

The logo for Catalia Health features the word "Catalia" in orange and "Health" in blue. A blue starburst icon is positioned above the letter 'i' in "Catalia".

Catalia Health

UCI MHCID CAPSTONE 2018



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INTRODUCTION

THE TEAMS

Catalia Health



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ABOUT CATALIA HEALTH

Catalia Health is on a mission to address both sides of the healthcare equation: improving patients' health and extending the capabilities and efficiency of healthcare companies.

They aim to catalyze lasting behavior change for patients, wherever they are, to provide them with encouragement and motivation to achieve the best possible medical outcomes. At the same time, they provide deep insights to healthcare companies to optimize the efficacy of their services.

They believe that to improve behavior you have to measure it—and keep measuring it over the long term. That's why they made Mabu—because a platform should be easy to use, engaging, and tailored to each patient.





ABOUT MABU

I'm a Mabu personal healthcare companion. I keep people engaged with their own treatment.

In fact, in a randomized, controlled clinical trial, patients using my platform were engaged for 40% longer than patients using a computer.

Years of psychological studies have confirmed that people are more likely to trust, remember, and form bonds with people when they're interacting in person than over a mediated interface.

The same holds true for technology. And we've built our technology to increase this effect.

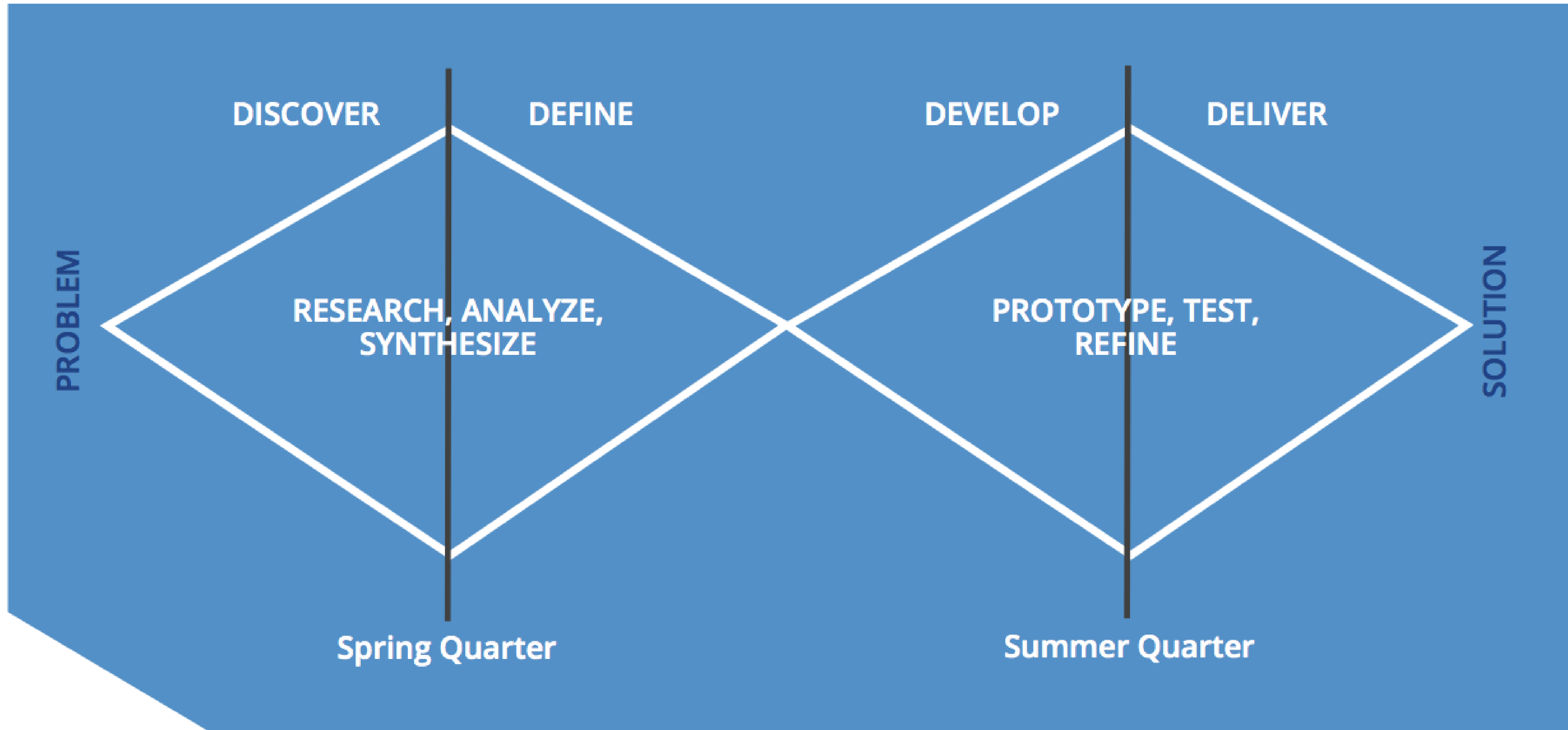
I'm an effective, scalable technology platform and my AI-driven conversations are tailored to each patient.

THE ASSIGNMENT

To extend Manu's capabilities for data input and to deliver increased interactivity to the patients, we were asked to create a health portal. This would allow patients to not only input their medications and health data points, but also track their progress over time.



OUR APPROACH



PHASE ONE: DISCOVERY

Research + Recommendation

FOUNDATIONAL RESEARCH INPUTS

In user-centered design, we “test early and often” to develop the most highly usable site(s). Our foundational user research for this engagement include both quantitative and qualitative methods:



SURVEY RESPONSES

- 77 respondents
- All suffer from chronic disease

89%

Take multiple
medications per day

31%

Forget to take their
medication as directed

45%

Already communicate
with their care team
via email or a
healthcare portal

4.6 min

Average time spent
on the survey

QUOTES FROM 1:1 INTERVIEWS

The ease in communication was cited as a benefit to a portal, but they caution that it must be timely and relevant.

