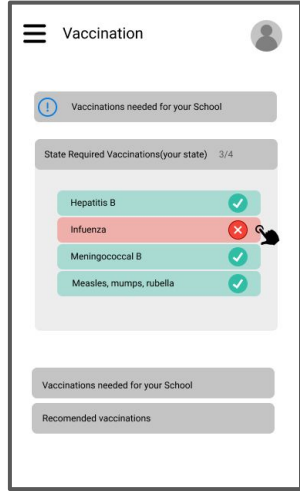
lo-fi



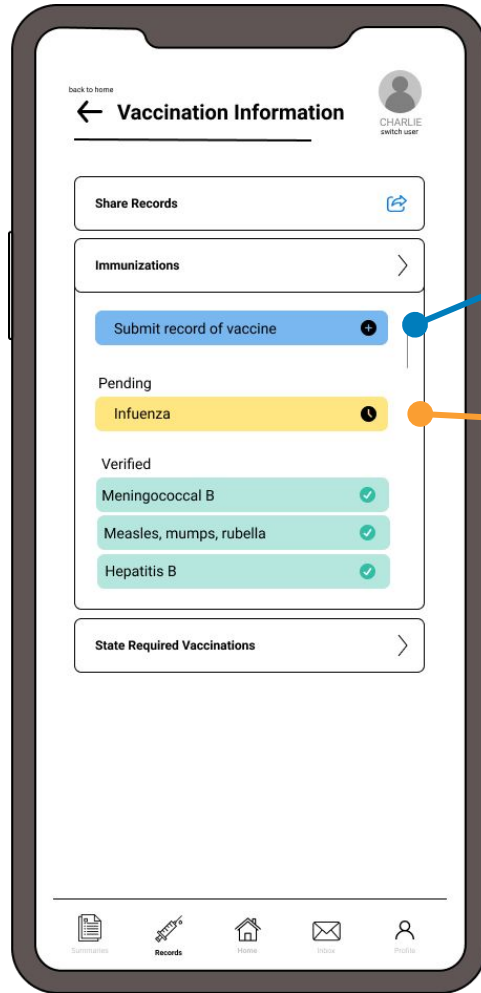
Users can click here to self-report a vaccination and quickly show proof of vaccination



Vaccination Walkthrough



lo-fi

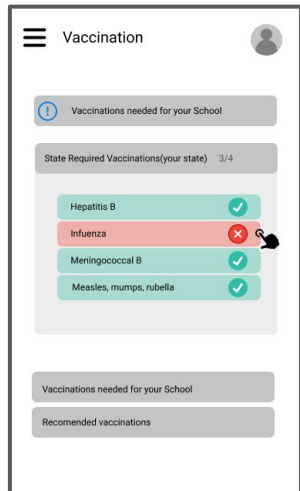


Users can click here to self-report a vaccination and quickly show proof of vaccination

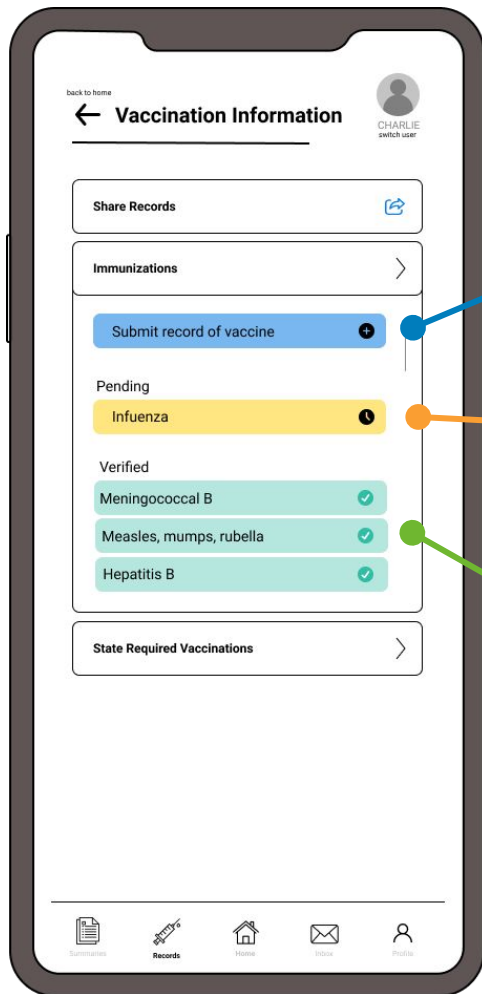
Pending is the step in between submitting the vaccine and it getting verified



Vaccination Walkthrough



lo-fi



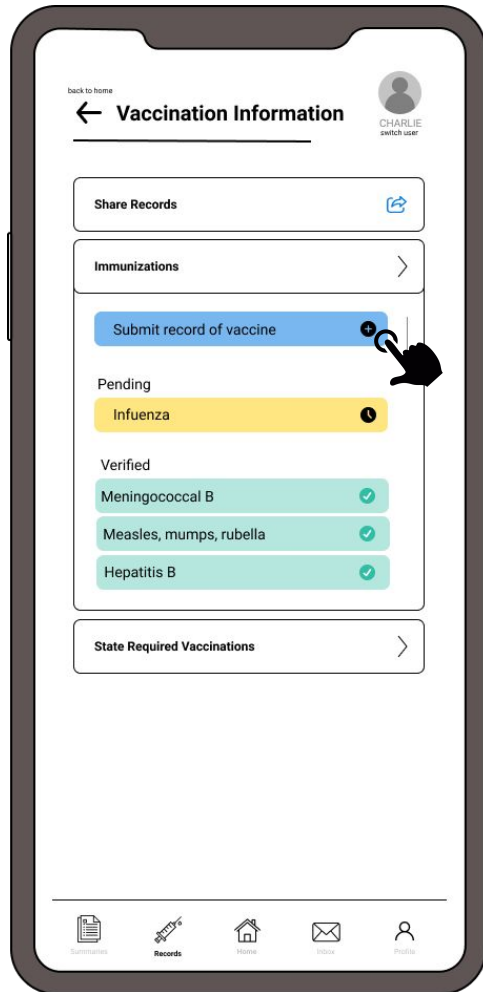
Users can click here to self-report a vaccination and quickly show proof of vaccination

