

Kaiser Permanente

Design Sprint

Product Manager: DIANA CHEPKIRUI



Set the stage

Set the stage for the Design Sprint by framing the problem

Initial PRD

Background

Currently, It is estimated that we spend US \$730.4 billion on preventable diseases like type 2 diabetes that could be saved. [According to American Journal of Lifestyle Medicine](#), Diabetes affects 28 million individuals and prediabetes 86 million in the United States. Type 2 diabetes makes up 95% of all diabetes cases. Kaiser Permanente is looking to enter into the preventative care space to help their patient base increase physical activity and improve on healthy habits.

Problem

According to American Journal of Lifestyle Medicine, Diabetes affects 28 million individuals and prediabetes 86 million in the United States. Type 2 diabetes makes up 95% of all diabetes cases.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6125024>

According to WHO(World Health Organization), in 2019, diabetes was the direct cause of 1.5 million deaths and 48% of all deaths due to diabetes occurred before the age of 70 years.

<https://www.who.int/news-room/fact-sheets/detail/diabetes>

Initial PRD

Problem cont'd

The user is able to track their lifestyles in relation to unhealthy lifestyle diseases like type 2 diabetes.

The competitors have: enhanced omnichannel experiences (in-home, in-store and virtual care), drive a digital-first approach incorporating Artificial Intelligence, diversified growth by embracing digital age and wider geographical reach.

Some diseases are affordable prevented rather than treated, an example, type 2 diabetes. Our solution is better because we are aiming to partner for wider geographical reach, partner with wearable device manufacturers, provide users with tailored data and analytics among others.

Goals

- 5.1M+ daily active users.
- 10M+ subscribed adults.
- >3.7 rating in App store/ Play store.
- 4.5M+ downloads from both App store and Play store.
- <10% app downtimes for active users.

Understand

Create a shared understanding of the space, problem, and goals

How Might We

How might we encourage a full recommended physical exercise?

How might we encourage eating healthy?

How might we encourage regular exercising?

How might we personalize health plans?

How might we offer health education?

How might we encourage social engagement?

How might we Connect people with gyms?

How might we gamify healthy habits?

How might we reward milestones attained?

How might we track user physical activity?

How might we provide nutritional guidance?

How might we educate young children?

How might we Connect people with fitness instructors?

How might we Encourage people to keep track their milestones?

How might we build good habits from a young age?

How might we encourage pre-diabetic people to exercise and eat healthy?

How might we incorporate easy tracking?

Encourage good habits

How might we gamify healthy habits?

How might we create a rewards system?

How might we reward people for good behaviors?

How might we reduce healthcare costs for healthy patients?

How might we Encourage people to keep track their milestones?

Incentives

How might we encourage social engagement?

How might we make patients feel accountable?

How might we build a social support system?

Accountability

How might we provide nutritional guidance?

How might we offer health education?

