Lester Jones
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Patient Portal

www.LesterAJones.com
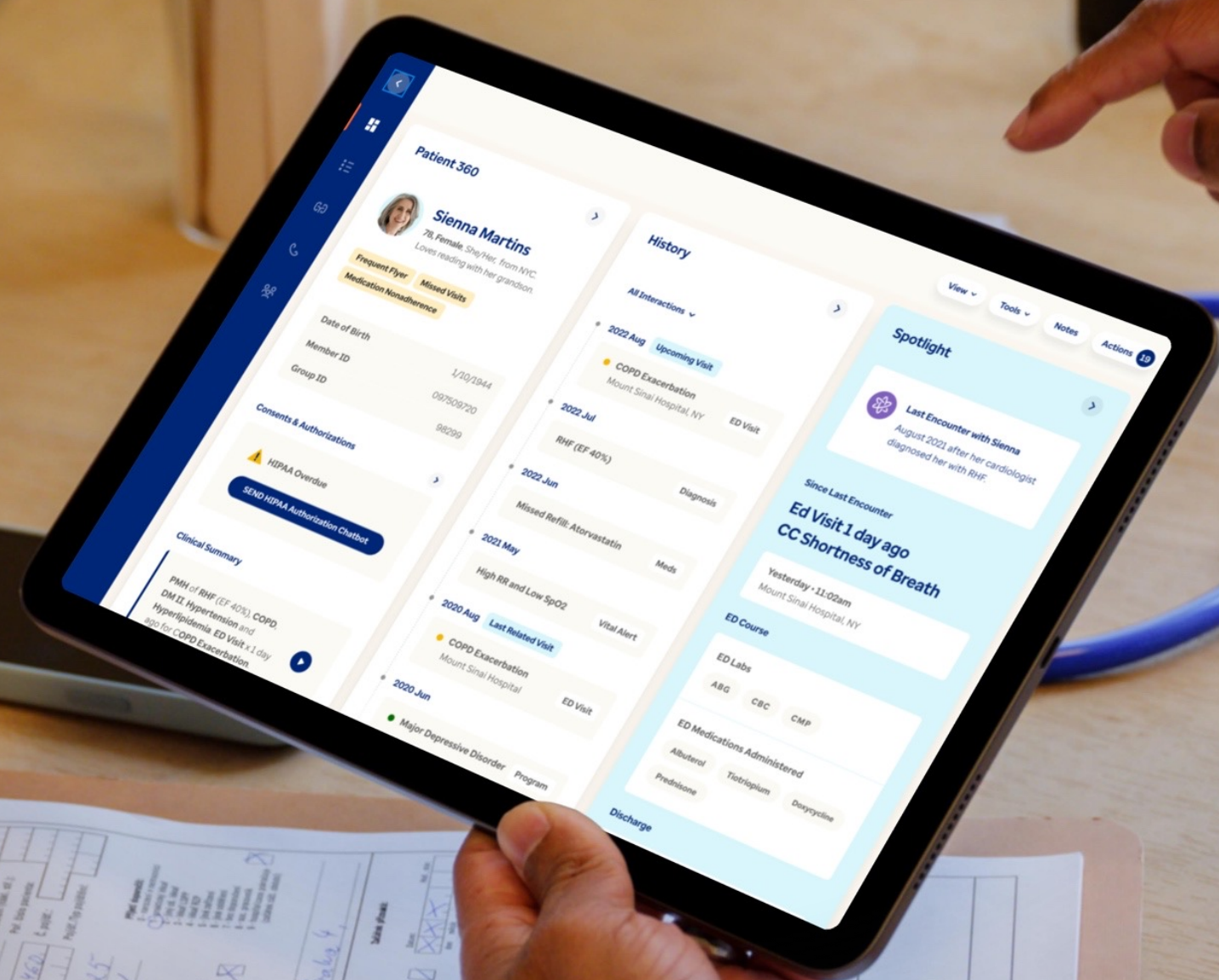
Lester Jones

The UX Researcher/Designer with Expertise in Informing Results Delivering UX Efforts for Large Impactful Systems.

www.lesterajones.com

Academics

2021 - Graduate Certificate - Cyber Security
Harvard Extension School

2009 - Masters - Information Architecture and Interaction Design
University of Baltimore

2005 - AAS - Computer Information Systems
Baltimore City Community College

2000 - B.Sc. - Zoology and Botany
University of the West Indies

Special Sauce

- Experience Leading Nation Spanning Ethnographic Studies
- Expert in Generative UX Research Methods
- Experience working with Large Scale Systems that Impact Millions of Users
- Experience with both UX Research and UX Design Methods
- Professional Photographer, Drone Pilot and Overlander
- Experience working in Confidential Environments
- Strong Science Background

United Healthcare

Patient Portal

Research and Design an Improved Patient Portal that will allow clinicians to more effectively interact with patients