Pending is the step in between submitting the vaccine and it getting verified

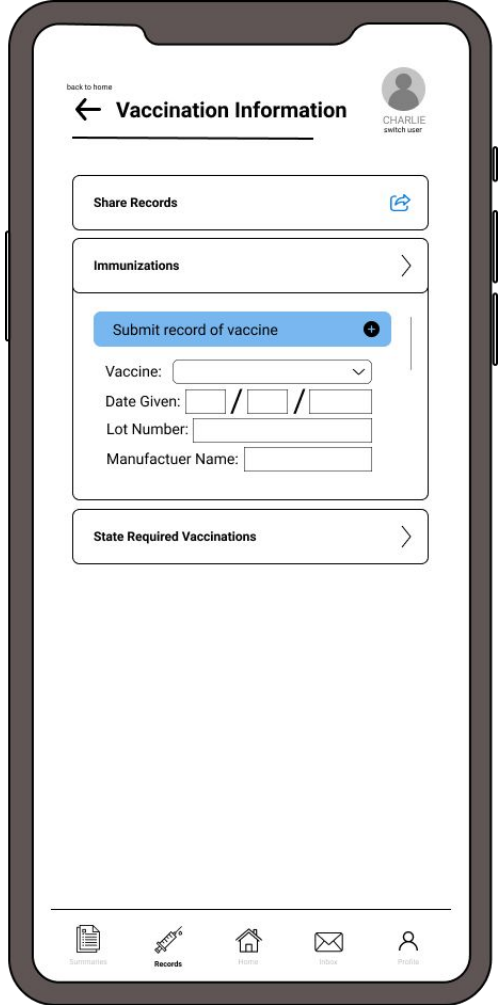
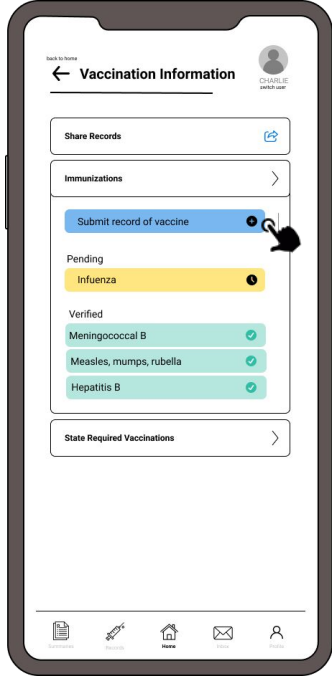
The verified section includes vaccinations you have previously gotten and has been verified



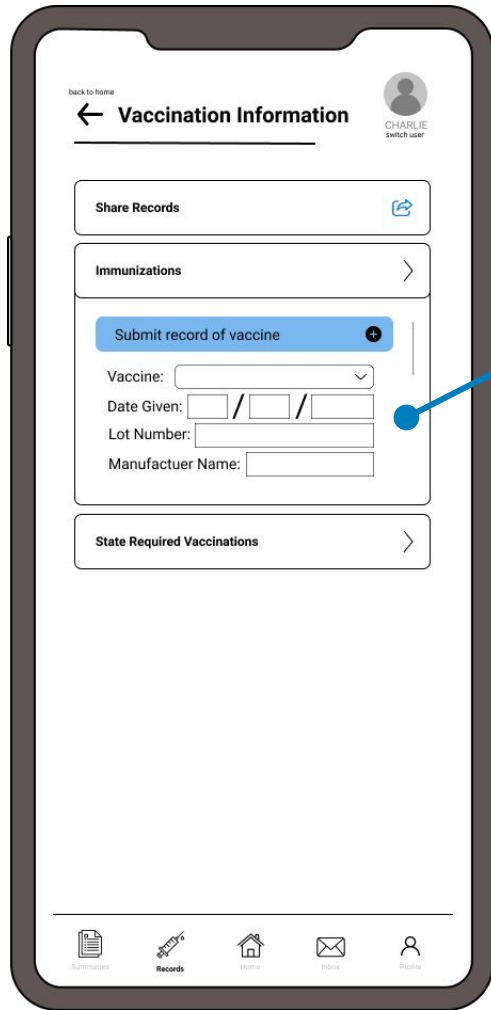
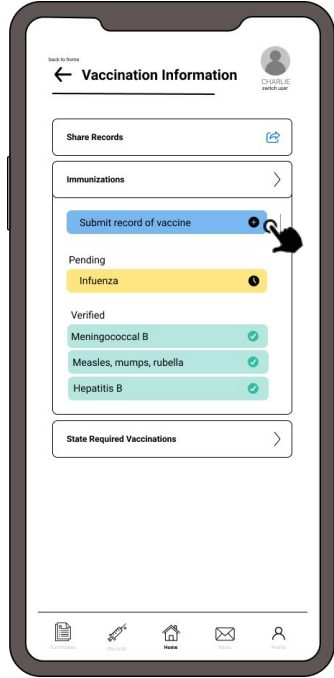
Vaccination Walkthrough