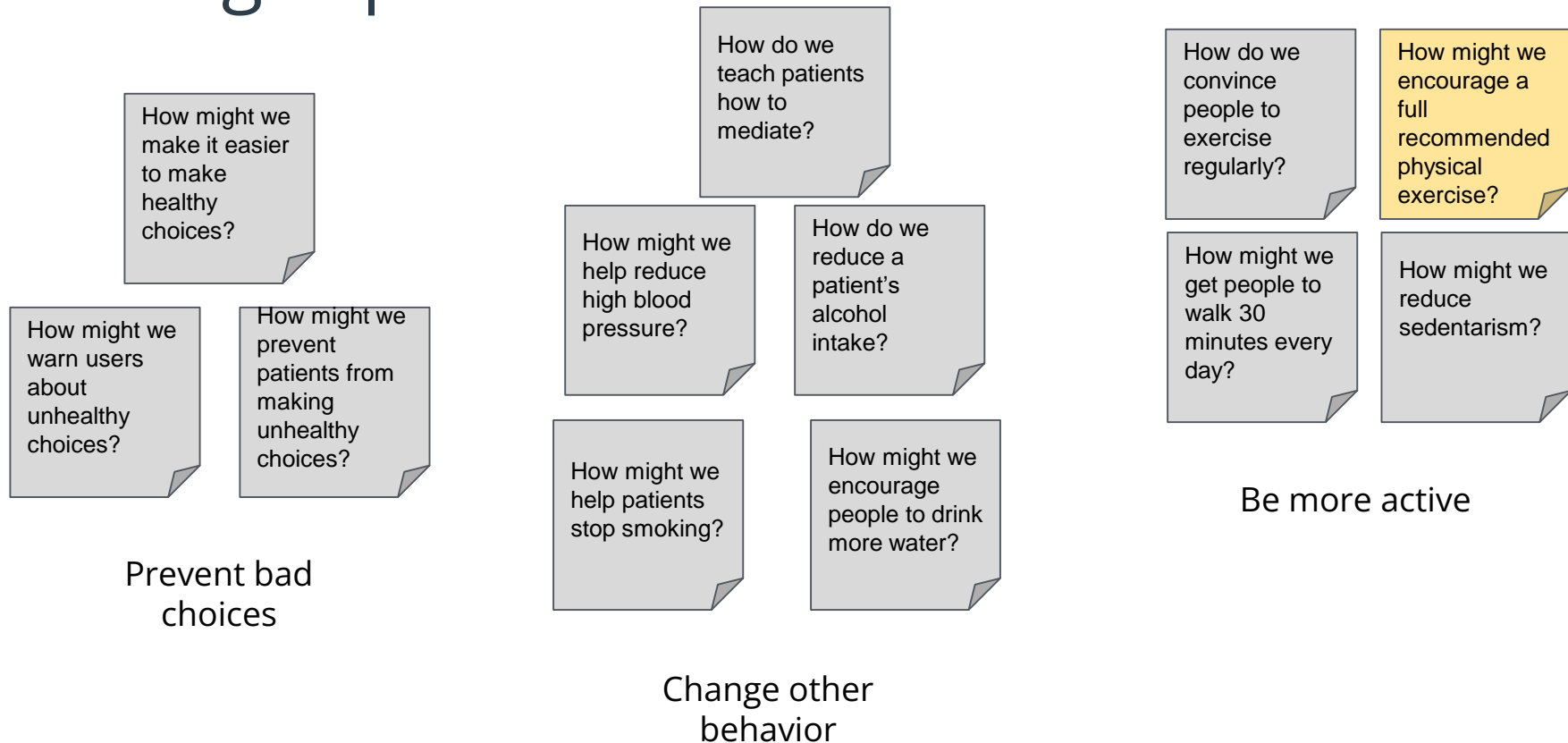
How might we build good habits from a young age?

How might we get people to build healthier habits?

How might we promote healthy habits?

Routines

Change specific behaviors



Planning & Tracking

How might we
create a
personalized
plan?

How might we
help patients
set health
goals?

Personalized
planning

How might we
incorporate
easy tracking?

How might we
provide
activity
tracking?

How might we
provide diet
tracking?

How might we
help patients
monitor their
goals?

How might we
help people
manage their
weight?

Personal tracking
towards plan

Education

How might we help people better understand diabetes?

How might we offer health education?

How might we encourage pre-diabetic people to exercise and eat healthy?

How might we make people aware of risk factors?

How might we raise awareness across society?

How might we identify and warn pre-diabetic patients

How might we make people aware of their current state of health?

How might we build good habits at a young age?

How might we educate young children?

Personal
assessment

Young age

General
education

Other

How might we
Connect
people with
fitness
instructors?

How might we
Connect
people with
fitness
instructors?

How might we
provide better
insights to
doctors?

Sprint Focus

Focus	Change specific behaviors
Slide	8
I selected this theme because	<p>In changing specific behaviors, we will be able to curb contracting preventive diseases earlier. Currently, 11.5% of adults in the USA smoke cigarettes. How about passive smokers? 28% of Americans are exercising enough. How can we turn this population into a healthy population?</p> <p>https://www.cdc.gov/tobacco/campaign/tips/resources/data/cigarette-smoking-in-united-states.html</p> <p>https://www.forbes.com/sites/carlieporterfield/2023/01/26/just-28-of-americans-are-exercising-enough-cdc-says-and-its-even-lower-in-some-regions/?sh=10e2e4cb2b96</p>

Define

With an understanding of the problem space, create focus and align on specific outcomes for the Design Sprint

Future Press Review

Kaiser Permanente Team worked on a mobile application that focused on preventive care rather than treatment. The app helped me, as a pre-diabetic patient to build better eating and physical fitness habits. This was achieved through efficient calorie tracking, physical activities recommendations and tracking, nutrition and dietetics recommendations and what bad habits to avoid.