Role: UX Lead
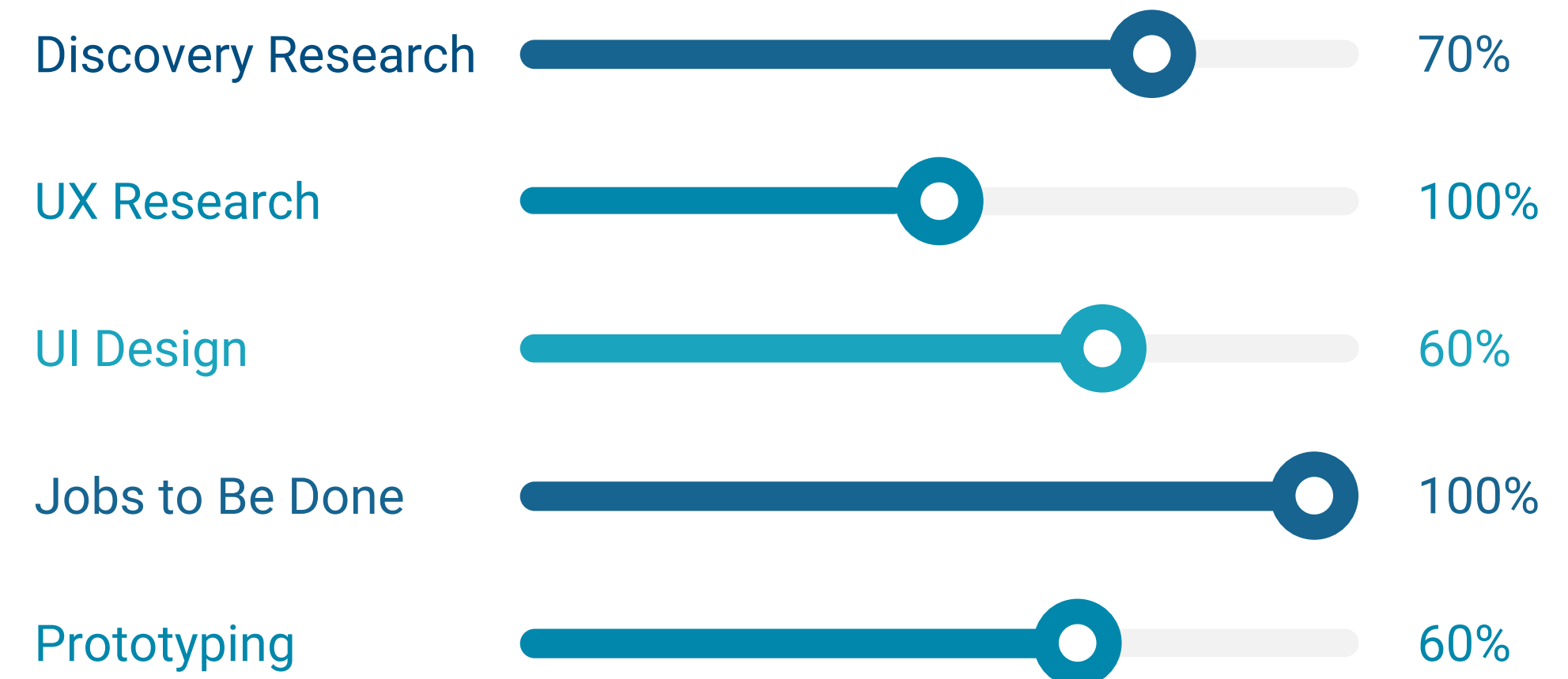
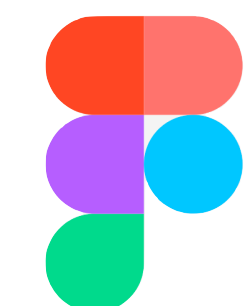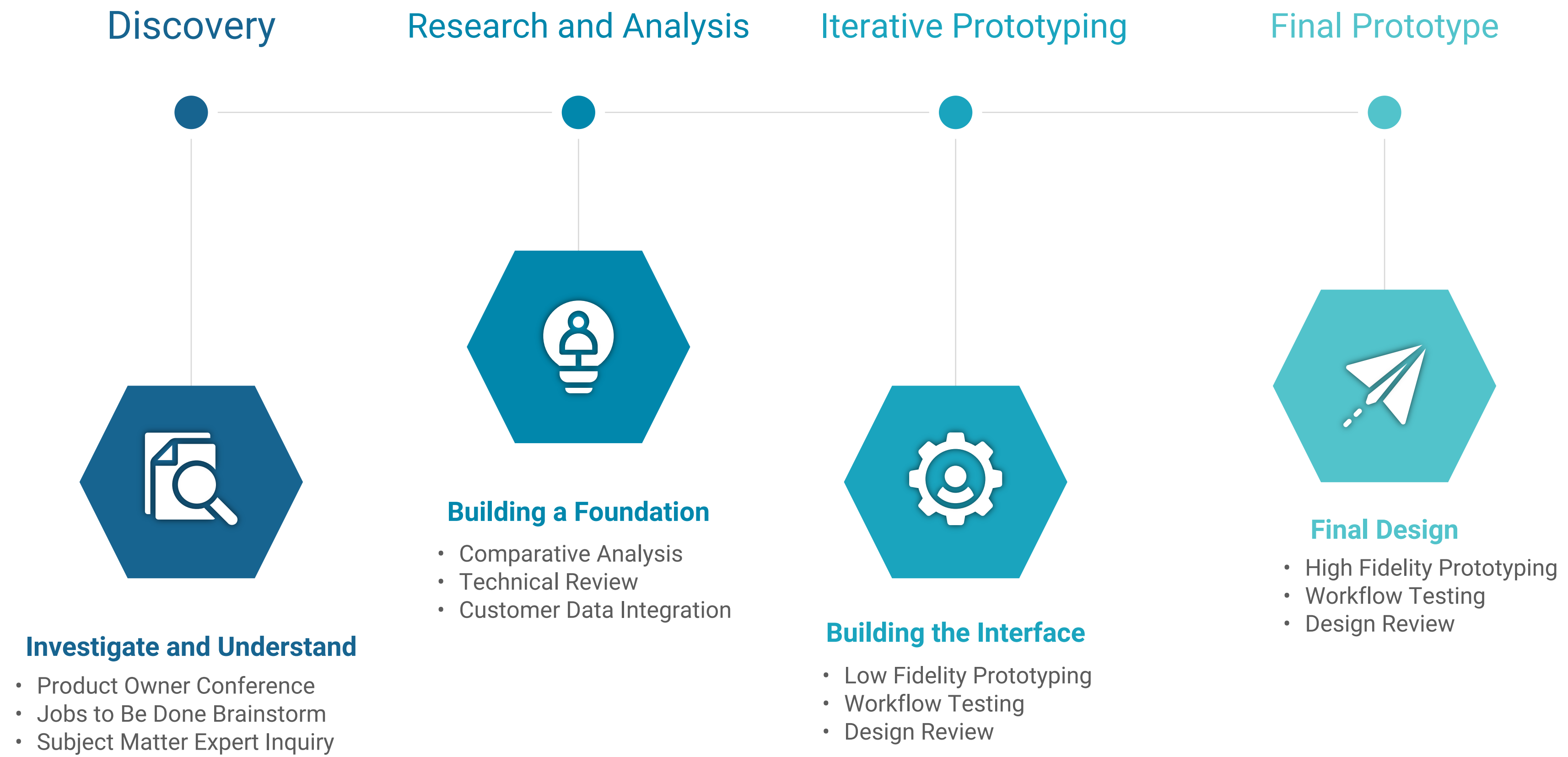UX Team Size: 2.5

Project Management: Agile

My Contributions

Discovery Research 70%

UX Research 100%

UI Design 60%

Jobs to Be Done 100%

Prototyping 60%

Tools:

balsamiq®

mach⚡form
Est. 2007

Figma

The Design Process

Discovery Research and Analysis Iterative Prototyping Final Prototype

Investigate and Understand

- Product Owner Conference
- Jobs to Be Done Brainstorm
- Subject Matter Expert Inquiry

Building a Foundation

- Comparative Analysis
- Technical Review
- Customer Data Integration

Building the Interface

- Low Fidelity Prototyping
- Workflow Testing
- Design Review

Final Design

- High Fidelity Prototyping
- Workflow Testing
- Design Review

01

Discovery

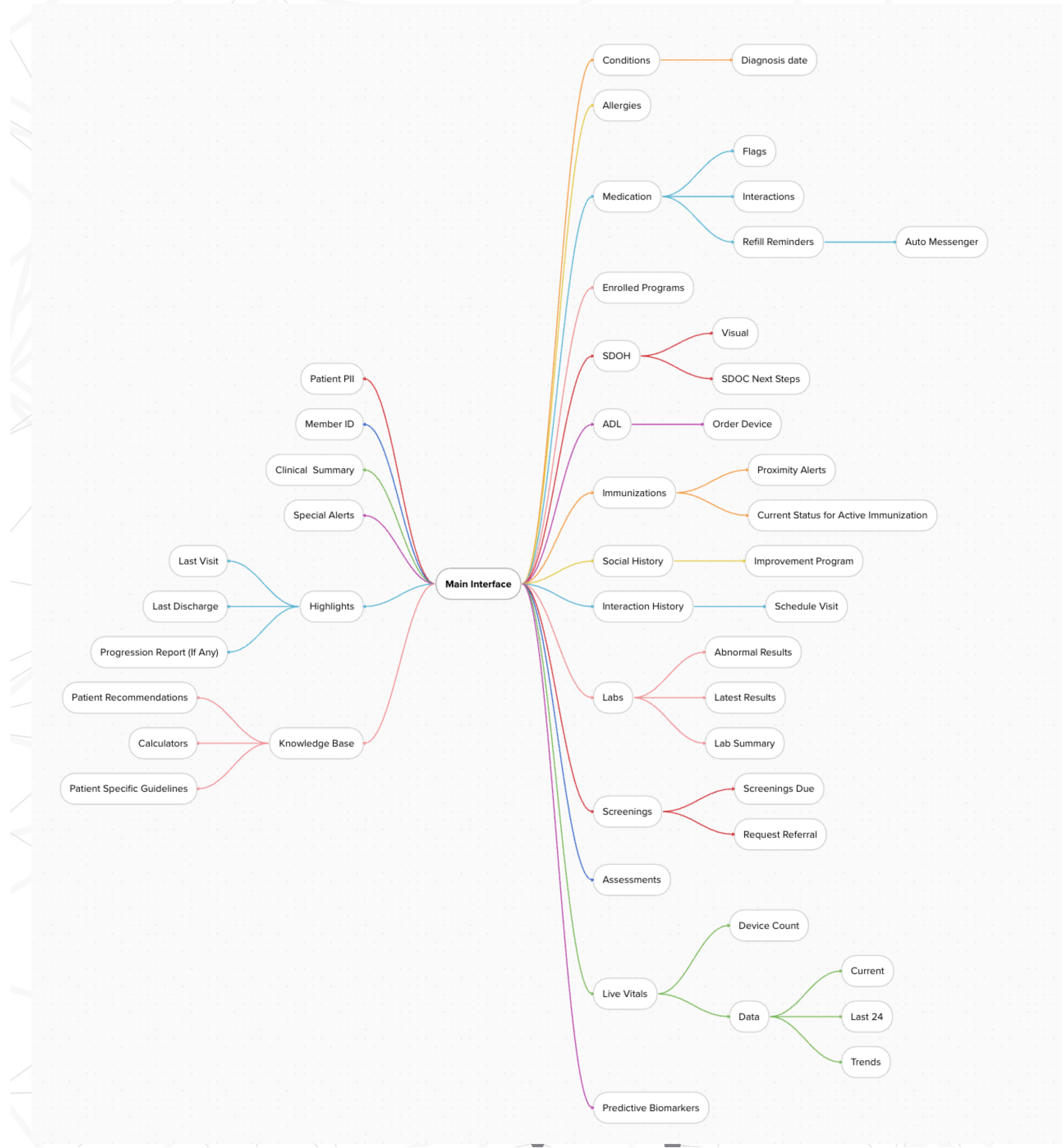The preliminary phase in the UX-design process, here it involved:

- Conference with the Product Owners, SME's, Technical Staff, etc.
- "Jobs to be Done" Brainstorming
- Researching the problem space
- Framing the problem to be solved and determine the scope
- Gathering enough evidence and initial direction on what to do next

Discovery

Jobs to Be Done

Deep Dive

I facilitated a "**Jobs to be Done**" Brainstorming effort to determine the functions that was needed for this Patient Portal

The results were captured in a Mural Mind Map

Patient PII

Member ID

Clinical Summary

Special Alerts

Last Visit
Last Discharge — Highlights
Progression Report (If Any)

Patient Recommendations
Calculators — Knowledge Base
Patient Specific Guidelines

Main Interface

Conditions — Diagnosis date

Allergies

Flags
Medication — Interactions
Refill Reminders — Auto Messenger

Enrolled Programs

Visual
SDOH —
SDOC Next Steps

ADL — Order Device

Proximity Alerts
Immunizations —
Current Status for Active Immunization

Social History — Improvement Program

Interaction History — Schedule Visit

Abnormal Results
Labs — Latest Results
Lab Summary

Screenings Due
Screenings —
Request Referral

Assessments

Device Count
Live Vitals —
Data — Current
Last 24
Trends

Predictive Biomarkers

Discovery

Subject Matter Expert Inquiry

Deep Dive

For each of the "bubbles" developed in the previously shown Mind Map, the SME's of each of these domains were interviewed to determine the best way to display the respective content as well as other details as shown.

Content Header

Data Source

Data Team

Main Content

Suggested Visualization

Linked Resources

Actions

Extras

Notes

Contacts

Discovery
Role Analysis
For Personalized Experiences

Deep Dive

A Role Analysis was done to determine what
functionality different user groups need to access.
Users were also given the ability to customize their
experiences within their need to view constraints.
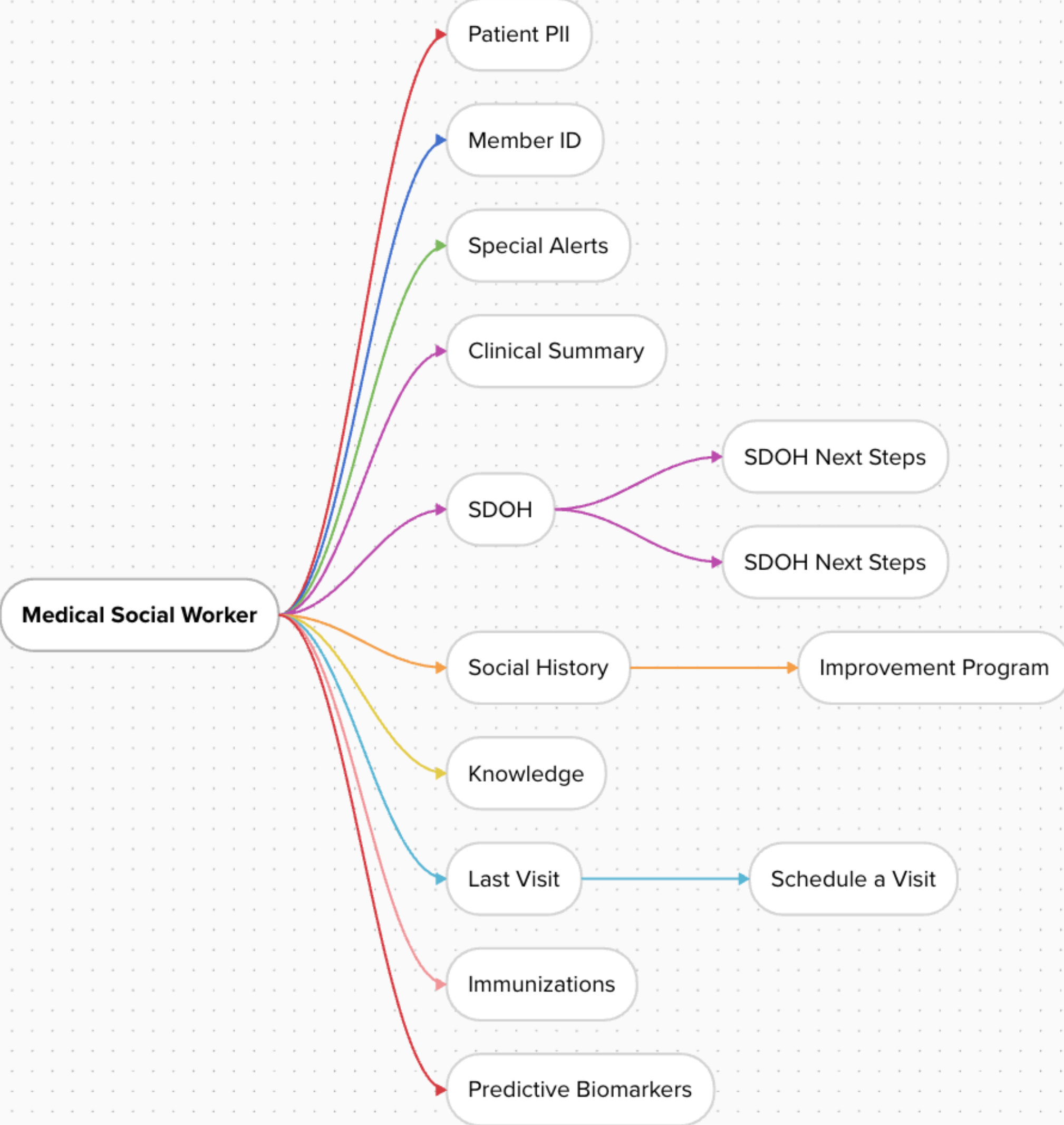
02

Research and Analysis

After the Product and Project Scope and the Desired Outcomes are determined, Research and Analysis is done to determine the specific next steps need to insure the success of the overall effort.

Discovery

Comparative Analysis

Invent and Simplify

I conducted a Comparative Analysis to survey the Data Visualization Products and implementations, used in medical area.

Special Notice was taken of the following:

- Responsive Design
- Section 508 Compliance
- Technical Constraints
- Rendering Speed on Target Devices
- Benefits
- Potential Challenges

Comparative Analysis

Invent and Simplify

Some of the Key Takeaways from this analysis were as follows:

Visual Selection
- The right visualization must be used for the right data

Types of dashboards
- **Operational** for displaying real-time data
- **Strategic** for showing patterns and trends over time
- **Analytical** for more advanced analytics

Infographics and motion graphics
- Infographic is a simple but powerful tool for visualizing complex data in a format that users can easily understand.