Vaccination Walkthrough



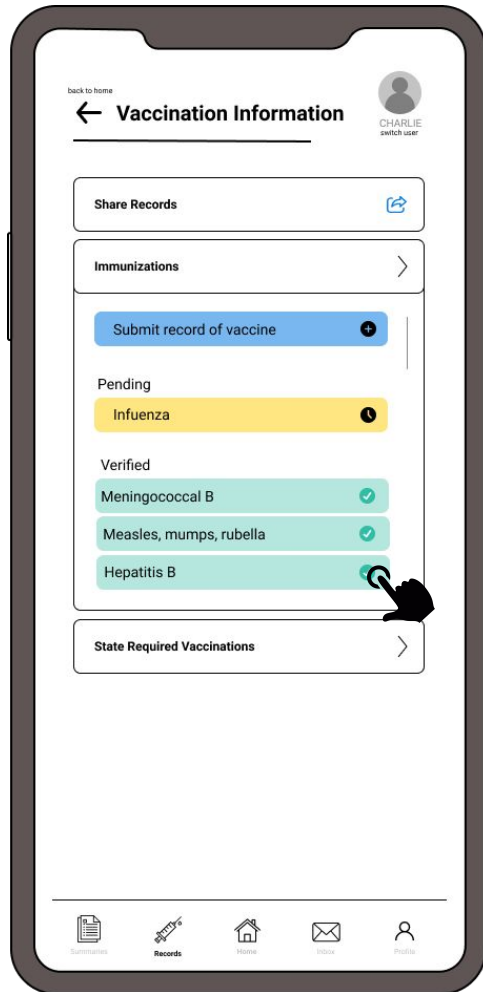
Vaccination Walkthrough



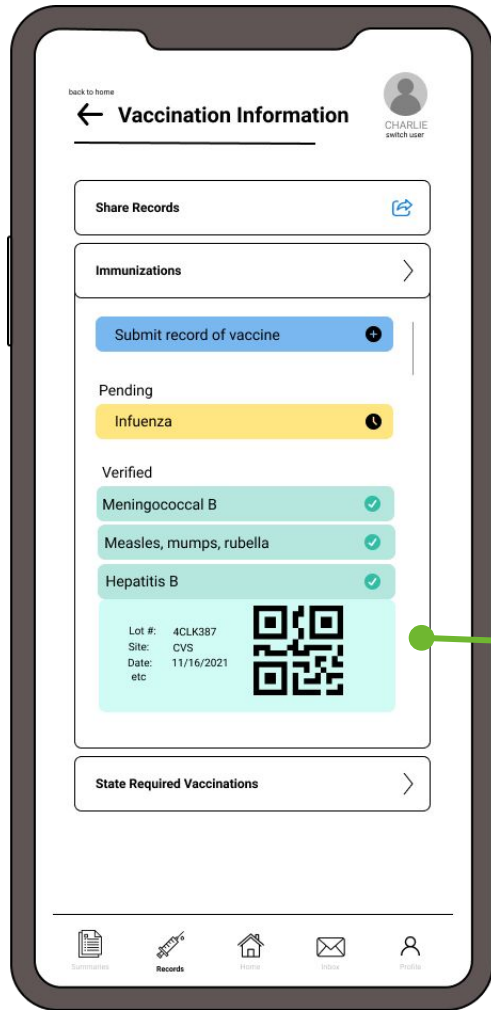
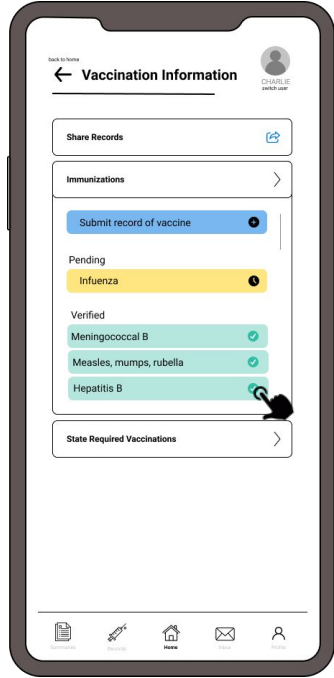
List of relevant information that must be entered



Vaccination Walkthrough



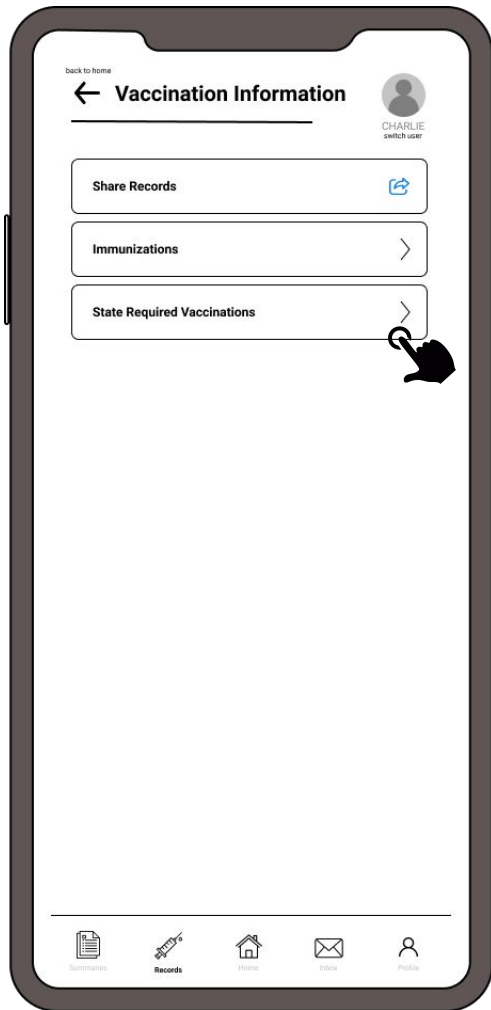
Vaccination Walkthrough



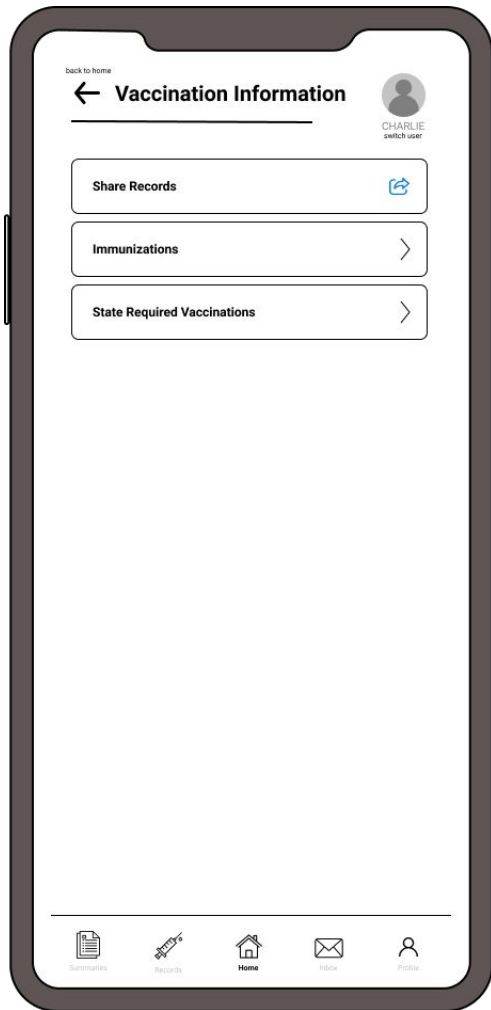
Quick access to on-the-go vaccination proof