The application helped me monitor my nutrition and diet by recommending food that has low sugar/ calories and hence effectively managing my sugar levels and weight gain advancements. Through the fitness sessions and content, I have been able to exercise to the recommended extent, manage my weight as well and burn excess calories effectively.

The application has also helped me connect with medical experts like nutritionist and dieticians, connect with other patients who have served as accountability partners and vouch a path together, connect with gyms and fitness specialists to exercise better.

I loved the application because it's simple and easy to understand and navigate. The app also provides valuable analytics from my health history and my efforts in exercising and the food I eat to keep fit. It's also a great source of educative content, what to do and what to avoid.

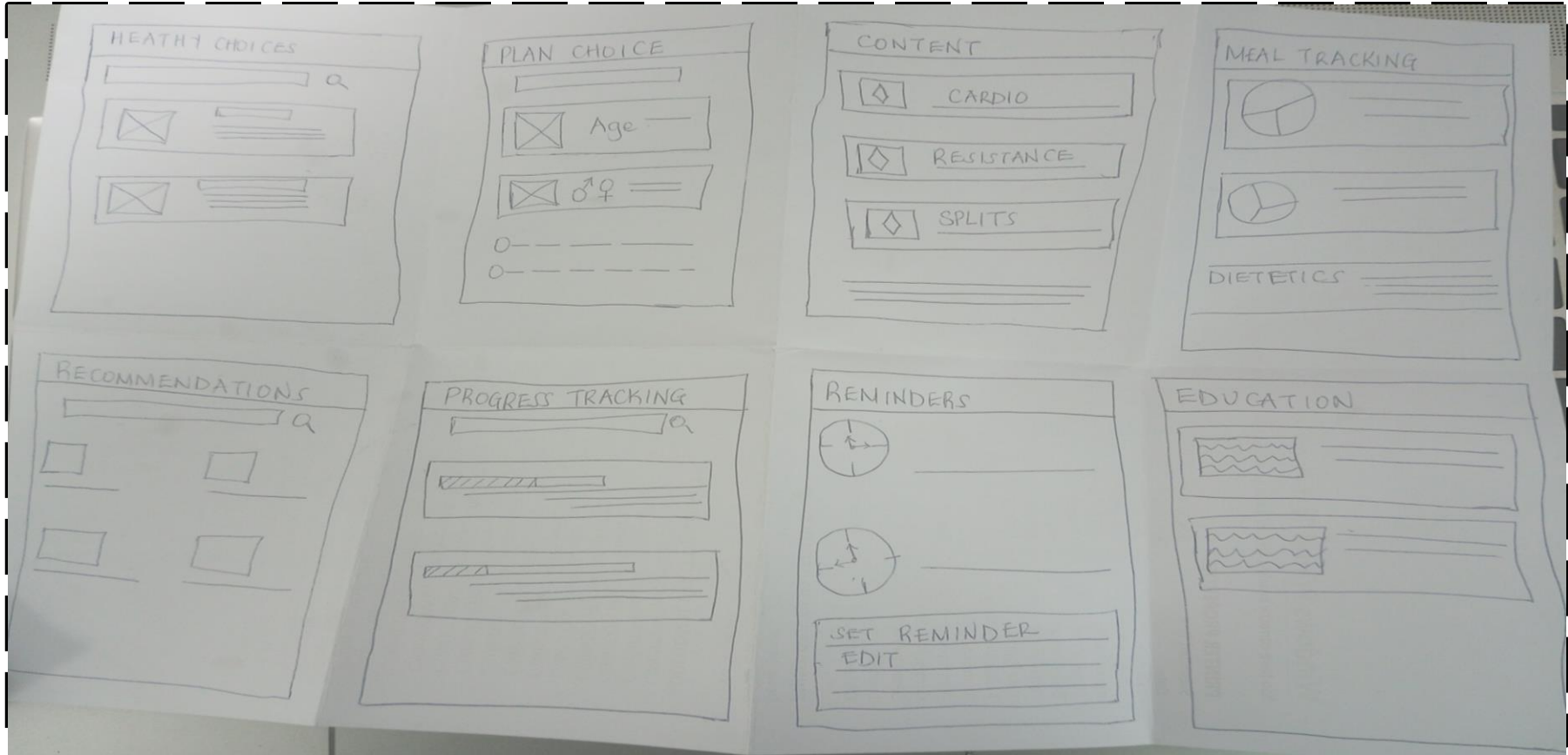
