## WeCare:

## Your healthcare coach

Design Sprint

**Product Manager: Christian Kulik** 



# Set the stage

Set the stage for the Design Sprint by framing the problem

### **Initial PRD**



# Understand

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

How Might We
Use these digital stickies to capture your ideas. Feel free to rearrange. Colorize. Etc

How might weremind people to drink water often?	How might wemotivate people to eat an apple a day?	How might weinfluence a family to run together?	How might wemotivate people to stay focused on bad days?	How might welet people use a stress ball daily?	How might wecheck their posture at the office table?	How might weget companies involved for a daily activity routine?	How might weget people to know the bad food additives of sugar?
How might westructure information for people that they know the basics?	How might wenudge people to open our app so that they checkin daily?	How might wecoach people so that they don't get hurt?	How might wewarn people against unhealthy choices?	How might wereward people so that they feel motivated?	How might wecheck the vital parameters of people?	How might weencourage people to fill out a risk profile so that they know what to look for?	How might weconvince people to eat less sugar?
How might weadvertise the app for elderly people?	How might wetrack what people have eaten?	How might weencourag e people to eat less meat?	How might werecomme nd people to eat less fast food?	How might weexplain complex diseases in simple words?	How might wecoach people to use the stairs?	How might wetrack people without being a stalker?	How might weget people active every hour?
How might wepropose meal plans for people with families?	How might weencourag e people drinking less milk?	How might wenudge people to eat more fish?	How might welet people eat less deep-fried food?				

#### Other stickies 1

How might we get people to drink more water?

How might we make health data easier for patients to understand?

How might we track a patient's physical activity?

How might we build good habits at a young age?

How might we make it easier to make healthy choices?

How might we help people make more healthy food choices? How might we allow users to share health choices with friends? How might we allow users to compare choices vs. norms?

How do we convince people to exercise regularly?

How do we teach patients how to mediate?

How might we facilitate conversations about health habits between patients and care providers?

How might we make it easier for patients to get exercise?

How might we notify patients when they are making a suboptimal food choice?

How might we help patients stop smoking?

How do we reduce a patient's alcohol intake?

How might we reward healthy behavior choices?

How might we reward people when they learn about better health choices?

How might we connect people to health information?

How might we help a patient track their food choices?

How might we help people find accountability partners?

#### Other stickies 2

How might we reduce How might we How might we How might we How might we healthcare provide better help people help reduce provider diet high blood costs for insights to manage their tracking? doctors? healthy weight? pressure? patients? How might we get people to create a help patients help patients gamify healthy build healthier rewards monitor their set health habits? habits? system? qoals? qoals? How might we How might we How might we How might we prevent How might we identify and raise patients from build a social make people warn awareness aware of risk making support pre-diabetic across factors? unhealthy system? patients society? choices? How might we help people get people to make people promote encourage better walk 30 aware of their health habits? people to drink understand minutes every current state more water? of health? diabetes? day?

How might we

easier/quicker

How might we

allow people

understand

their health?

to better

provide

care to

patients?

#### Other stickies 3

How might we reward patients for eating more vegetables?

How might we reduce sedentarism?

How might we incentivise exercise?

How might we identify healthy habits with the most benefit?

How might we gamify positive lifestyle changes?

How might we allow people to better track their own health data?

How might we create a personalized plan?

How might we warn users about unhealthy choices?

How might we make healthy food choices accessible?

How might we make healthy food choices affordable?

How might we encourage goals patients already are trying to make?

How might we use ubiquitous technology to improve patient health?

How might we make patients feel accountable?

How might we provide activity tracking?

How might we improve patient satisfaction and well being without increasing costs?

How might we educate our patients about healthy habits?

How might we help patients increase their physical activity? How might we use ubiquitous technology to track patient data securely?

How might we reward patients for walking more?

How might we reward people for good behaviors?

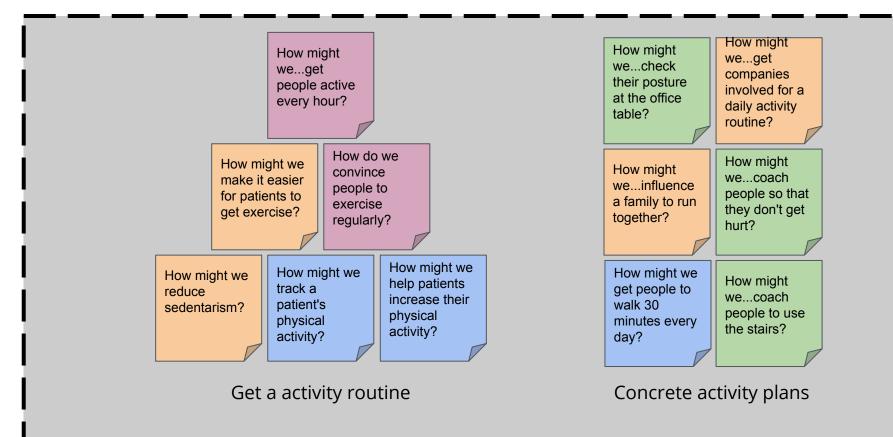
How might we educate our patients about preventative health care?