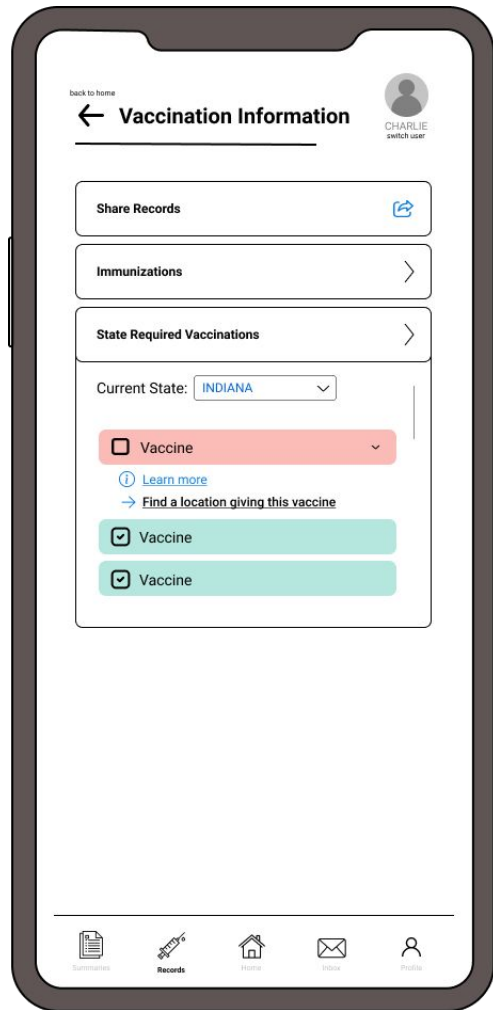
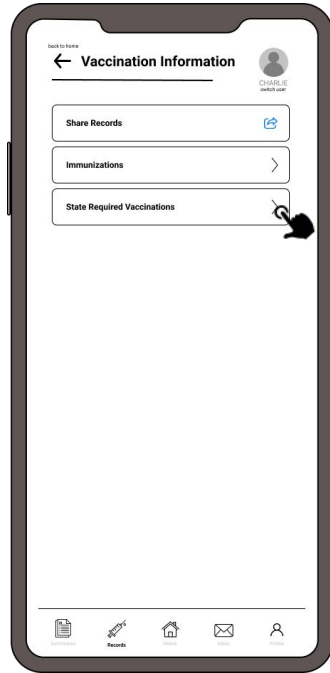
Vaccination Info



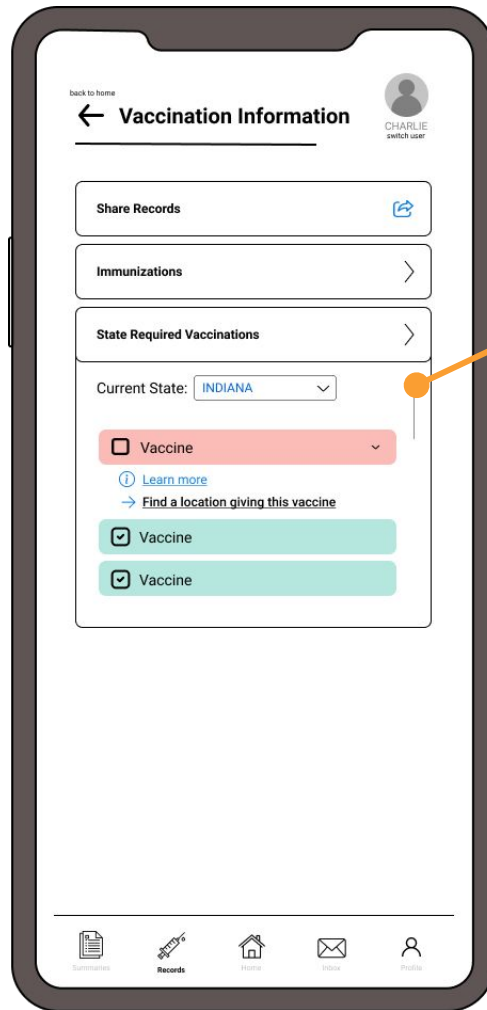
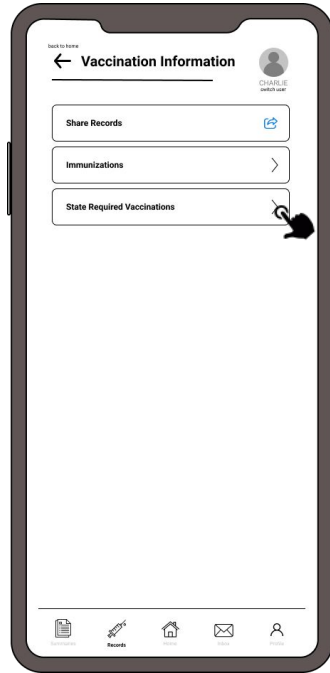
Vaccination Info



Vaccination Info



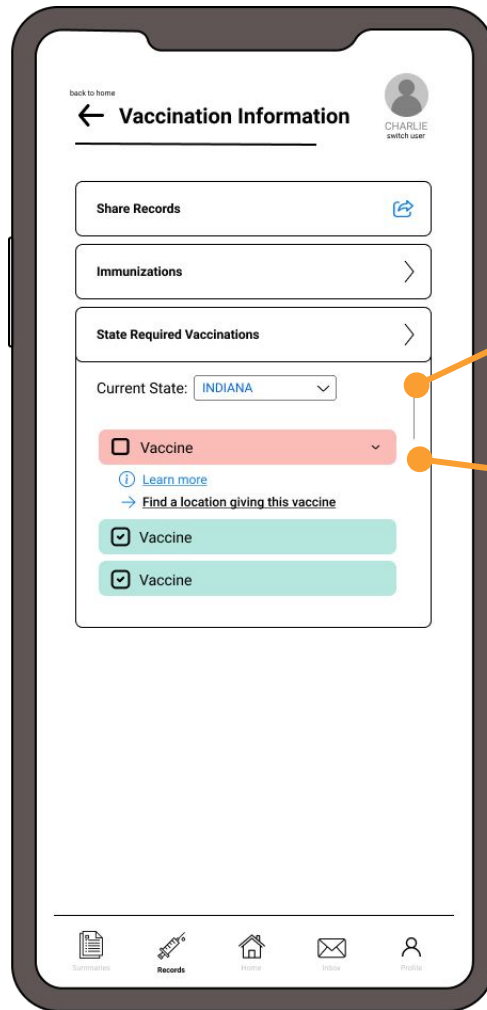
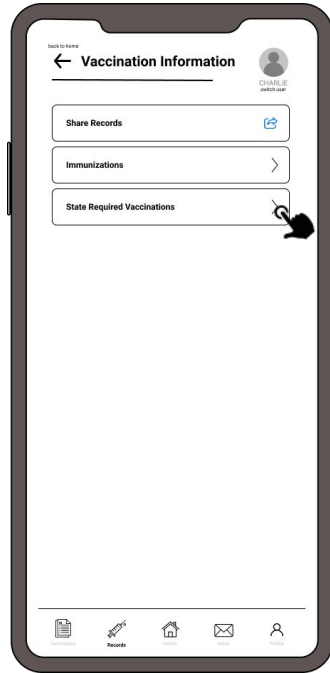
Vaccination Info