Success Metrics

	Goals	Signals	Metrics
Happiness	Efficient health tracking	Ability to add and keep track of physical activities	Average App downtimes
Engagement	Track physical activities	Physical activities in tray/ started	Number of users who complete their planned targets
Adoption	Share with friends	Friend referrals	Percentage of users signing up through referrals
Retention	Automatic subscription renewals	Users renewing their subscriptions	Average customer churn rate/ retention rate
Task Success	Better preventive care	Tracking milestones	Number of users who complete their planned targets

Sketch

Generate tons of ideas, then narrow them down to two in depth solution sketches

8 Sketches



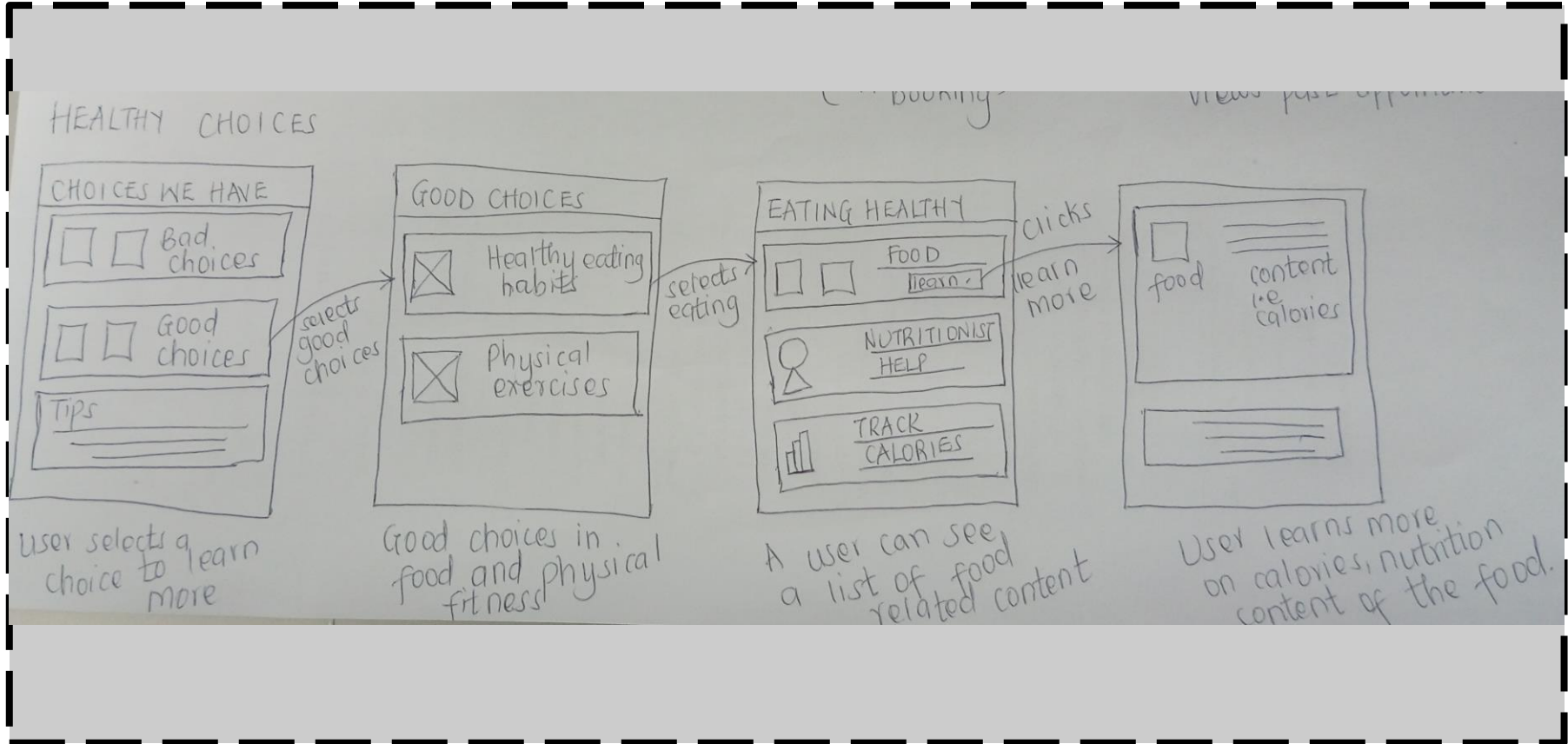
The wireframe illustrates a four-screen mobile application for booking appointments. The screens are connected by arrows indicating the user flow.