Challenges
- One must ensure that user devices can properly render visualization
- Visualizations must be displayed at the right scale
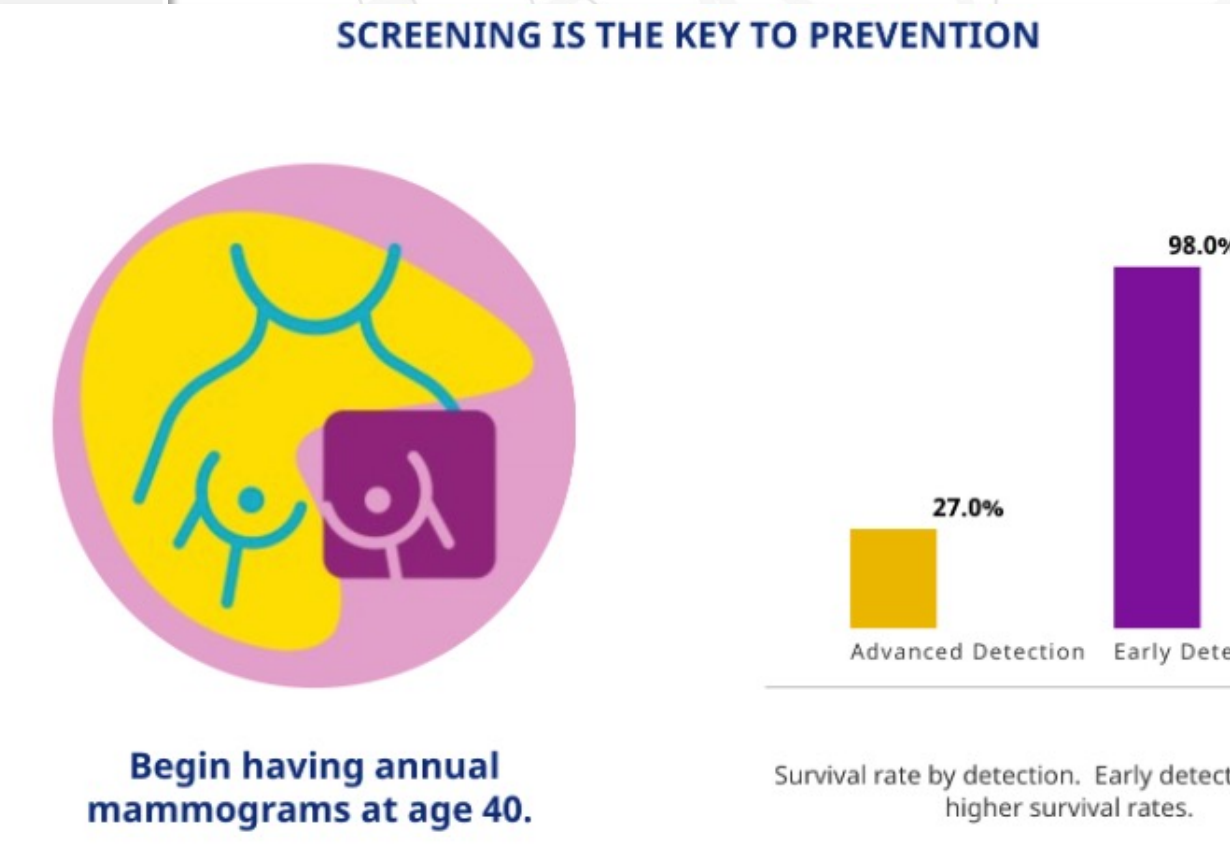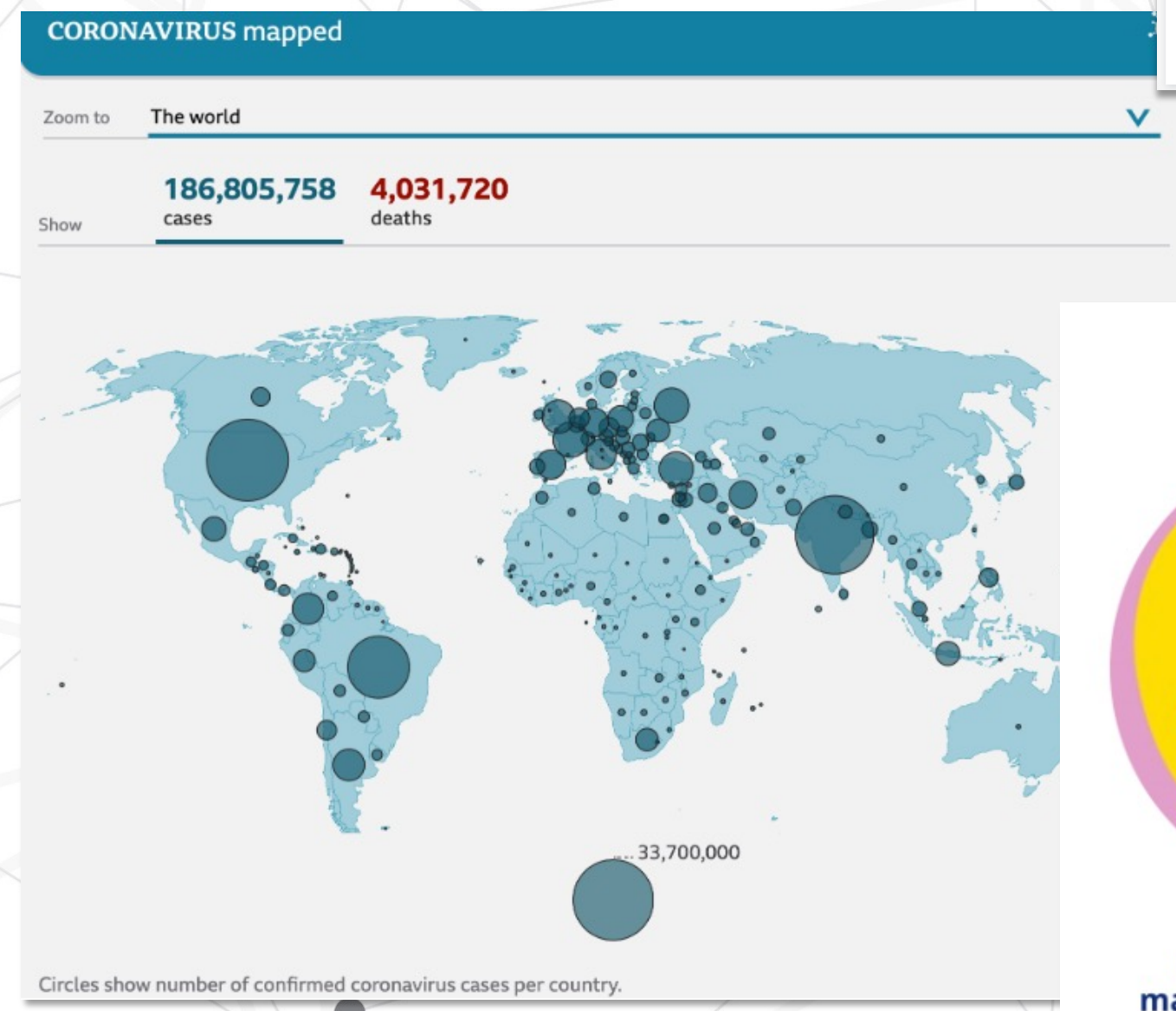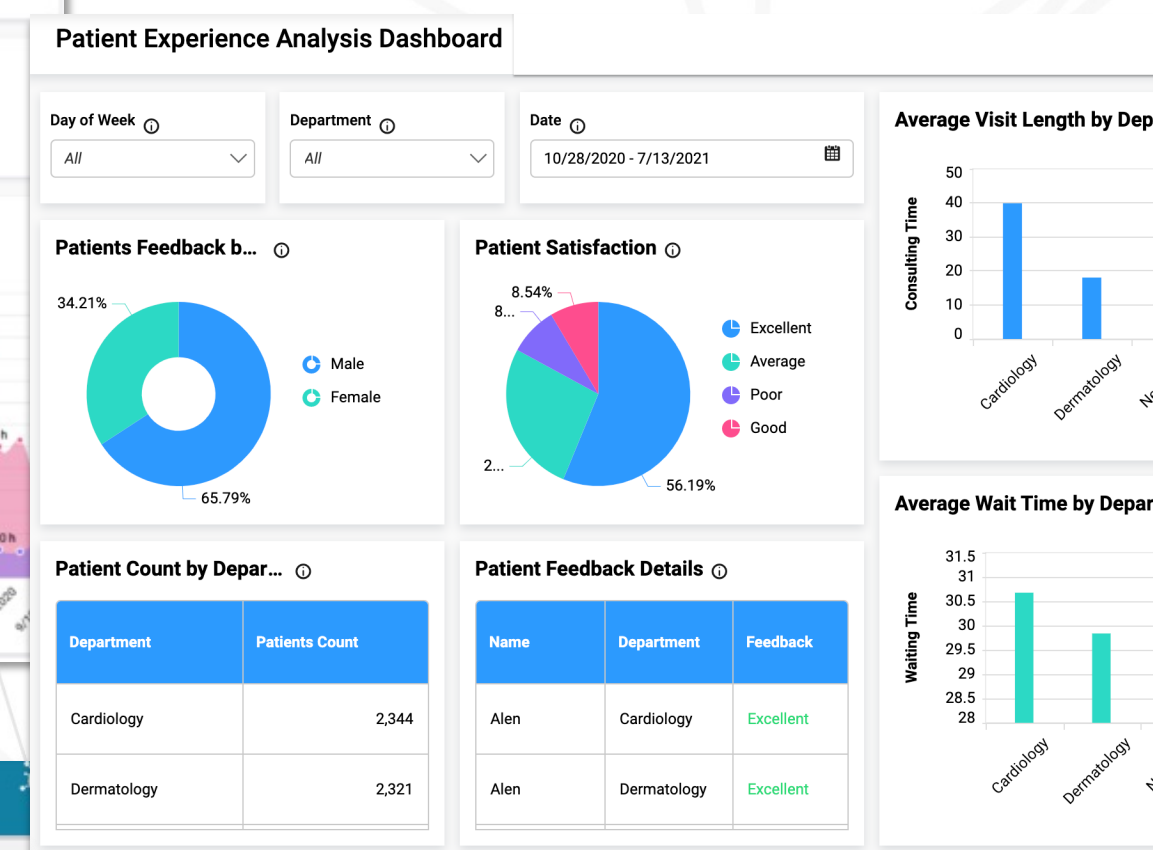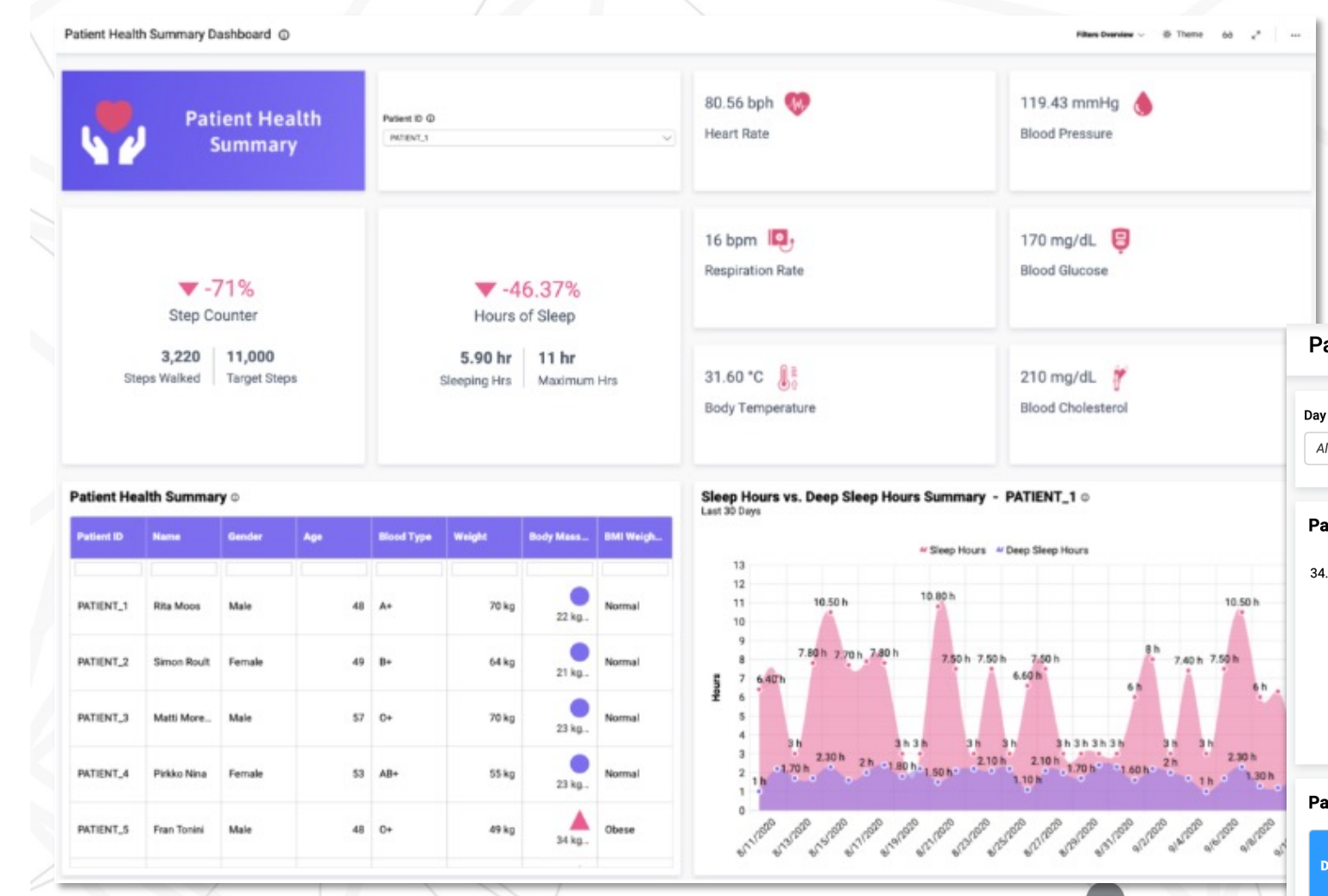
03