State Selection



Vaccination Info

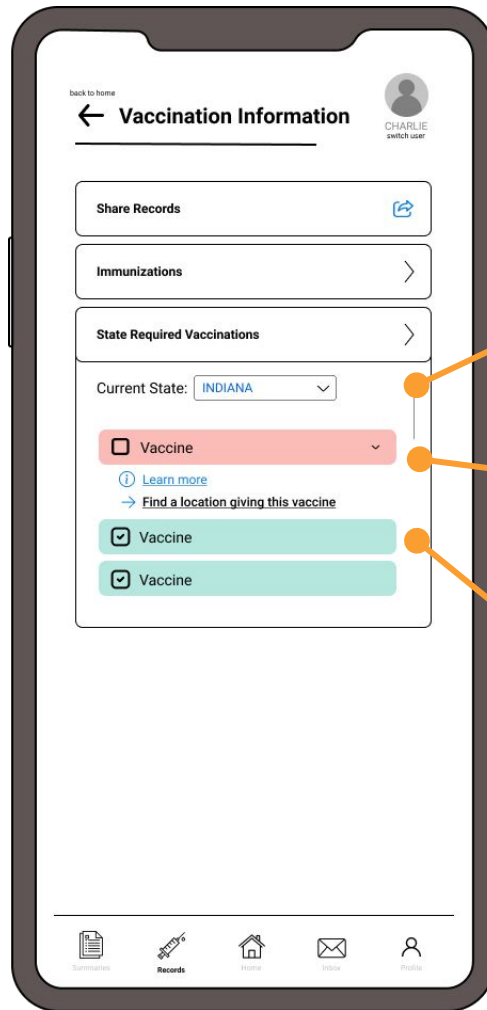
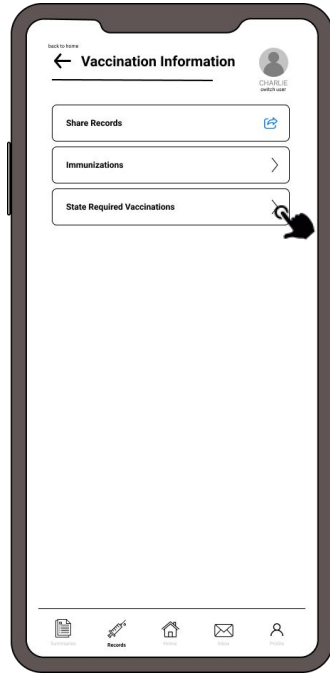