How might we allow for safe and secure sharing of health data btw patient and caregiver.

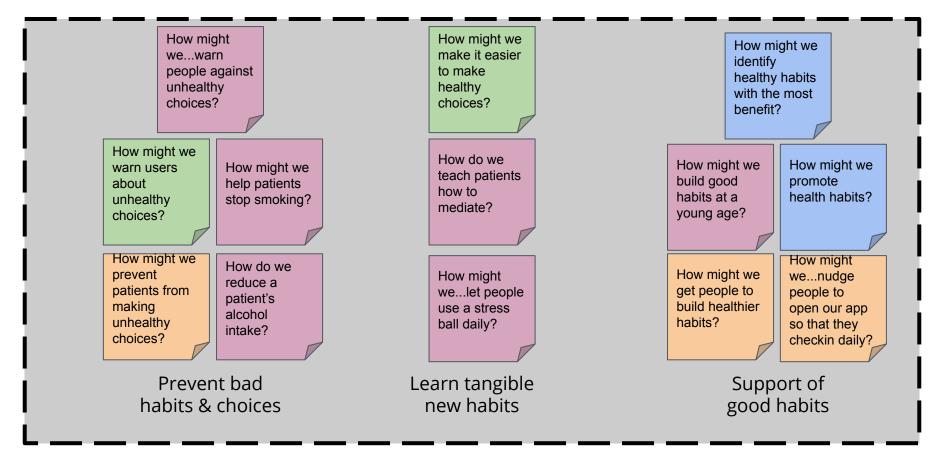
How might we gamify health?

How might we allow people to better access their medical records?

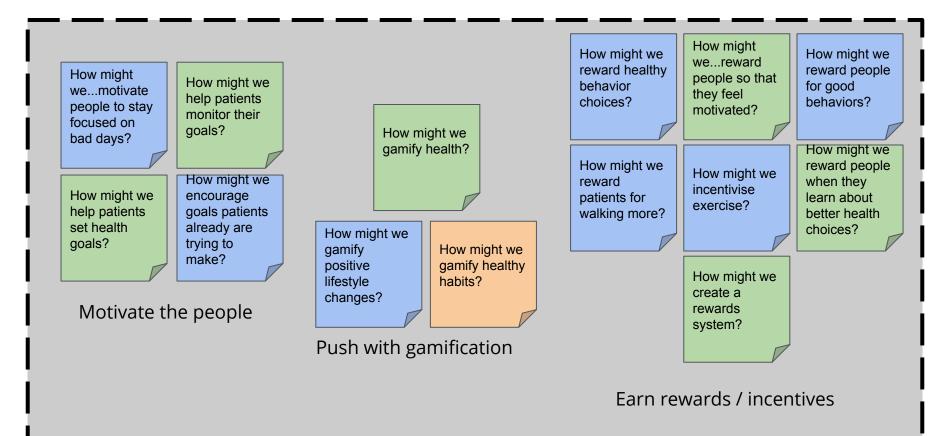
## Increase activity levels



## Change different habits



### Get Motivation, Incentives or Rewards



### Give nutritional advice

How might How might How might How might we How might we...motivate How might we...convince make healthy we...encourag we...encourag people to eat we...remind food choices e people to people to eat e people an apple a people to drink eat less meat? less sugar? accessible? drinking less day? water often? milk? How might we How might How might we How might notify patients help people we...propose when they are we...nudge How might we How might we make more meal plans for people to eat making a get people to encourage people with healthy food more fish? suboptimal drink more people to drink families? choices? food choice? water? more water? How might How might we How might How might we reward we...let people we...recomme make healthy eat less Optimize drinking patients for nd people to food choices eat less fast eating more deep-fried affordable? food? food? vegetables?

Optimize food intake

### Educate and inform about health

How might How might How might we How might we we...get we...structure educate our identify and people to information patients about warn know the bad about healthy pre-diabetic preventative food for people food additives health care? patients that they know of sugar? the basics? How might How might How might we How might we we...encourage make health educate our we...explain people to fill out data easier for patients about complex a risk profile so diseases in healthy patients to that they know simple words? understand? habits? what to look for? How might we How might we How might we facilitate How might we connect help people conversations make people people to better about health aware of risk habits between health understand factors? patients and care information? diabetes? providers?