Iterative Wireframing

Low fidelity Wireframes were developed in collaboration with SME's the technical Teams.
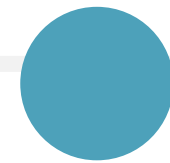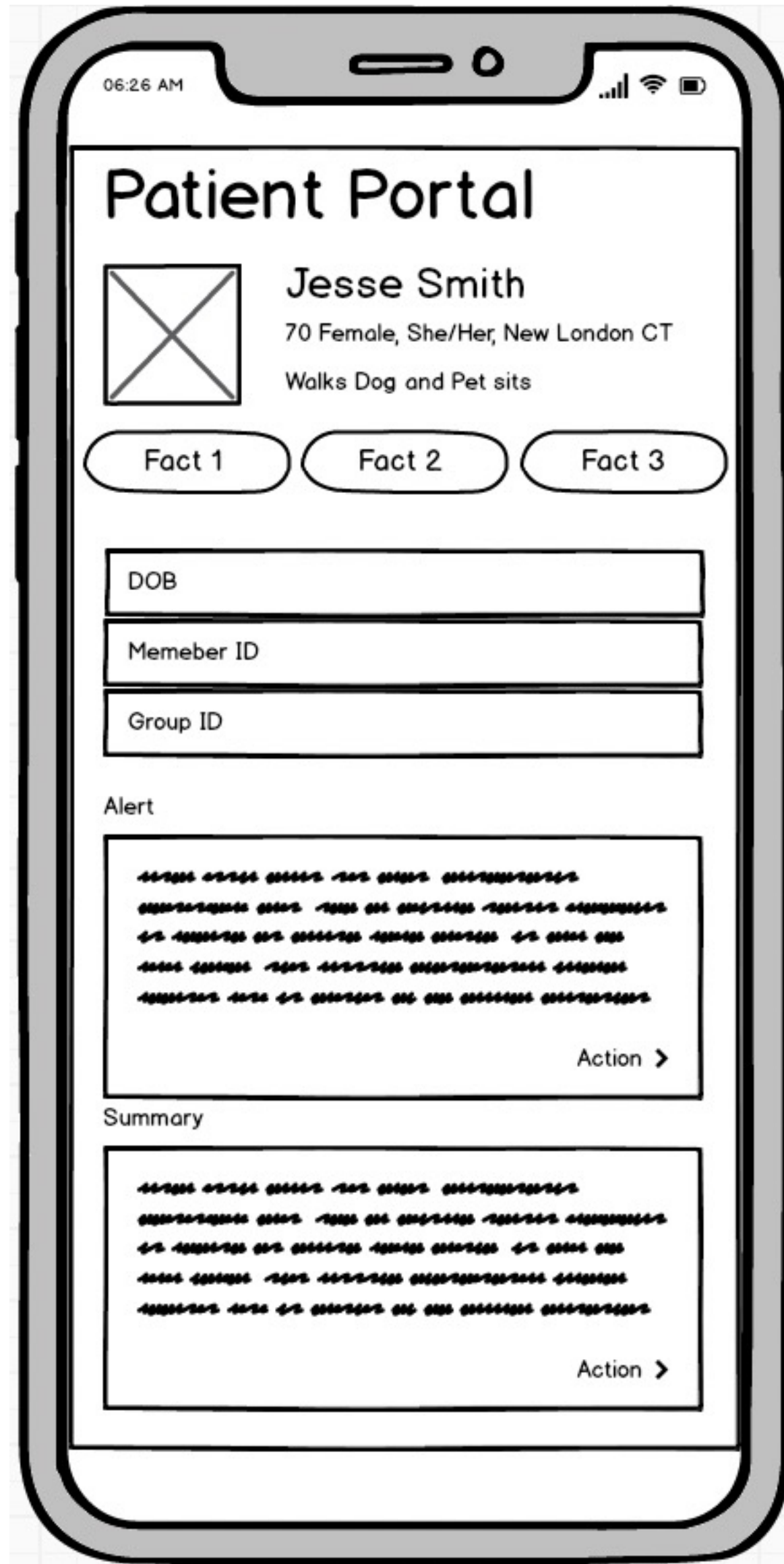
Tool: **Balsamiq**