State Selection

Vaccines on the list that are still needed



Vaccination Info

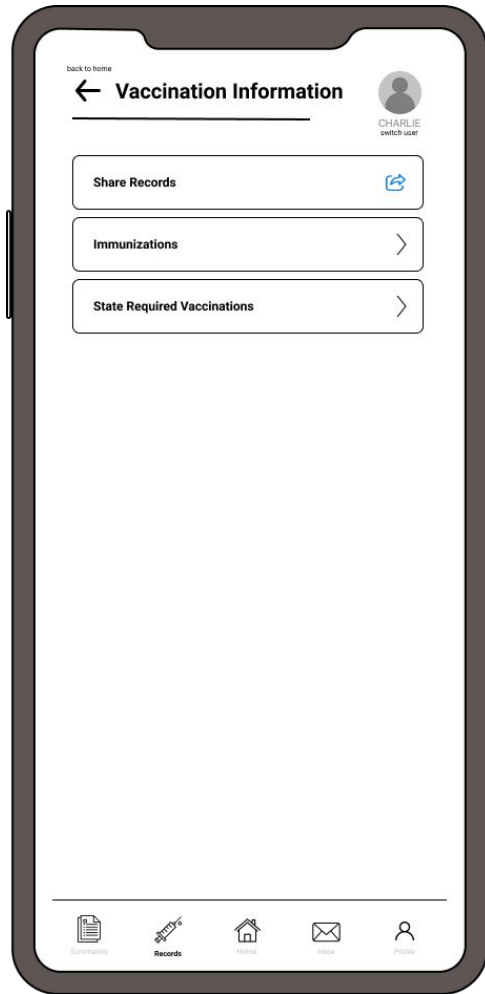


State Selection

Vaccines on the list that are **still needed**

Vaccines on the list that **you have**





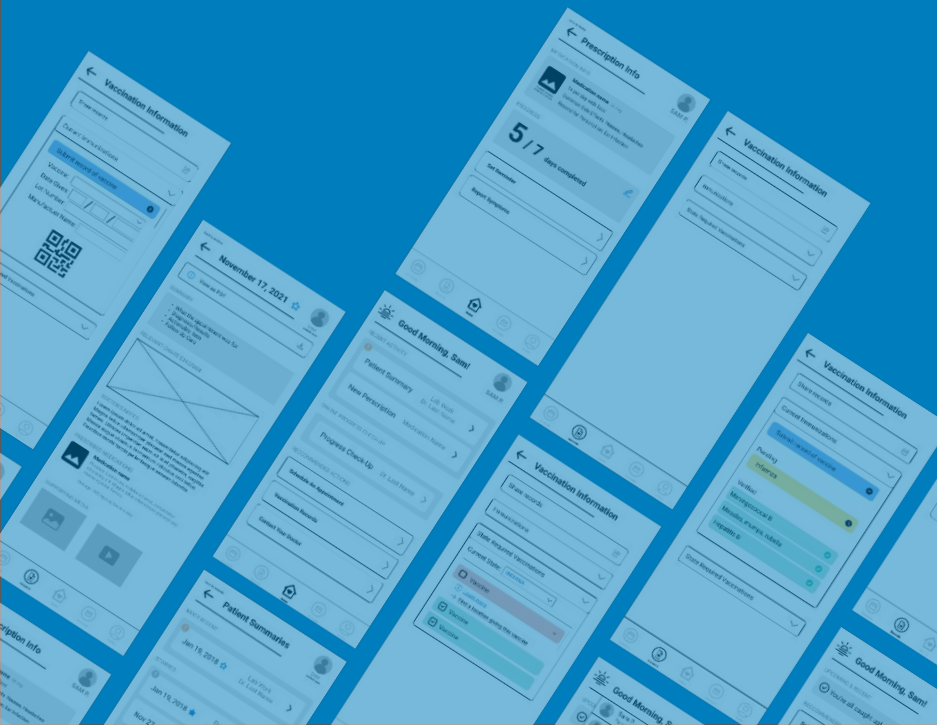
Let's Check Back with Charlie and Sam



Sam is able to save **time** and **stress** because all of the **vaccinations** that Charlie needs are in one place that is **easily accessible**. He is also able to keep track of any on-going vaccines and **easily share** vaccination proof to schools.



Patient Summaries



Home & Time-based Features



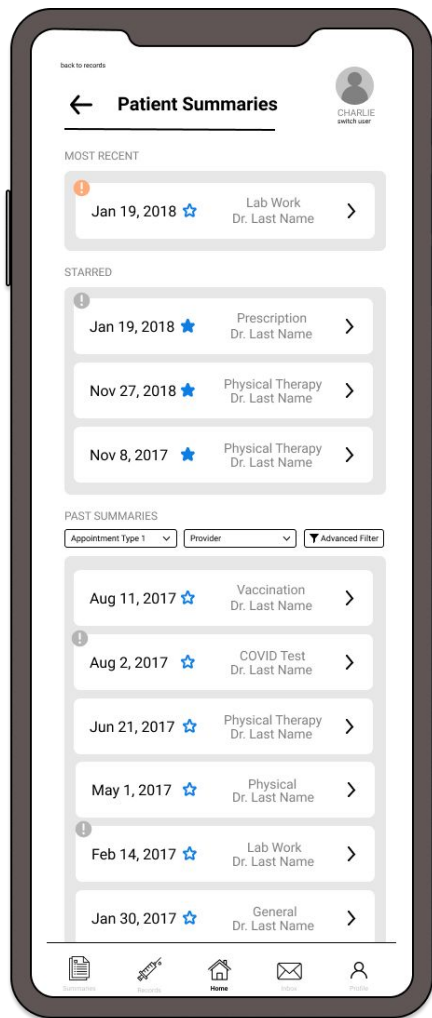
Vaccination information



Patient Summaries



Why Patient Summaries?



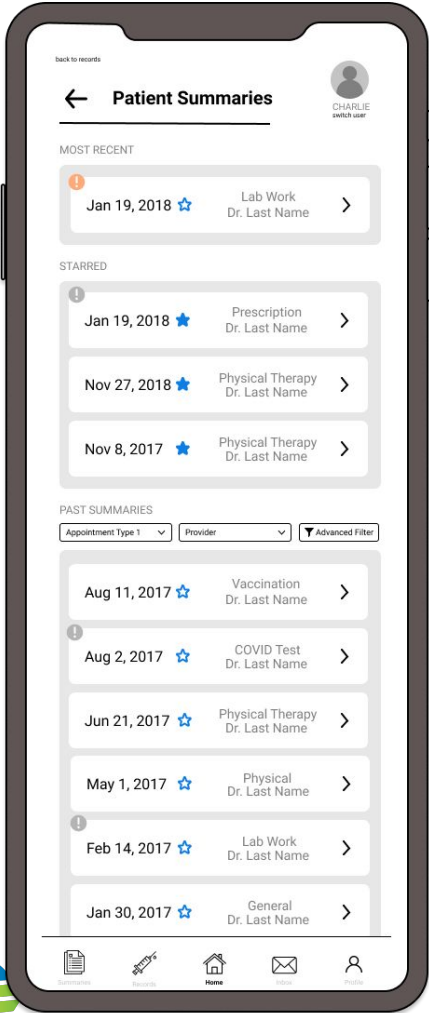
55% of participants check their portal for important information about their appointment

Interviewing participants revealed that **recalling specific information** was a common pain point

The patient appointment journey is **exhausting**



Patient Summaries



Most Recent

Starred

Past Summaries



Important
Results/Action Items



Important Results
(read)



Starred
by user



Patient Summaries

New

Date	Doctor	Doctor	>
Lorem ipsum	Doctor	Doctor	>

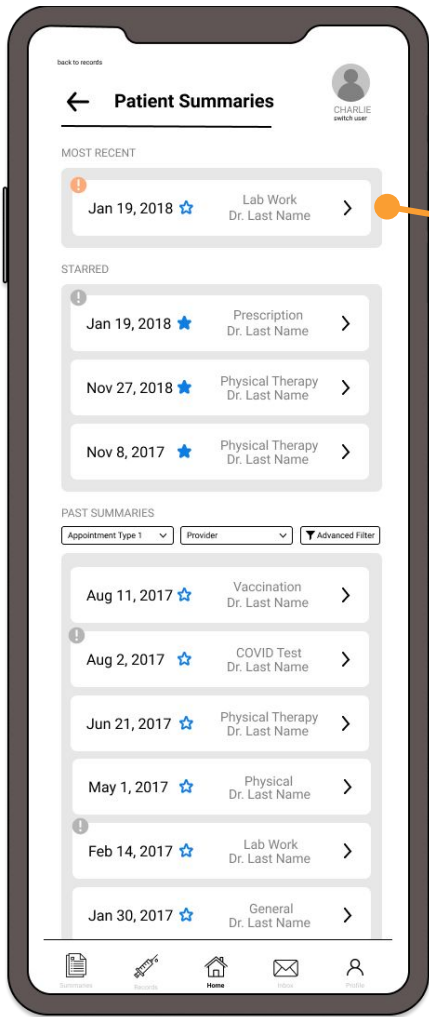
Your Starred

Date	Doctor	Doctor	>
Lorem ipsum	Doctor	Doctor	>
Lorem ipsum			>

Archived

Date	Doctor	Doctor	>
Lorem ipsum			>
Date	Doctor	Doctor	>
Lorem ipsum			>
Date	Doctor	Doctor	>
Lorem ipsum			>