“ *...I have a lot of stress and remembering my pills adds to that stress, and being stressed makes my...condition worse*

“ *...I don't believe I've ever received a call from my pain management doctor, unless you count the robo call to remind me of an appointment*

“ *...usually once a week or so I will forget my second dose of medication.*

“ *...best case scenario is that my doctors share my records from office to office, but that doesn't always happen*

“ *...occasionally I've written notes about pain I was experiencing. I tried to describe the pain at those times because it can be very hard to describe certain type of pain...*

PERSONAS



THE INDEPENDENT SKEPTIC*

Accessibility and ease of use are both key for this patient type. They are not looking for emotional support, but they do want all their healthcare information easily accessible and at their fingertips, but are unlikely to use a new type of device to do so.



THE OPEN-MINDED EXPLORER*

Forming a personal bond with their healthcare providers and being able to easily track their progress is important to this type of patient. They are open to new types of interaction, as long as it is easy to use and requires minimal effort.



THE INDEPENDENT SKEPTIC

FAMILIARIZE

Provide easy access to foundational healthcare information and personal records.

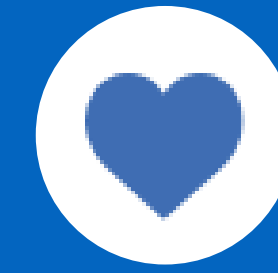
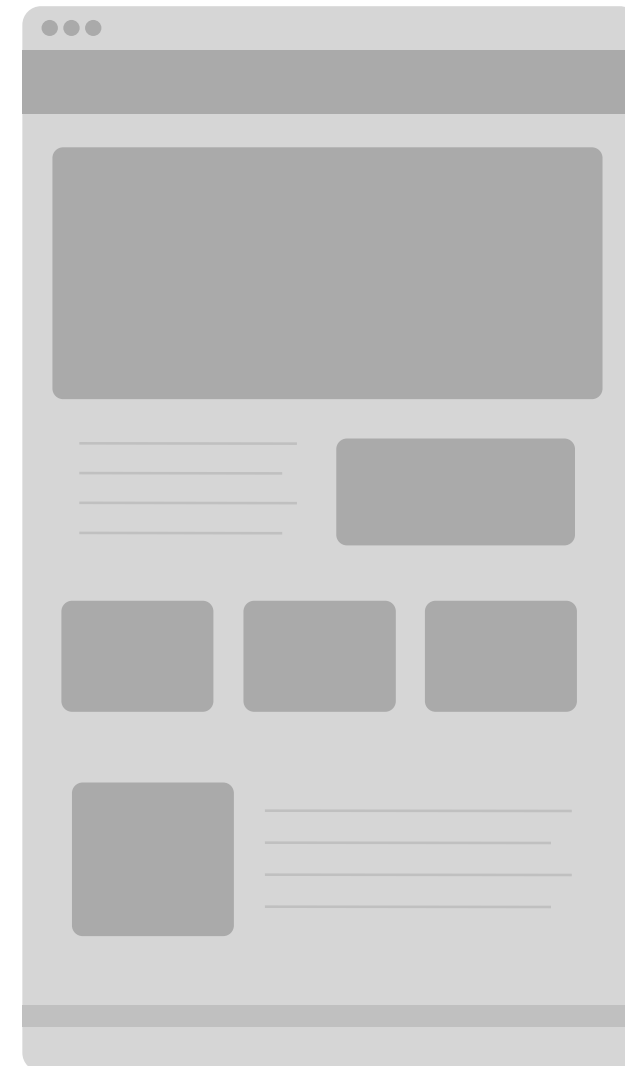
DIFFERENTIATE

Highlight unique product attributes / offerings that are meaningful to this user.

COMMUNICATE

Give them what they need with the least amount of friction.

Catalia Health



THE OPEN-MINDED EXPLORER

PROMOTE / EDUCATE

Onboard and introduce users to resources and healthcare information.

INSPIRE

Provide relevant content, tools, and information to help them on their healthcare journey.

EXCITE

Exceed expectations and create a delightful experience that will keep them engaged.