During the wireframing process the following UX Validation methods were used to inform design decisions:
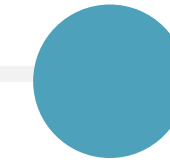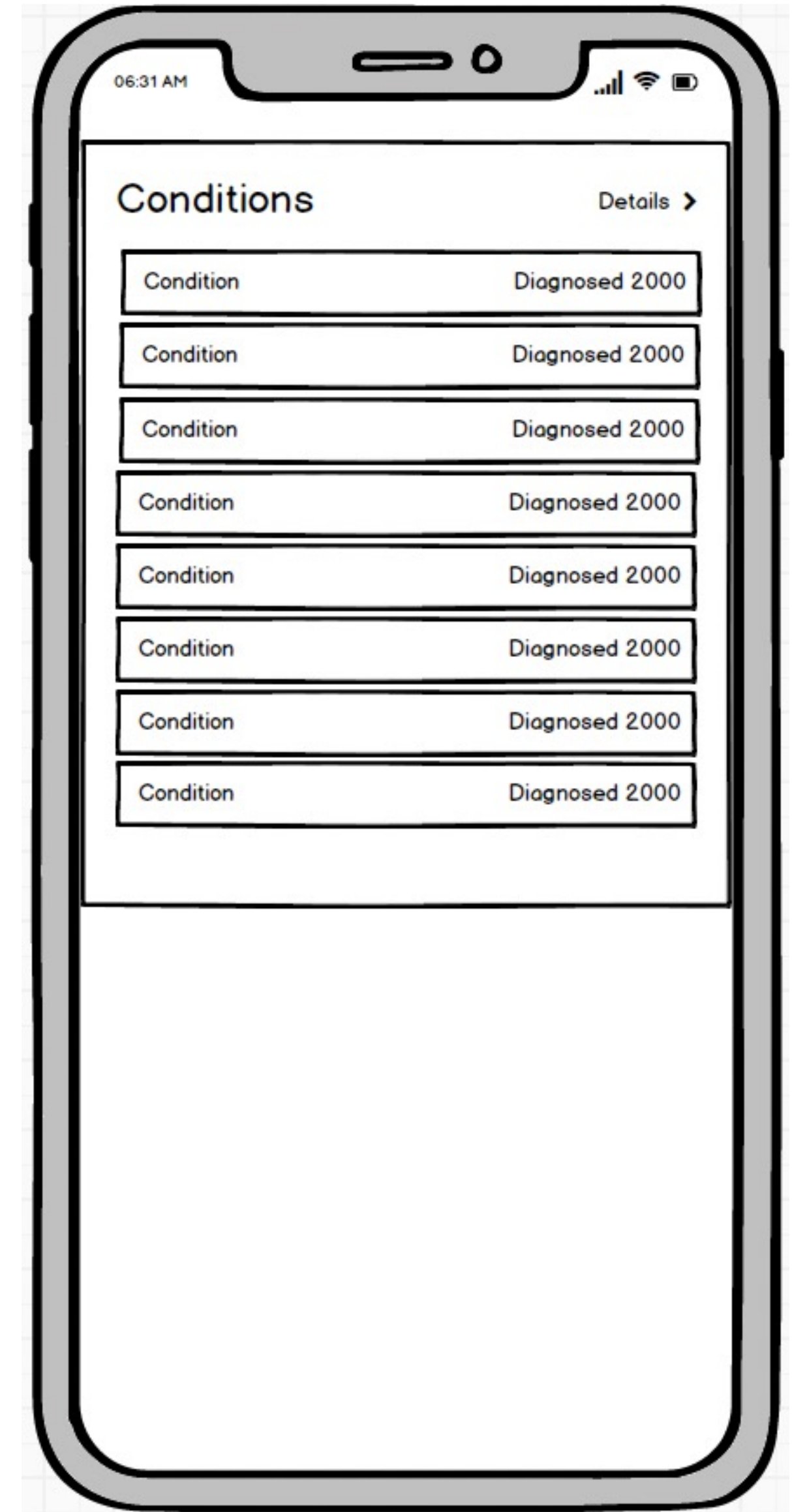
- AB Testing
- Use Case and Workflow Analysis