LO-FI



Most recent: indicates the patient's most recent patient summary for their convenience



Patient Summaries

New

DateDoctorDoctor>

Lorem ipsumDoctorDoctor>

Your Starred

DateDoctorDoctor>

Lorem ipsumDoctorDoctor>

Lorem ipsum>

Archived

DateDoctorDoctor>

Lorem ipsum>

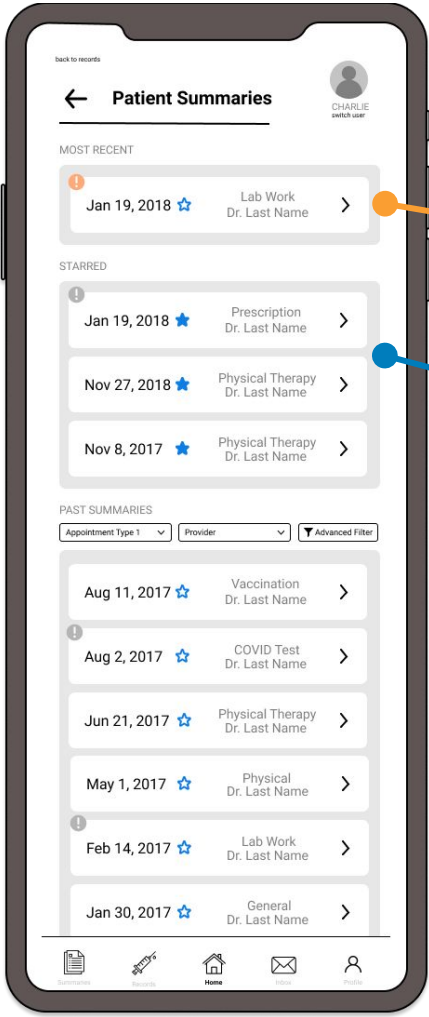
DateDoctorDoctor>

Lorem ipsum>

DateDoctorDoctor>

Lorem ipsum>

LO-FI



Most recent: indicates the patient's most recent patient summary for their convenience

Starred: Make accessing it easier to access summaries the user finds important



Patient Summaries

New

Date	Doctor	Doctor	>
Lorem ipsum Doctor Doctor >			

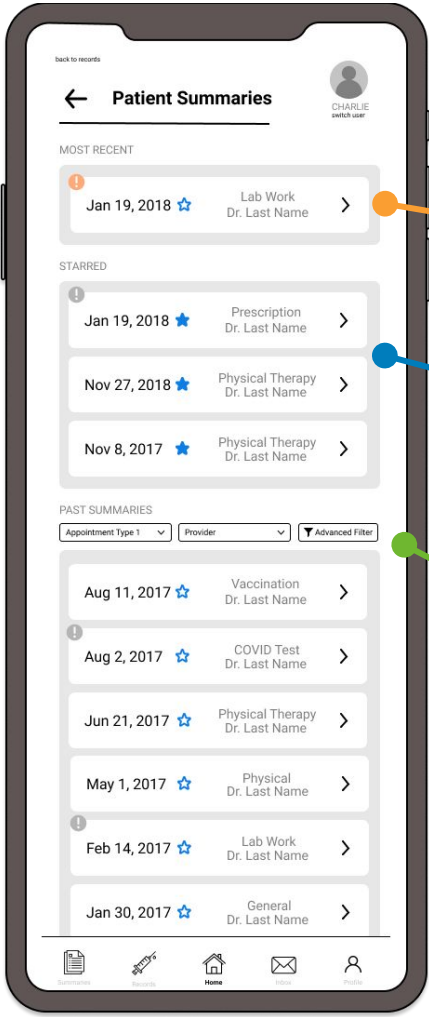
Your Starred

Date	Doctor	Doctor	>
Lorem ipsum Doctor Doctor >			
Lorem ipsum >			

Archived

Date	Doctor	Doctor	>
Lorem ipsum >			
Date	Doctor	Doctor	>
Lorem ipsum >			
Date	Doctor	Doctor	>
Lorem ipsum >			

LO-FI



Most recent: indicates the patient's most recent patient summary for their convenience

Starred: Make accessing it easier to access summaries the user finds important

Past Summaries: consolidate previous records, in an unobstructive way while still allowing patients to refer back to them

PAST SUMMARIES

Appointment Type 1	Provider	Advanced Filter
--------------------	----------	-----------------



Argument For a Better Format

Current patient summaries aren't geared towards a layman's understanding and are not consistently provided