THE RECOMMENDATION

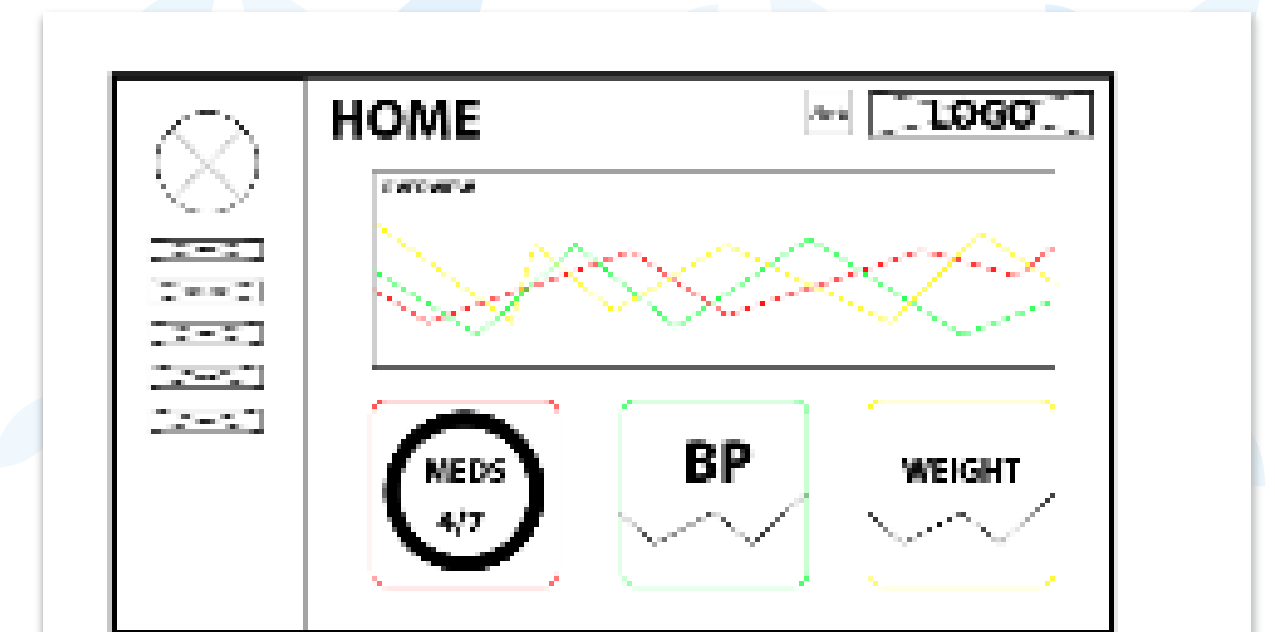
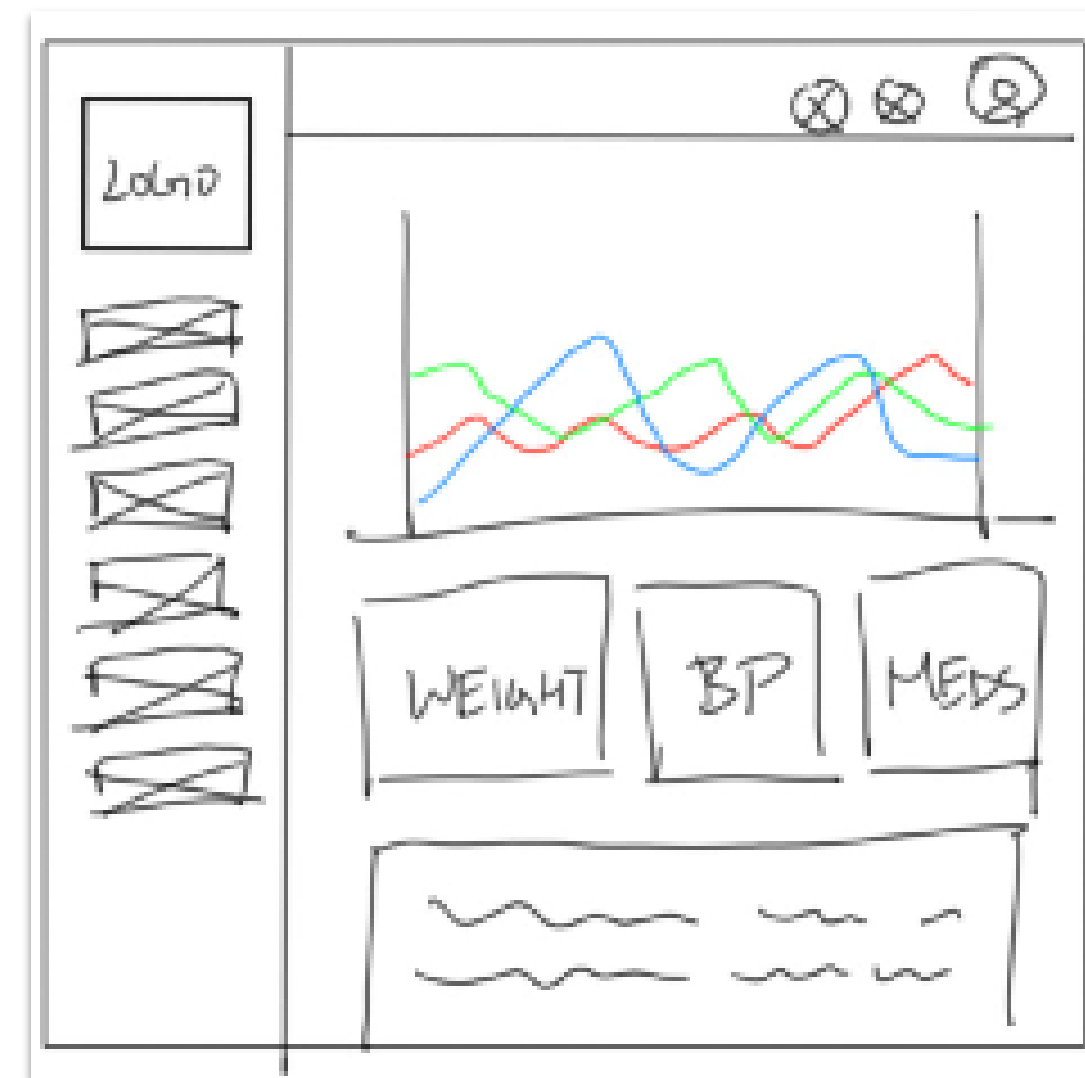
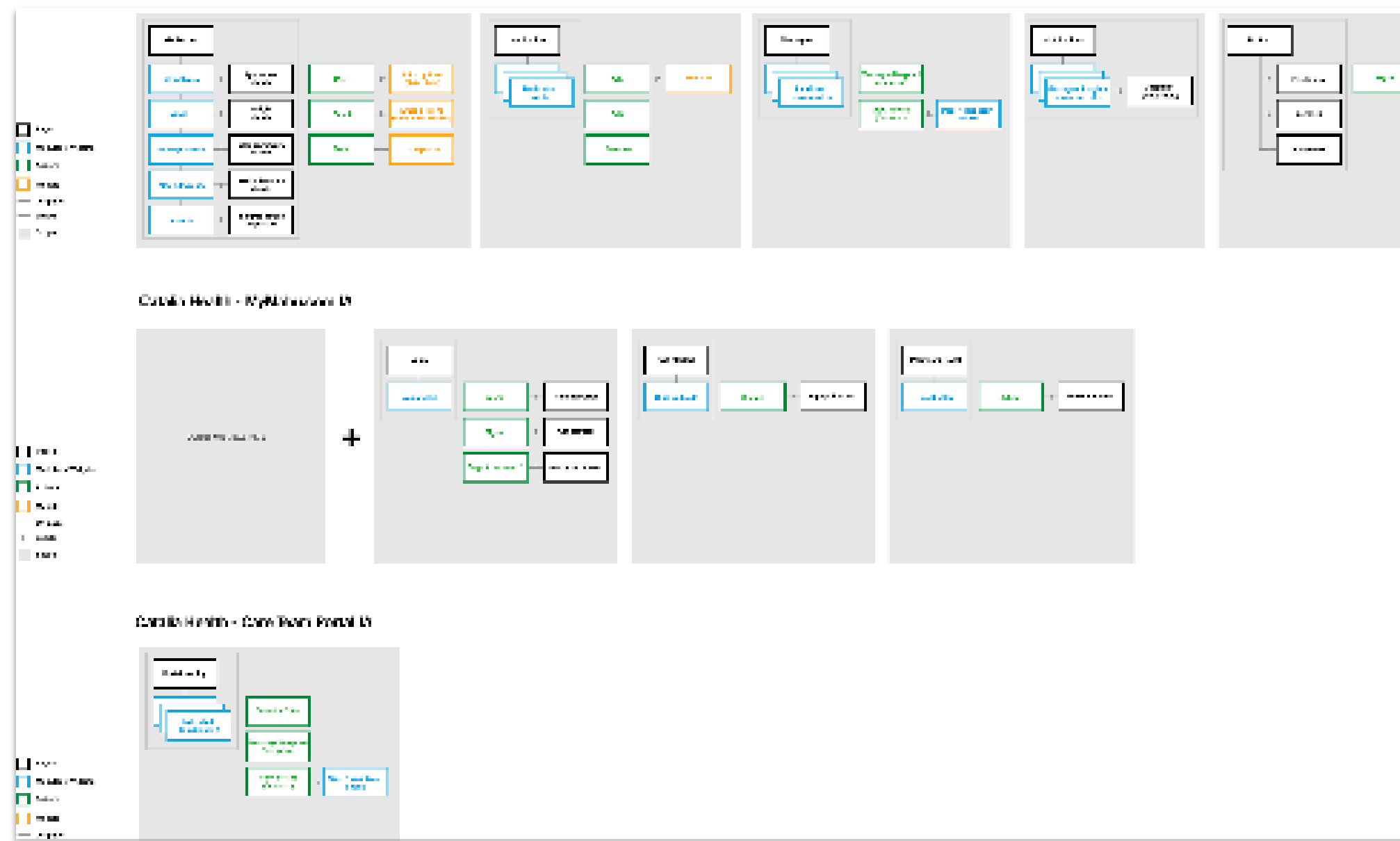
The desire to be inclusive to both patient groups, we recommended a responsive web approach over creating an app-based experience. This would reach the largest number of users while being device and platform agnostic. From a content standpoint, it also serves from a single codebase, which creates content parity across all breakpoints.