- PLAN CHOICE:** Contains a text input field, a checkbox for "Age", a checkbox for "Gender" with a dropdown arrow, and a "VIEW PLANS" button.
- PLANS AVAILABLE:** Displays three options: "PREVENTIVE", "TREATMENT", and "CONSULTATION", each with a checked checkbox.
- TREATMENT:** Contains four options: "select aiment" (with a radio button), "have a doctor in mind?" (with a checkbox), "lab review?" (with a checkbox), and "Book an appointment" (with a checkbox).
- Booking Appointment:** Includes a date picker labeled "Book a date", a section for "Booked Appointments" with a list view, and a "Book appointment" button.

Handwritten annotations describe the user actions and data flow:

- "User fills in their Age and gender" points to the input fields in the Plan Choice screen.
- "Plan details provided" points to the Plans Available screen.
- "Selects a plan (Appointment) booking" points to the Treatment screen.
- "Books an appointment views past appointments." points to the Booking Appointment screen.

Solution Sketch 2



Decide

Pick the final concept that you develop into a prototype

Decision

Decision	Healthy Choices
Rationale	<p>According to American Journal of Lifestyle Medicine, Diabetes affects 28 million individuals and prediabetes 86 million in the United States. Type 2 diabetes makes up 95% of all diabetes cases.</p> <p>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6125024</p> <p>Most of the preventable diseases are as a result of lifestyle. If people know what choices are good/preferable and avoid bad choices, we can curb lifestyle diseases like type 2 diabetes.</p>

Prototype

Turn your concept into a realistic, interactive prototype that you will use to validate your assumptions and ideas

Storyboard



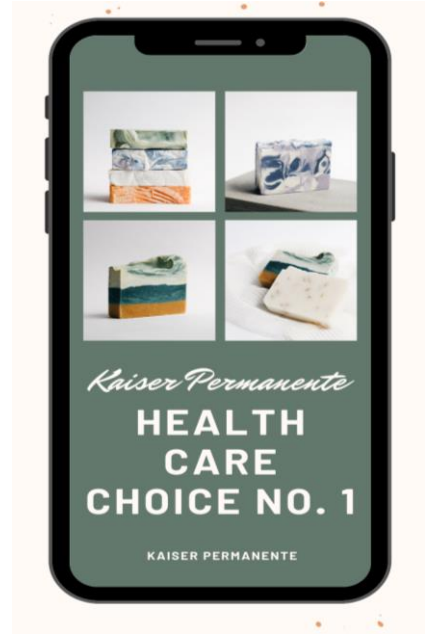
Script

Grace has been falling sick often. She has been eating lots of red and processed meat, sweetened foods. This has been really costly.



Script

Grace's friends visit her. One friend recommends KP's mobile app to advise on healthy choices. Grace downloads the app and signs in using her hospital ID.



Script

Grace sees her previous doctor/hospital visits, the preventive measures for some of them and good choices to prevent future encounters.

Storyboard



Script

Grace doesn't want to fall ill again unnecessarily. She signs up for good choices content to try out and the bad choices to avoid as well.



Script

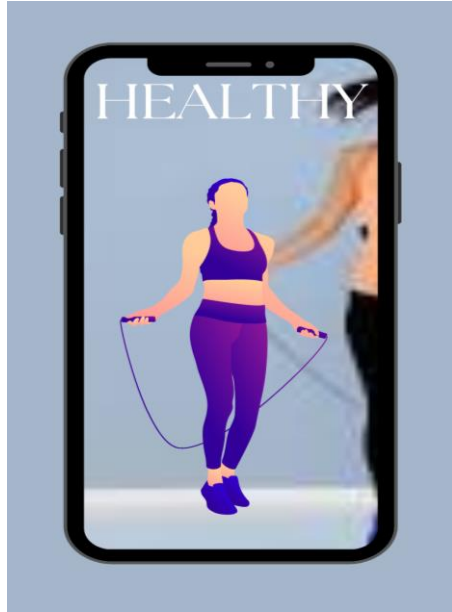
Over a few days, Grace tracks her eating choices and physical activities.