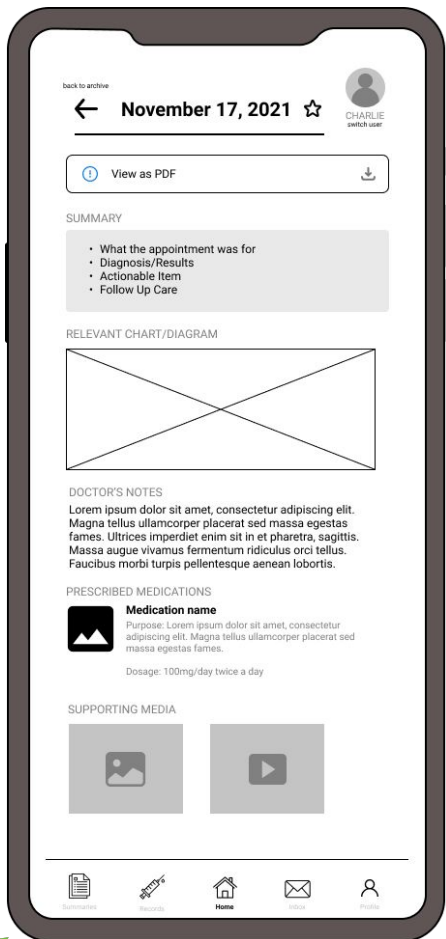
Confusing Terminology

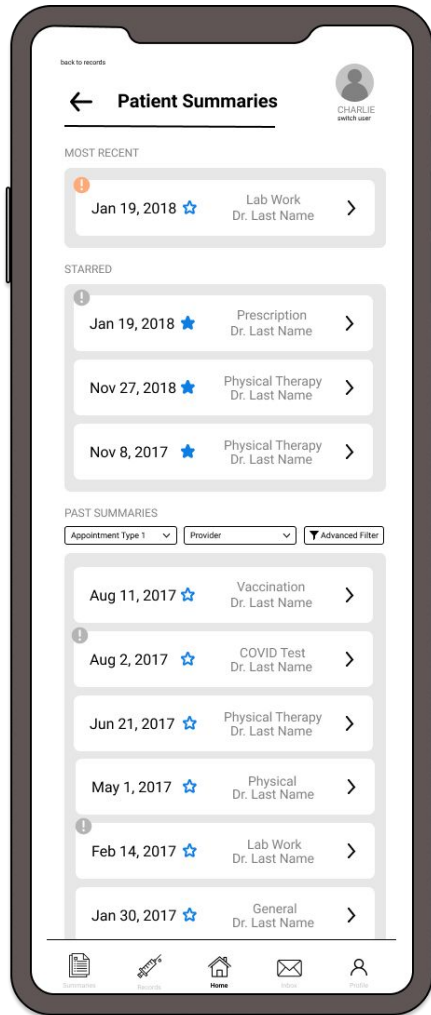
Dense Text

Unengaging Content

"I feel like I am completely on my own to manage something that they do everyday."

Interview Participant



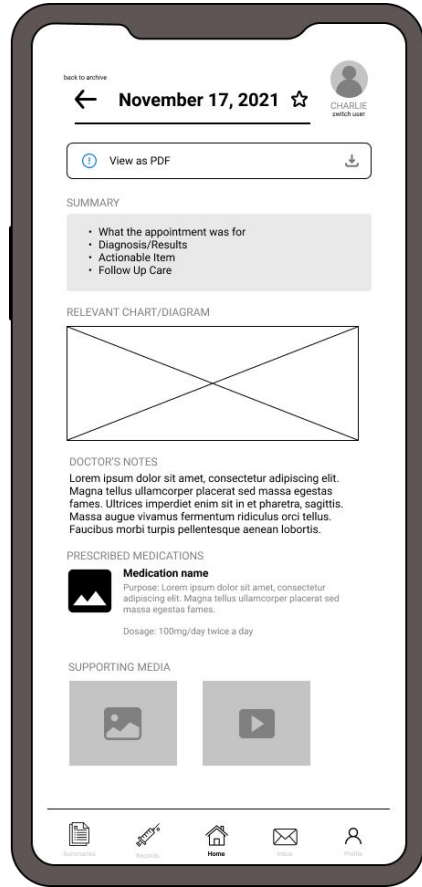
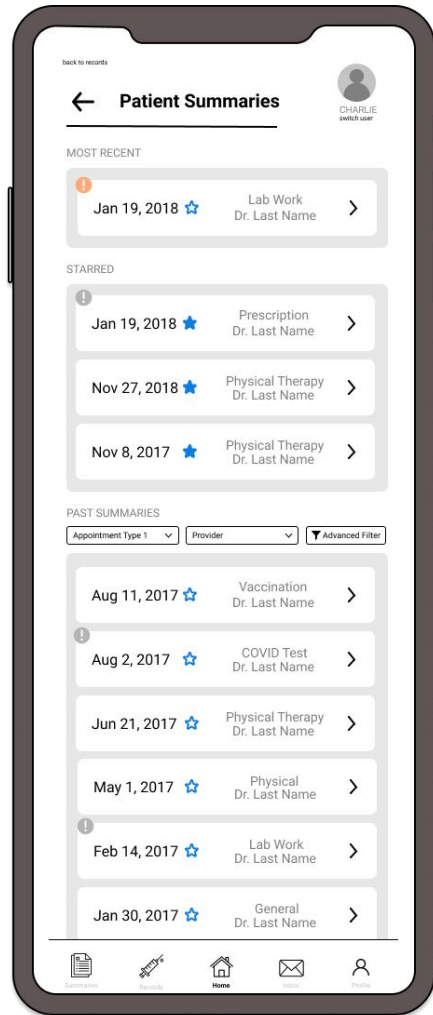


Let's Check Back with Sam & Charlie



With Charlie's patient summaries organized, Sam can easily review the details from his last appointment and **doesn't have to worry about remembering everything.**





Let's Check Back with Sam & Charlie



Overall, there are still barriers for Sam to overcome, with better organization, he can now clearly locate Charlie's most recent summary and **access** information about the **medication** that **prescribed** for his earache.





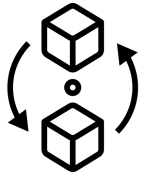
Next Steps & Reflection



Next Steps



01 Finalize Project Documentation



02 Compile Transition Document



Reflection - What We Learned



Questions?

CERNER x PURDUE
FA2021



Reflection - What We Learned

**Need icons and text input

Quality over Quantity

Mercury is the closest planet to the Sun

Quality over Quantity

Mercury is the closest planet to the Sun

Teamwork

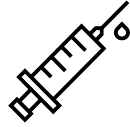
Mercury is the closest planet to the Sun

Feedback often and Frequently

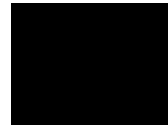
Mercury is the closest planet to the Sun



USE THESE ICONS



USE THESE COLORS



I put these here to show
progression



Stuff we need to get done

Headers: **Roboto | Bold**

Everything Else: **Raleway | medium**

Slide 31: Needs to be more consistent/better visually

Home Screen Walk through: Needs to be more consistent/better visually


Home Screen Walk through: Needs to be more consistent/better visually




Need to do:


- Double check fonts
-
-

- Why Section (~1 minute)
 - What led us to choose this feature
 - Tie in our user group

☰ Vaccination 

 Vaccinations needed for your School

State Required Vaccinations(your state) 3/4

Hepatitis B	✓
Infuenza	✗ 
Meningococcal B	✓
Measles, mumps, rubella	✓

Vaccinations needed for your School

Recomended vaccinations