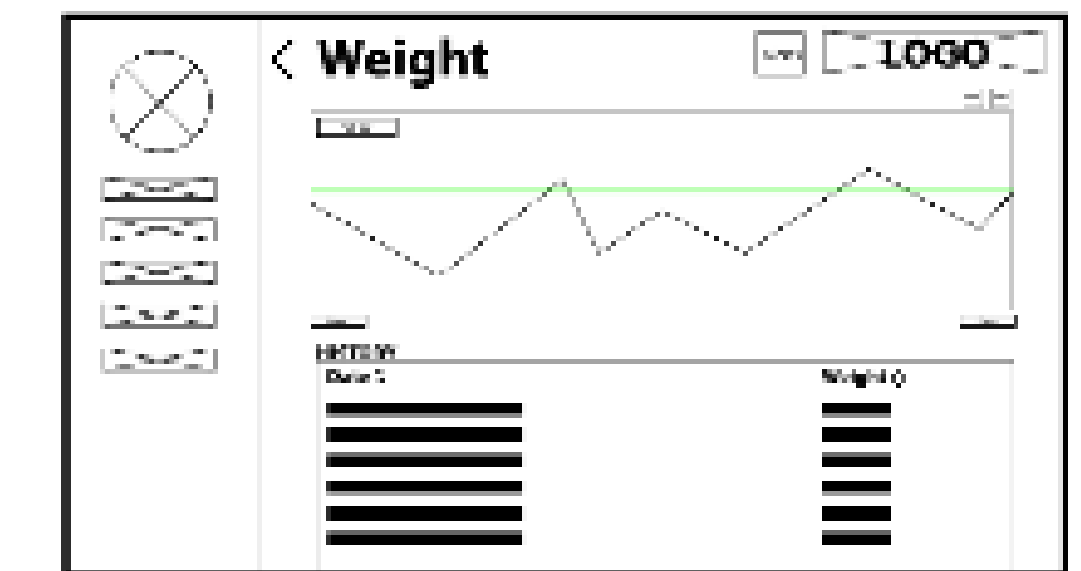
PHASE TWO: DESIGNS

Ideation + Validation

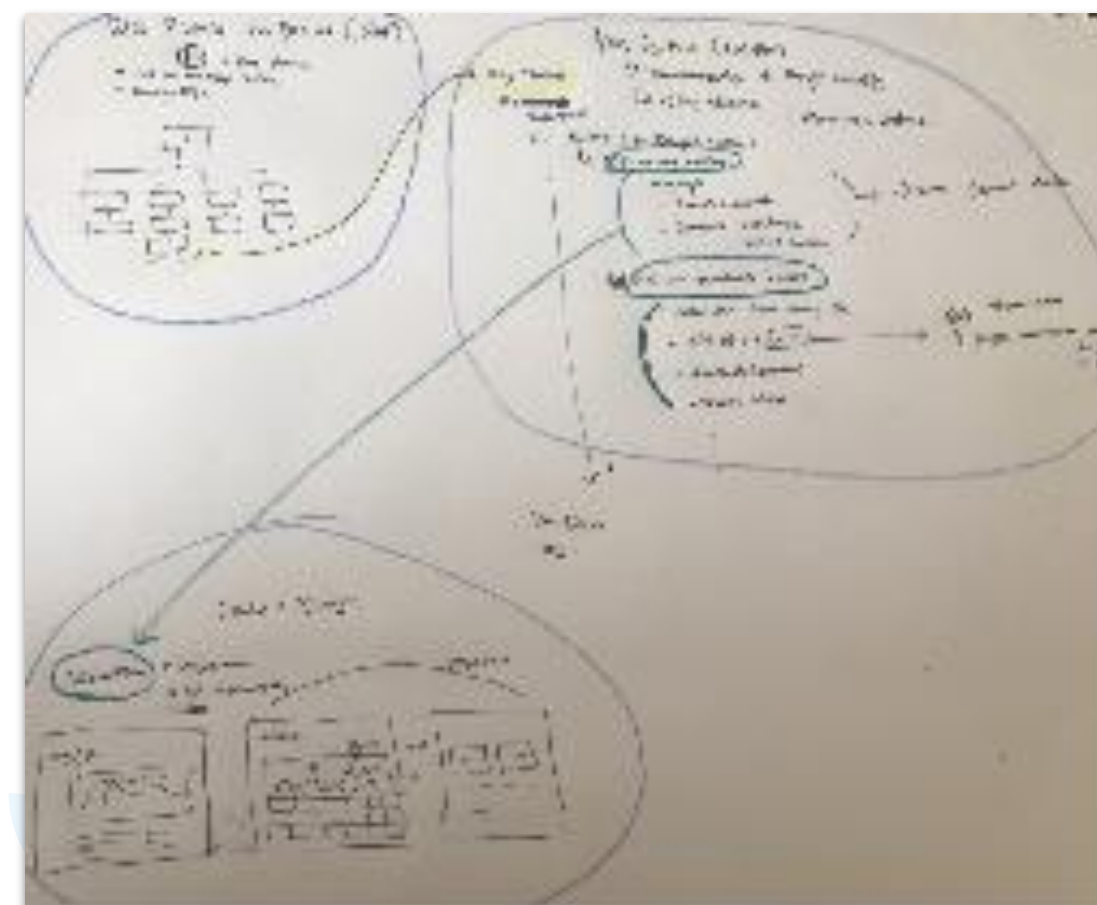
DESIGN IDEATION



Top 3 modules will be color-coded to indicate progress or alert patients of needs