Script

Grace also manages to seek nutritionist and dietician to learn more on the diet she's taking.

Storyboard



Script

Over a few weeks, Grace is surprised to see her health has greatly improved for the better.



Script

Grace is able to prevent frequent hospital visits. She now leads a healthier life away from preventable diseases illnesses

Prototype

Description

- High level overview of the prototype
- What does it do?

My Prototype highlights user journey from sign in to adopting healthy lifestyle habits guidance.

Assumptions

- Any assumptions within the prototype

- Do all users have unhealthy lifestyle habits?
- Are all users associated with Kaiser Permanente?

Tasks

- What are the tasks that a user can complete in the prototype?

- A user can sign in to the app using their hospital ID and password
- A user can check their hospital visits records
- A user can sign up for healthy lifestyle habits
- A user can also learn unhealthy lifestyle habits to avoid



Link your
prototype

Validate

Users will go through your prototype and provide feedback on your concept. This is also an opportunity to have an engineering feasibility discussion

Kaiser Permanente Research Plan

PM: DIANA CHEPKIRUI
STATUS: DRAFT

Objectives

How often do you go to the hospital? How often do you get treated for preventable diseases? Is your lifestyle habits a big cause of your hospital visits? How often do you exercise? Have you ever used an healthcare app? If so, What was your experience? What would you prefer the experience to be? Are they aware there are preventable diseases?

Methodology

Interviews.

Participants

- Kaiser Permanente's patients.
- USA adult citizens.

KAISER PERMANENTE: Interview Sessions

Introduction

Hello, my name is Diana and I am a product manager here at Kaiser Permanente. The team's been working on some exciting new ideas about the preventive healthcare experience and we wanted to share them with you and get your feedback.

This is the way that this interview will run: ... I have a few background questions to get to know you a little bit better and some of your health lifestyle habits. Then, we'll switch gears and I'll show you a prototype that the team has been working on and ask you for your feedback.

Before we get started, please review this NDA and sign it. It's important that the things we show you and the ideas that we discuss today stay confidential.

Do you have any questions before we get started?

No questions... Great! Is it ok if I record this session? The recording is only going to be used internally by the team to refer back to our conversation. It also helps make sure that we don't miss anything in the notes.

Background Questions

How long have you lived in this city? How would you describe the highs and lows in this city? How often do you go to the hospital? How often do you get treated for preventable diseases? Is your lifestyle habits a big cause of your hospital visits? How often do you exercise? Have you ever used a healthcare app? If so, What was your experience? What would you prefer the experience to be? How often do you go to the gym?

KAISER PERMANENTE: Interview Sessions

Tasks

Now, I'm going to show you a prototype that the team has been working on. Keep in mind that this isn't a test... And there's no right or wrong answer. We're trying to understand how well this idea works for you. And because it's a prototype, not everything you see in the app may work.

One more thing... As you start using the prototype, I'm going to ask you to think out loud. I'm interested in hearing what you are seeing on the screen, how you are interpreting it, and what you expect things to do.

Go ahead and take a look around. Can you describe what you see? How would you sign in?

How would you go about finding previous hospital visits? Can you show me?

Let's say that you wanted to sign up for more physical exercises. How would you do that?

What are the different options for getting the healthy lifestyle habits to you? Which one do you prefer? Why?

Wrap Up

Awesome! Thanks so much for going through all of that with us. Just a few more questions

Do you think this is something you would use? Why or why not?

Is there anything you think could be improved?

Is there any other feedback you want to share with the team?

Thanks so much for participating in this! We really appreciate you taking the time to share your thoughts about what we've been working on.

User Testing: Participant 1 Key Findings



Link your audio recording

What worked well

The tracking and sign up for various content. The data was also presented in an easy and understandable way

Where participants got stuck

Login process was a bit tedious as the user did not remember their hospital number.

Other observations

Develop a UI that accommodates both left and right handed people.

Participant 1: Interview Notes

Easy to navigate the flow

Content displayed in a clear and easy to understand way

Data displayed with clear insights

What to avoid is clearly explained

Struggle logging in

User Testing: Participant 2 Key Findings



Link your audio
recording

What worked well

Ease of logging in, the reuse of hospital ID proved helpful.