- Technical Validations
- Efficiency Testing
- Card Sorting
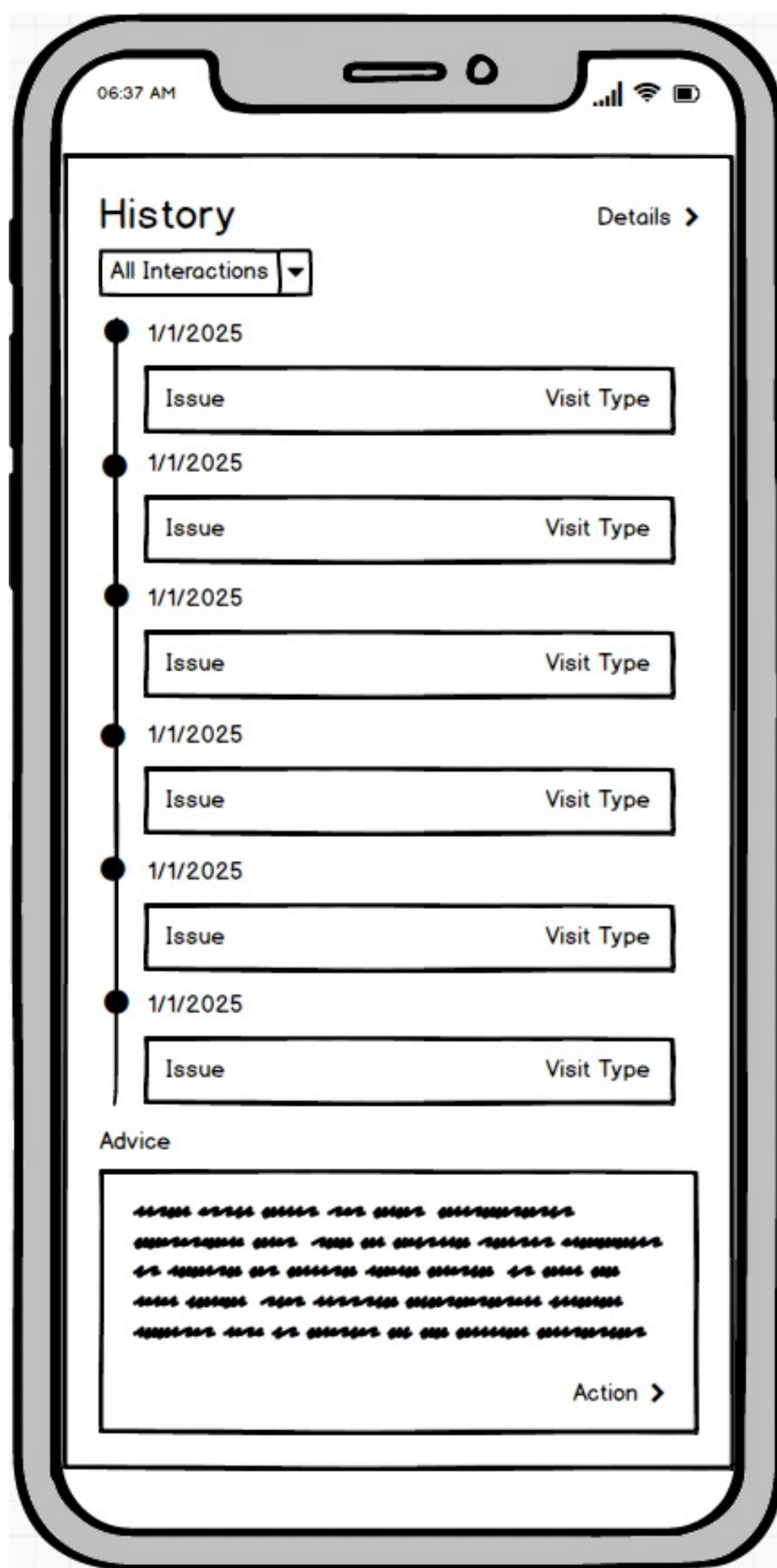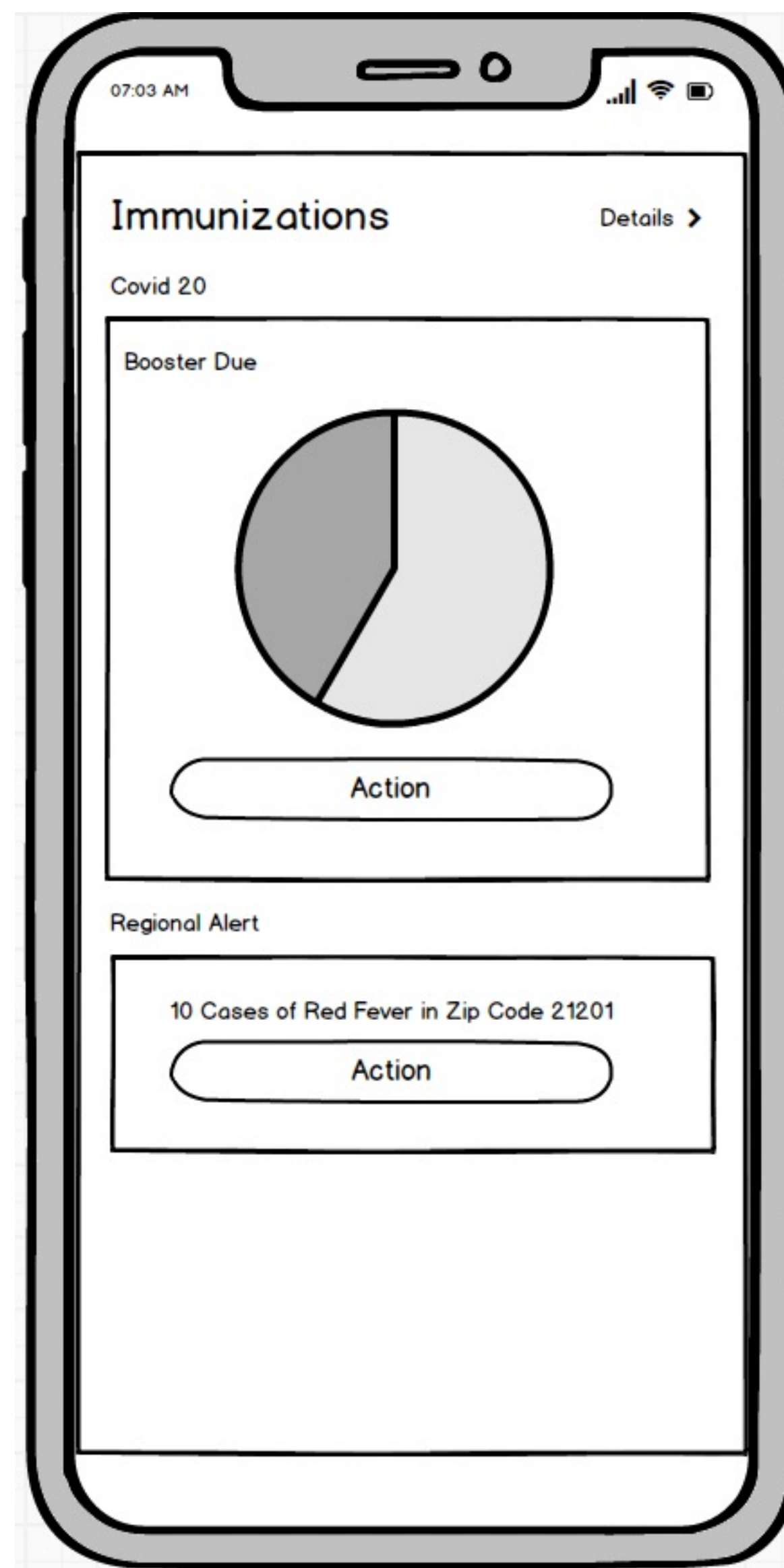
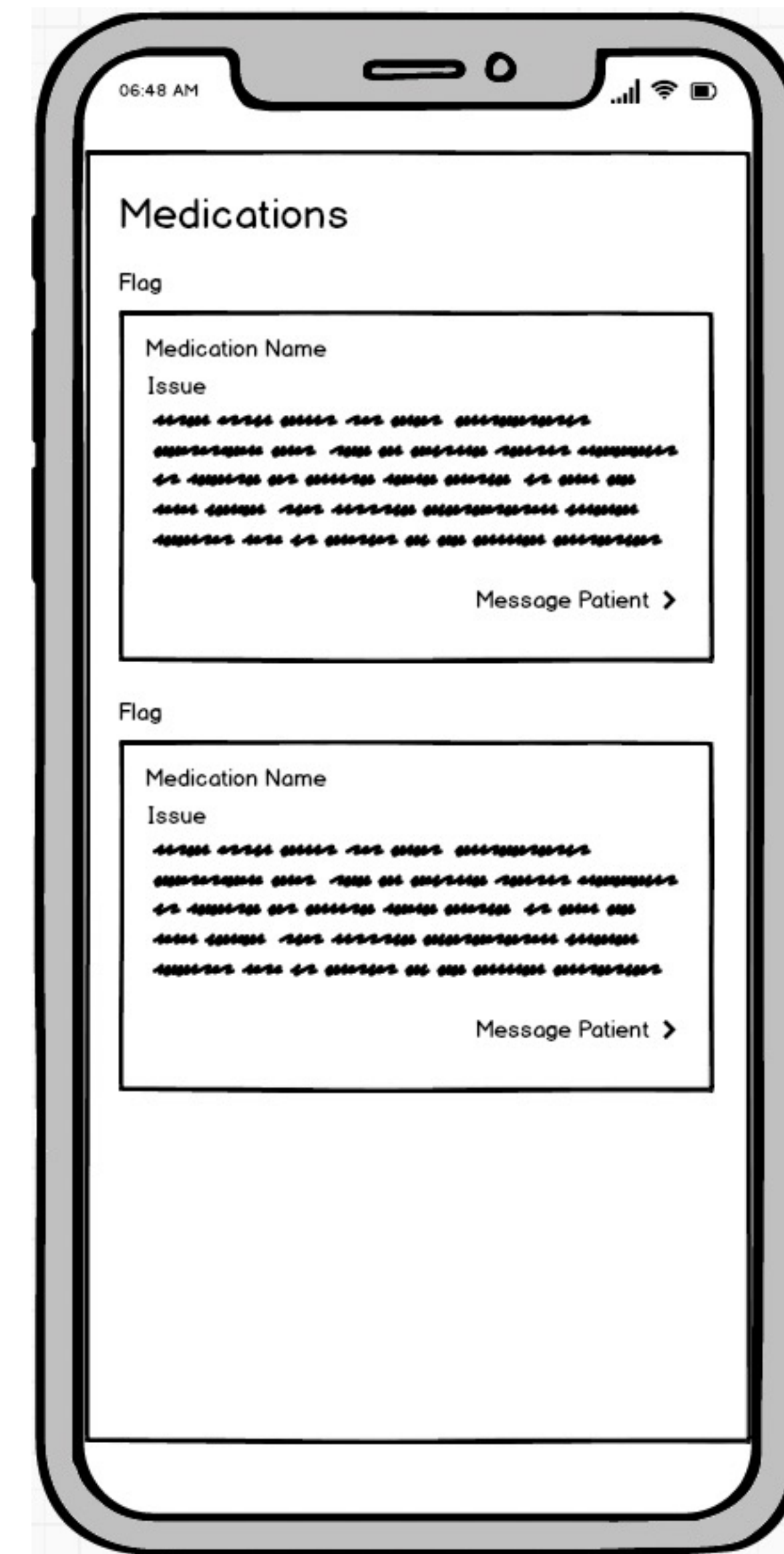Iterative Wireframing
Prototyping