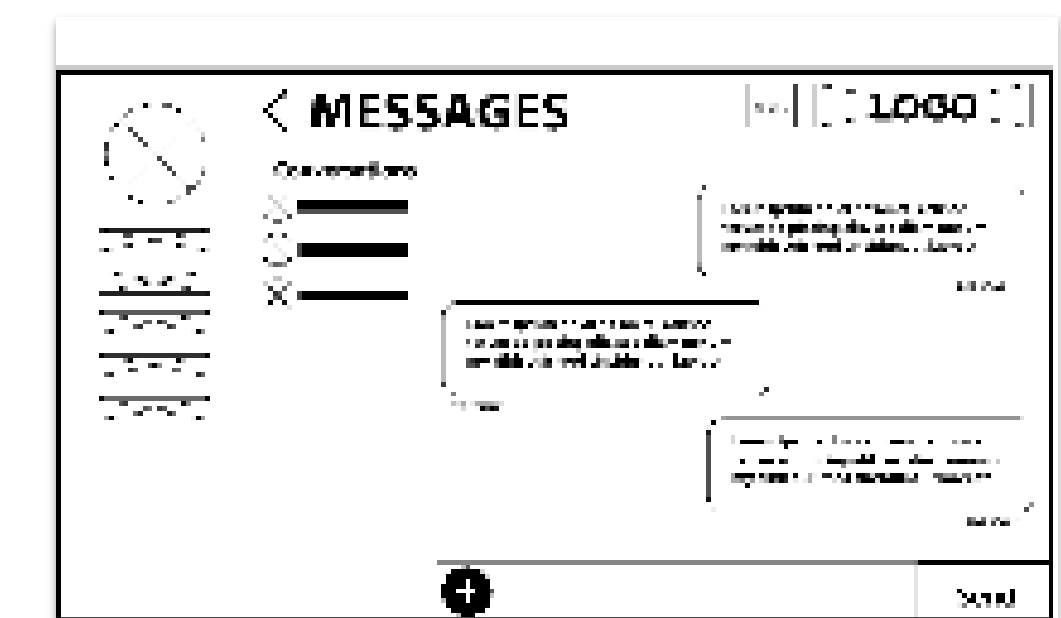
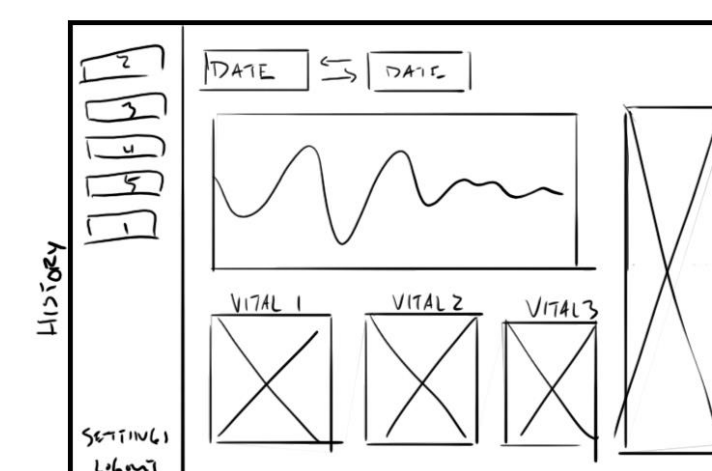
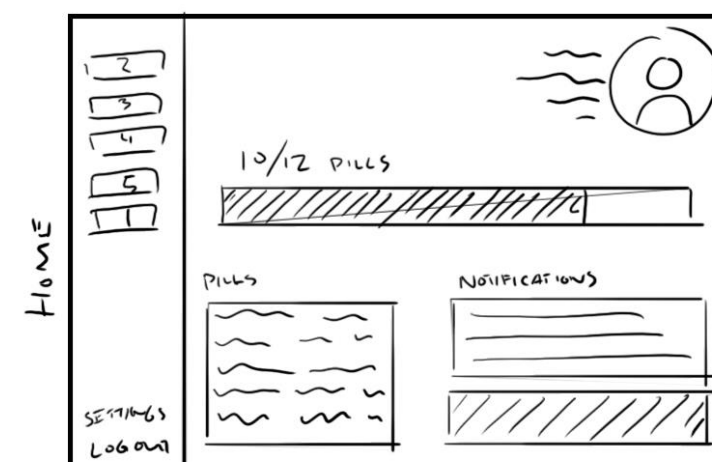
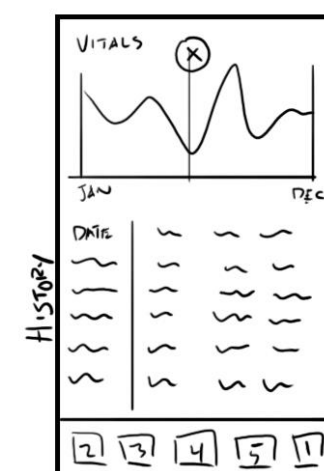
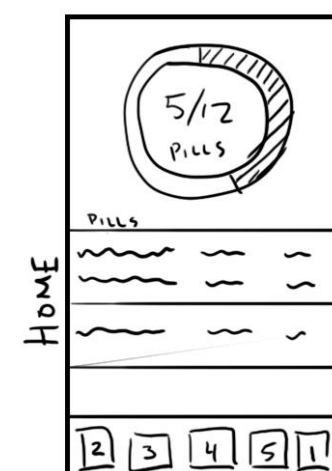