Where participants got stuck

N/A

Other observations

N/A

Participant 2: Interview Notes

Easy to log in

Easy to navigate the flow

Content displayed in a clear and easy to understand way

Data displayed with clear insights

What to avoid is clearly explained

Feasibility

	Your Assumptions	Specific feasibility questions
Drawing the UI <ul style="list-style-type: none">• <i>What data is needed to draw the UI on the screen?</i>• <i>Where is the data coming from</i>	We have an existing system, can we leverage the UI?	How can we leverage the existing UI? What do we need for that to work out?
User generated data <ul style="list-style-type: none">• <i>Is it stored?</i>• <i>Where/how?</i>• <i>How will that data be used again?</i>	We need to store user data. We have existing subscriptions with AWS cloud vendor.	What do we need to think through data storage and safety?
Latency <ul style="list-style-type: none">• <i>How quickly should things load?</i>• <i>Are there any operations that might slow down load time (ie: a call to another service)?</i>	How fast is fast? What measure can we use?	What do we need to think through to ensure the content is quickly presented to the user? What design architecture should we use? Which vendors should we consider?

Iterate (Optional)

Leverage learnings from your first two user interviews to make changes to your prototype. Then run another round of user interviews.

Completing this section is not required. However, it's a good opportunity to validate that your improvements addressed the feedback you identified.

Improvements

Improvement #1	<i>How do we store our patient's data?</i>
Rationale	<i>Considering the Privacy of data, especially health records; how safe is our data from unauthorized access?</i>
Improvement #2	<i>How do we onboard people who aren't necessarily Kaiser Permanente's patients?</i>
Rationale	<i>Currently, our sign up process uses our patient IDs, how do we onboard other users?</i>

Handoff

Updated PRD

Background

Currently, It is estimated that we spend US \$730.4 billion on preventable diseases like type 2 diabetes that could be saved. [According to American Journal of Lifestyle Medicine](#), Diabetes affects 28 million individuals and prediabetes 86 million in the United States. Type 2 diabetes makes up 95% of all diabetes cases. Kaiser Permanente is looking to enter into the preventative care space to help their patient base increase physical activity and improve on healthy habits.

Problem

According to American Journal of Lifestyle Medicine, Diabetes affects 28 million individuals and prediabetes 86 million in the United States. Type 2 diabetes makes up 95% of all diabetes cases.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6125024>

According to WHO(World Health Organization), in 2019, diabetes was the direct cause of 1.5 million deaths and 48% of all deaths due to diabetes occurred before the age of 70 years.

<https://www.who.int/news-room/fact-sheets/detail/diabetes>

Updated PRD

Problem cont'd

The user is able to track their lifestyles in relation to unhealthy lifestyle diseases like type 2 diabetes.

The competitors have: enhanced omnichannel experiences (in-home, in-store and virtual care), drive a digital-first approach incorporating Artificial Intelligence, diversified growth by embracing digital age and wider geographical reach.

Some diseases are affordable prevented rather than treated, an example, type 2 diabetes. Our solution is better because we are aiming to partner for wider geographical reach, partner with wearable device manufacturers, provide users with tailored data and analytics among others.

Goals

Build a mobile app that will ensure preventive healthcare rather than treatment through health advisory.

Updated PRD (page 2)

Success Metrics

- 5.1M+ daily active users.
- 10M+ subscribed adults.
- >3.7 rating in App store/ Play store.
- 4.5M+ downloads from both App store and Play store.
- <10% app downtimes for active users.

Key Features & Scope

Mobile app that gives advise on healthy lifestyle habits:

- Eating healthy
- Physical fitness
- Data analytics from lifestyle data
- Unhealthy lifestyles to avoid
- reminders

Core UX Flow

Handoff

Updated PRD (page 2)

Core UX Flow Key Features

P0	Search	The user should be able to search exercises and food types using common names as text
P0	Exercises	The user should access various exercises content on their UI
P0	Nutrition	The user should access various nutrition and diets content on their UI. They should also be able to access a nutrition specialist

Updated PRD (page 2)

Core UX Flow

P1	Health Records	The user should access their past health records.
P1	Data Analytics	The user should be able to access derived insights and analytics from their health habits and efforts.
P1	Bad Habits	The user should access bad habits that they should avoid for them to prevent diabetes.