Deliver Results

Patient Portal

Jesse Smith

70 Female, She/Her, New London CT

Walks Dog and Pet sits

Fact 1   Fact 2   Fact 3

DOB

Memeber ID

Group ID

Alert

Summary

Portal Home Page

Conditions   Details >

Condition	Diagnosed 2000
Condition	Diagnosed 2000
Condition	Diagnosed 2000
Condition	Diagnosed 2000
Condition	Diagnosed 2000
Condition	Diagnosed 2000
Condition	Diagnosed 2000
Condition	Diagnosed 2000

Conditions

History

All Interactions ▾

Details ›

● 1/1/2025

| Issue | Visit Type |

● 1/1/2025

| Issue | Visit Type |

● 1/1/2025

| Issue | Visit Type |

● 1/1/2025

| Issue | Visit Type |

● 1/1/2025

| Issue | Visit Type |

● 1/1/2025

| Issue | Visit Type |

Advice

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Action ›

Patient History

Immunizations

Details ›

Covid 20

Booster Due

Action

Regional Alert

10 Cases of Red Fever in Zip Code 21201

Action

Immunization

Medications

Flag

Medication Name
Issue

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Message Patient ›

Flag

Medication Name
Issue

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Message Patient ›

Medications

SDOH   Details >

Covid 20

Patient Need

Action

Patient Need

Action

Live Vitals   3 Devices   Details >

Current   Last 24   Trends

Stat   Stat
Value   Value

Stat   Stat
Value   Value

Stat   Stat
Value   Value

EKG

Predictive Markers

Marker   Details >

Marker   Details >

Labs

Parameter   Details >

Sub Parameter ▾

Happy Zone

Date

Parameter   Details >

Sub Parameter ▾

Danger Zone

Date

SDOH Analysis   **Live Data**   **Lab Results**

04

High Fidelity Prototyping

With initial validation complete, a high-fidelity prototype was created using Figma. Iterative design and Validation continued using the methods outlined previously.

Final Design

Responsive and Modular

Deliver Results | Customer Obsession

The final **High Fidelity Prototype** has 3 main features. They are:

1. Modular
2. Responsive
3. Visualized

Modular

Each content block was designed to be independent. This modularity allows the end user interface to be customized based on need.

Responsive

Responsive design allows one interface to be deployed on multiple devices ranging from cell phones, tablets, desktop computers to large format displays

Visualized

The right visualizations were selected for for each content block. Section 508 compliance, Rendering times etc. were evaluated prior to deployment.

Deployment and Beyond

Modular Design

Administrator Dashboard

Key Features

• Modern Design

• Light / Dark Switcher

• Real Time Monitoring of Chat KPI's

• Visualization of KPI with Color Coded Indicators

• "Real Time" Customer vs Technician Tracker

• Report Generator

Iterative Wireframing
Prototyping
Deliver Results

Patient 360

Sienna Martins
78, Female, She/Her, from NYC.
Loves reading with her grandson.

`Frequent Flyer` `Missed Visits`
`Medication Nonadherence`

Date of Birth	1/10/1944
Member ID	097509720
Group ID	98299

Consents & Authorizations ›

⚠️ **HIPAA Overdue**

SEND HIPAA Authorization Chatbot

Clinical Summary

PMH of **RHF** (EF 40%), **COPD**, **DM II**, **Hypertension** and **Hyperlipidemia**. **ED Visit** x 1 day ago for COPD Exacerbation. ▶

Conditions ›

🔴 Hypertension	Diagnosed 2005
🟡 RHF (EF 40%)	Diagnosed 2021
🟡 COPD	Diagnosed 2010
🟡 Hyperlipidemia	Diagnosed 2007
🟢 MDD	Diagnosed 2007
🟢 DM II	Diagnosed 1997

Portal Home Page

Conditions

History

All Interactions ⌄

2022 Aug [Upcoming Visit]

● COPD Exacerbation
Mount Sinai Hospital, NY — ED Visit

2022 Jul

RHF (EF 40%) — Diagnosis

2022 Jun

Missed Refill: Atorvastatin — Meds

2021 May

High RR and Low SpO2 — Vital Alert

Encounter Frequency

Switching to monthly encounters may help Sienna stay on track with her treatment plan.

Schedule Recurring Encounters

Immunizations

COVID-19
Booster Due

75%
Complete

Send Video and Free Local APTS

3 cases of Polio in Local Area

Check Polio Titers

Medications

Flags

Atorvastatin 10mg
[Nonadherance]

Sienna did not refill her Atorvastain (5 days overdue)

Message Sienna

St. John's Wort (Herb)
[Interaction Flag]

Study Shows this may interact with Sienna's SSRI

Message Sienna

New

Fluoxetine 20mg
Orally, Daily

Patient History

Immunization

Medications

SDOH

EDUCATION ACCESS AND QUALITY — 3
HEALTHCARE ACCESS & QUALITY — 2
NEIGHBOURHOOD & BUILT ENVIRONMENT — 2
SOCIAL & COMMUNITY CONTEXT — 3
ECONOMIC STABILITY — 0

Needs PCP

Set-up PCP

Lives in Food Desert

Check Available Local Resources

Limited Transporation Access

Schedule Recurring UBER

Live Vitals   ● 2 Live Devices

| Current | Last 24Hrs | Trends |

HR	BP
83 ▲	148/80 ▼

RR	Sp02
18 ▼	86% Low on RA ▼

Temp °F	Clucose
98.0	88 ▼

EKG
Normal Sinus

Predictive Biomarkers

RHF	›
COPD	›
HYPERTENSION	›

BP ADherence

BP nonadherent with latest guidelines.

Setup new Patient Goal

Labs

Abnormal

[BNP] [ABG]

650
630
610
600
500
450
400
Normal <100

2016   2018   2021   2022

Newly Resulted

[HbA1c] [CBC] [CMP]

9.5%
9%
8.5%
8%
7.5%
7%

Patient Goal: <7.5%   Achieved

2021   2022

HbA1C

Based upon Sienna's latest HbA1c and recent Testing Frequency studies, checking HbA1c twice yearly is recommended, with the next check in Feb 2023 (6 months).

Order HbA1C and Schedule Reminder

SDOH Analysis   **Live Data**   **Lab Results**

Outcome

Successfully Provided the UX Artifacts and Guidance to inform the implementation of the Clinician's Patient Portal that was deployable across multiple devices and utilized the best of data visualization's principles to communicate important medical information.