Mouse hover over the graph will reveal details

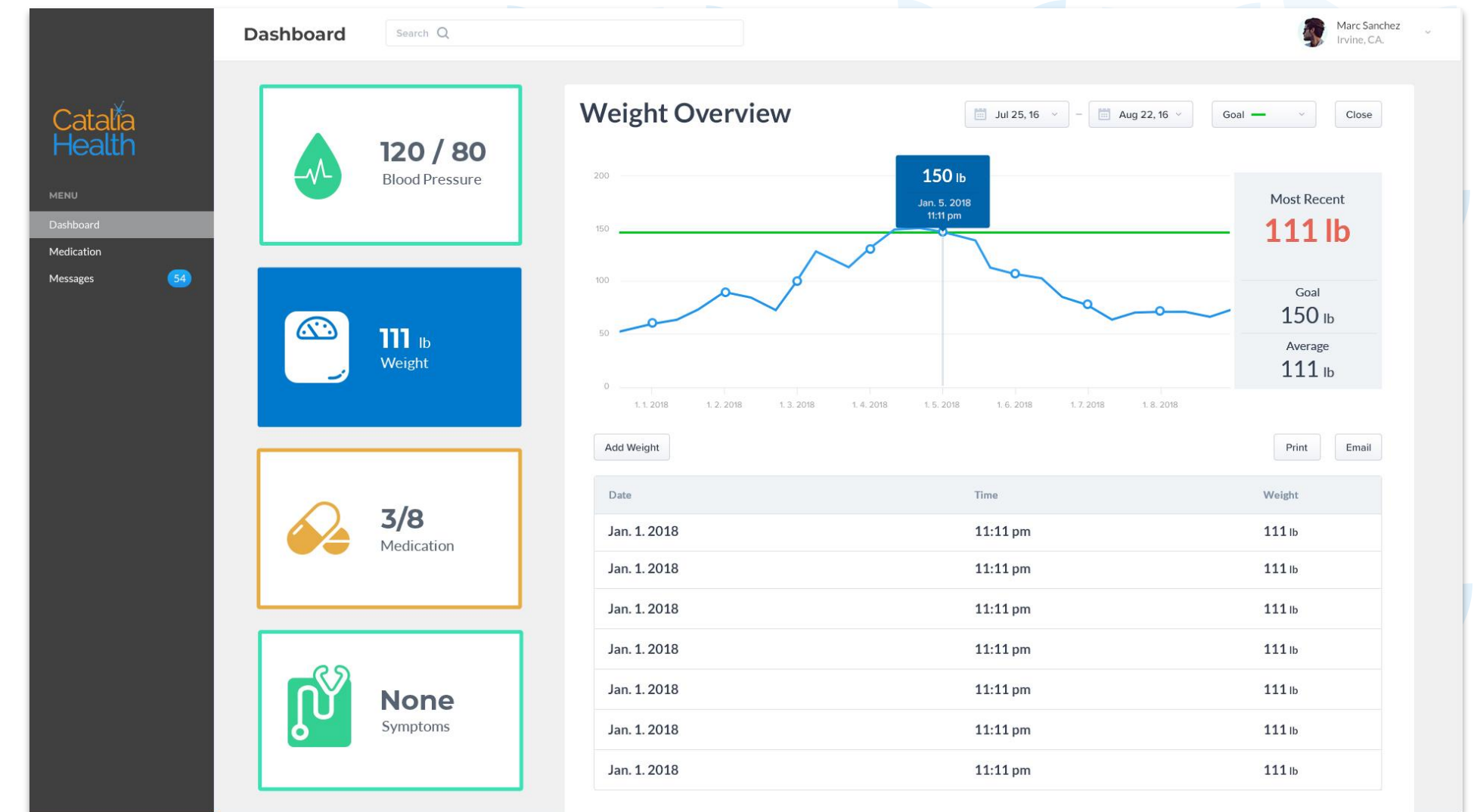
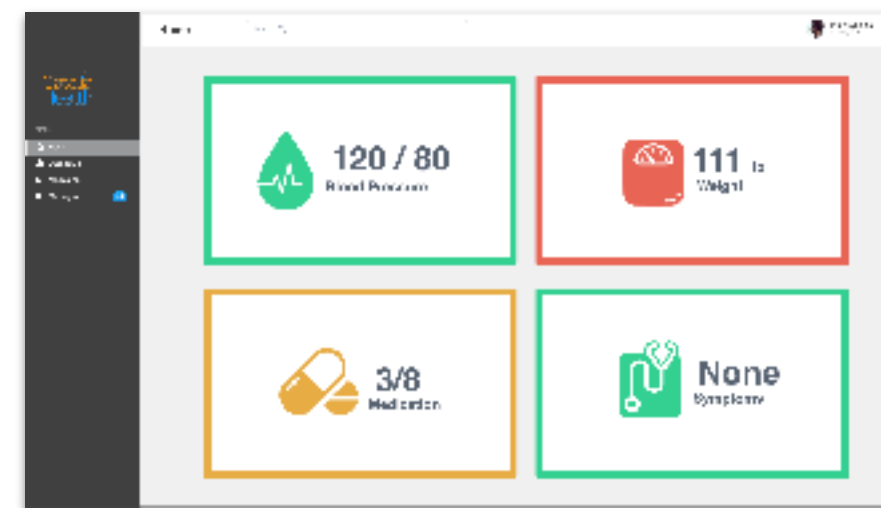
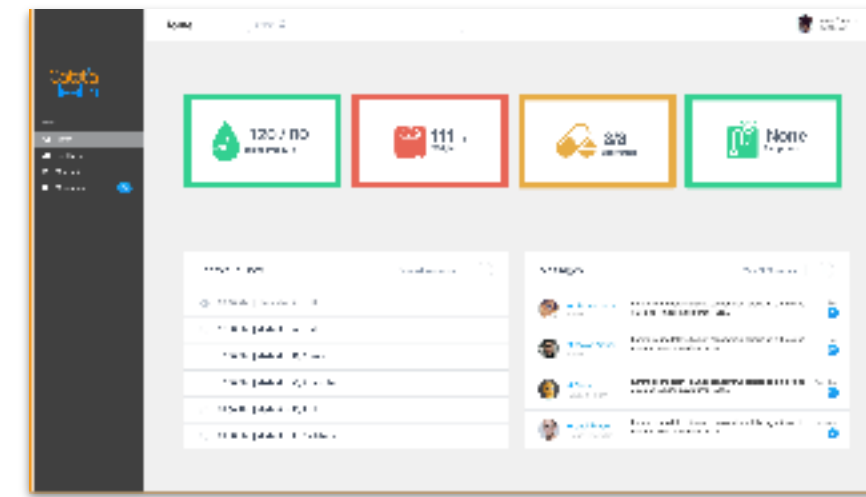


FUNCTIONS/MODULES:

- PROFILE ①
- HOME/DAILY PROGRESS ②
- APPOINTMENTS ③
- MESSAGES ④
- HISTORY ⑤



DESIGN IDEATION



QUOTES FROM USER TESTING

Overall, the feedback was very positive. All the participants described the experience as 'simple, clean and easy to use.' The constructive feedback centered around nomenclature and suggesting the addition of a dedicated "test results" section.

One pain point across all six users was the inability to create a "new" message on the "connections" page.

" I found it fairly intuitive: dashboard was fairly clear. It was apparent how the rest of the dashboard would work based on the first page..

...connections" isn't the most common word for this.
" 'Messages, email, chat box, etc would be more common...

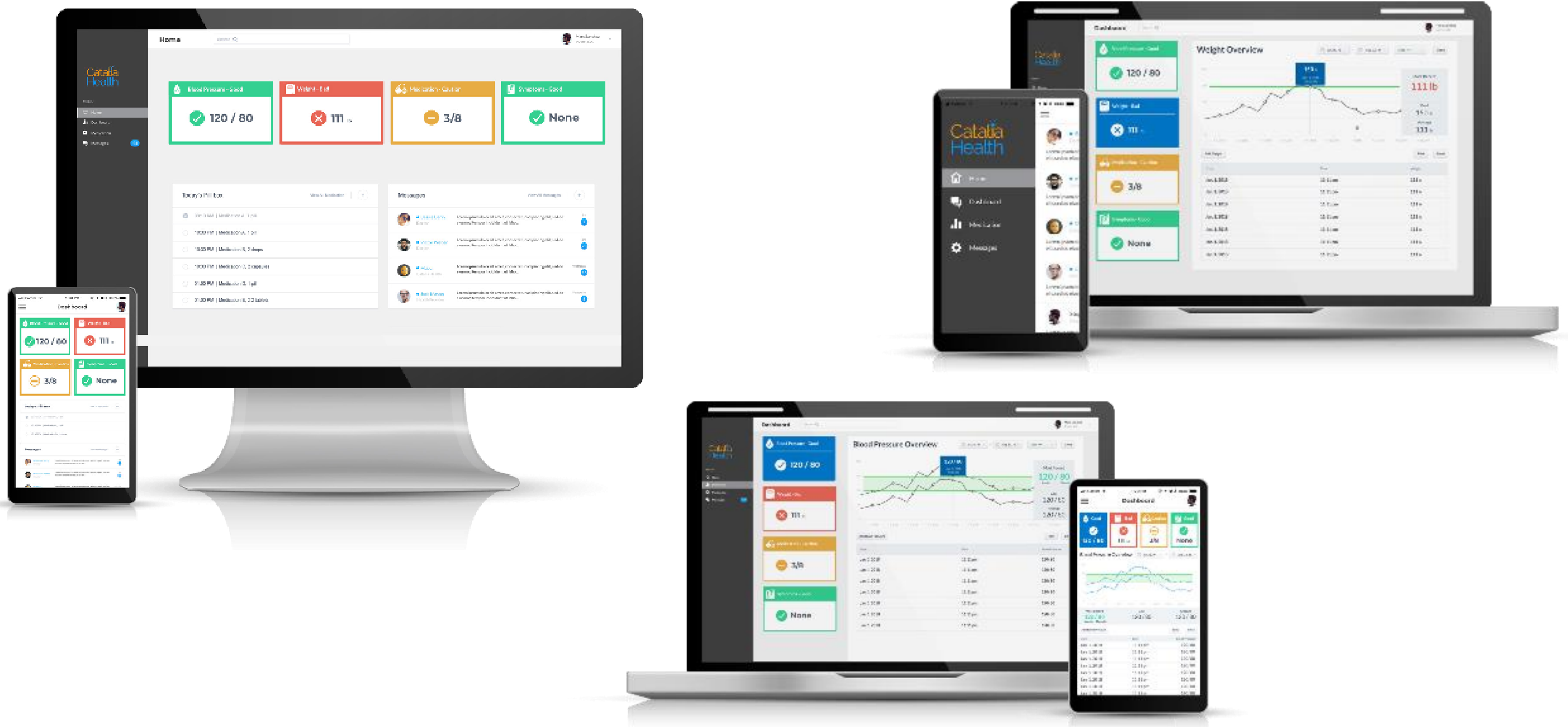
" I have no idea what adherence means

" When looking at the bloodpressure data, 'it's like the spreadsheet I made, but this is so much easier'

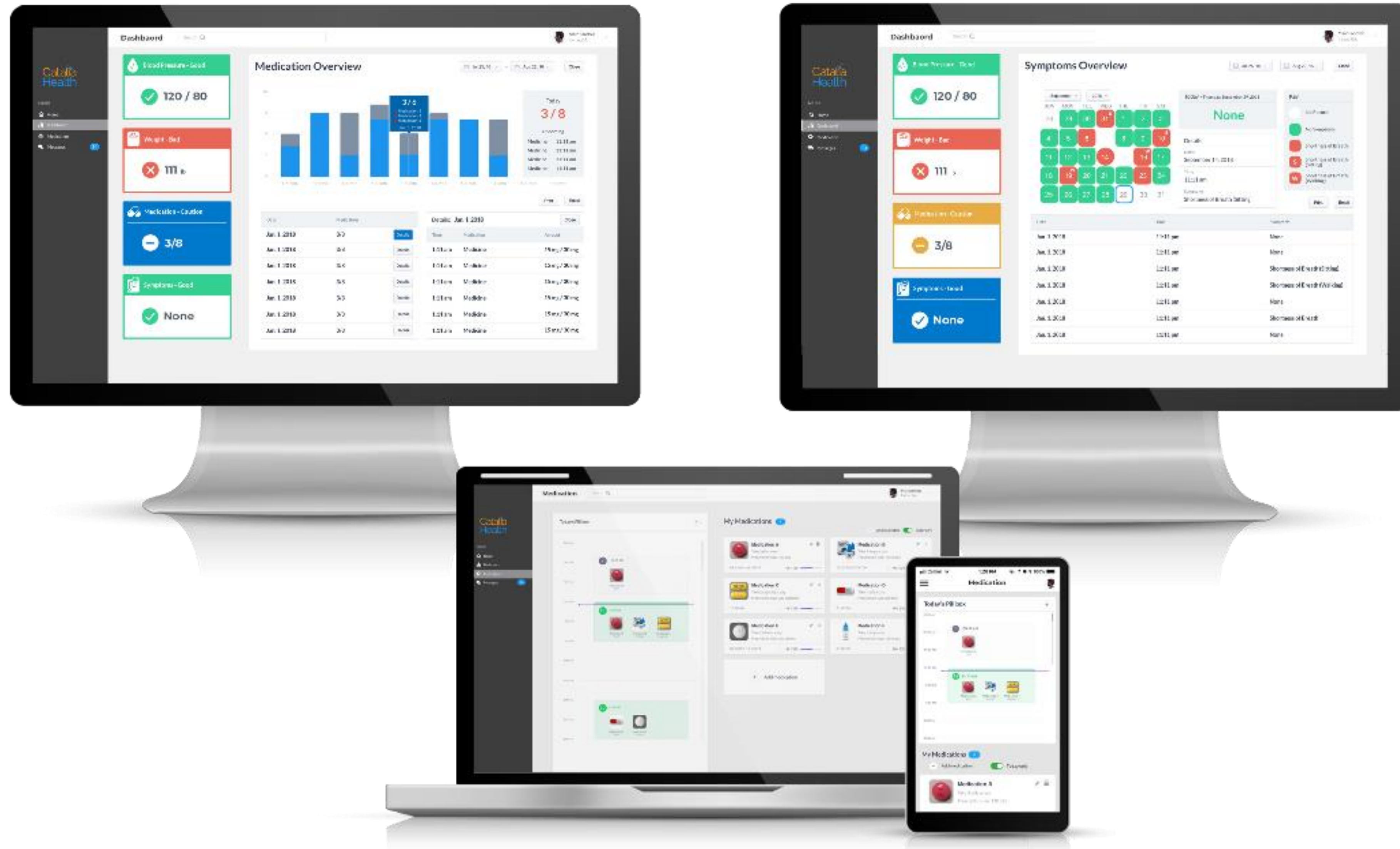
" Can you order new medications through here? I could see that happening.

" I'd expect when you update your existing medication, you'd see a message that 'this will be reviewed by your doctor or care team'

FINAL DESIGNS



FINAL DESIGNS



FINAL DESIGNS



THE RESULTS



WHAT ARE THE RESULTS?

In its current state, what we've designed has been well-received by users as 'easy to use' and refreshingly 'clean and simple.' It's a welcome departure from the cacophony that's encountered with other portal-type experiences.



WHAT ARE THE NEXT STEPS?

Further build-out what we've provided as a functional prototype, test with actual Catalia Health patients and use those insights to further refine the tool for their needs.



TOWARD THE FUTURE

Either in parallel or separately, depending on resources, the provider side of the experience will need to be crafted and the process we embarked on six months ago will repeat.



THANK YOU

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Health

- Team Tomo | 2018 MHCID Capstone Project
- UCI Department of Informatics
- Catalia Health