How might we allow users to compare choices vs. norms?

How might we make patients feel accountable?

How might we allow people to better understand their health?

Create understanding

Inform the people

## Tracking, Data & Technology of health

How might we...check the vital parameters of people?

How might we help people manage their weight?

How might we help a patient track their food choices?

How might we help reduce high blood pressure?

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

How might we provider diet tracking?

How might we allow people to better track their own health data?

How might we...track what people have eaten?

How might we provide activity tracking?

Tracking of own parameters

How might we.allow people to better access their medical records?

How might we allow for safe and secure sharing of health data btw patient and caregiver.

How might we use ubiquitous technology to improve patient health?

How might we...track people without being a stalker?

How might we use ubiquitous technology to track patient data securely?

Technology driven

### Others

How might we create a personalized plan?

How might we provide easier/quicker care to patients?

How might we provide better insights to doctors?

Treatment of patients

How might we allow users to share health choices with friends?

raise

across

society?

awareness

accountability partners? How might we

How might we build a social support system?

How might we

help people

find

Support of social networks / society How might we improve patient satisfaction and well being without increasing costs?

How might we reduce healthcare costs for healthy patients?

Reduce costs

How might we...advertise the app for elderly people?

Other

## Sprint Focus

Focus	Get Motivation, Incentives or Rewards	
Slide #	#11	
I selected this theme because	A motivation system will be beneficial for positively valenced emotions towards a mindset change for habits and activities.  Positive reinforcement and a reward system are stimuli that people will work towards and that will make habits easier to learn.  An intelligent incentive system can create added value to support	
	other objectives and is therefore selected first.	

# Define

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

### Success Metrics

Users continuing to use app

 Find favourite articles later Reduce app crashes

Reduce abandoned profiles

Awareness for likelihood of prediabetes

Retention

Task Success

Identify changes in user behavior will signal success in reaching the goal Create a *metric* to measure each signal

> Subscription renewal rate Daily Active Users Monthly Active Users

> · % of users with favourites

Avg # of crashes per user

# of aborted risk profiles

• % of users with completed risk profile

Goals **Metrics** Signals Users chechk-in often Daily rating of happiness Avg # of check-ins per user Happiness Users find information helpful · Send feedback of information provided # of 4&5 star reviews Users are happy to use the app Leave app rating Avg appstore rating Users get rewards Survey completed NPS

Set at least two user-centered goals

- Reward points assigned to user Avg # of rewards points Explore preventable diseases Amount of time spent in app/articles • # of visits per user per week Engagement Create weekly activity schedules Amount of activitiv schedules Avg # of created mealplans
- Coaching for mealplans Amount of tracked activities % checked/unchecked activities per user Checkmark of activities done Amount of time using app # of videos/articles watched Users discover new content Avg session length

- Referral link send to friends. Recommendation to friends · # Signups with referral link
- Adoption New users last 7 days # of new users Registration of user

Web Analytics of returning users

Completed personal risk profile

· Articles added to favourites list

Crash Feedback send

 Subscription of Paid features Opt in for subscription Churn rate

## Can an app teach you how to live healthier?

#### WeCare from Kaiser Permanente is an useful and fun app for preventive health care.

If you've been thinking about your healthcare lately, you're probably not alone. Literally everyone in the United States worry about healthcare all the time. And that's for a good reason: The American Diabetes Association says, that 84 million Americans have prediabetes. Also, 1 of 10 Americans have diabetes type 2. That means chances are high that someone from your family is affected by this.

We've looked at the available healthcare apps in the app store and found just one app that claims to support you with preventable diseases. The app was developed by Kaiser Permanente and was just released. It's worth noting that currently this app is for Kaiser Permanente members only, but we've been told that the registrations opens up for everyone later this year.

If you have symptoms of a disease you probably know what to do after talking to a doctor, but if you're healthy right now what can you do to maintain this status? WeCare will support you with that. After logging in, you'll start right away with a survey for your personal health action plan. You get detailed information about your personal risk of preventable diseases, such as diabetes. If anything doesn't look like a healthy status, you get advices and recommendations to check for.

Also, you can lookup all the information in the knowledge base - smart. Experts curated the information and its excellently presented - not boring at all!

Creating activity plans, setting up meal plans for you and your family and a direct way to communicate with health coaches will guide you through the next weeks. We tested them and they felt well balanced and carefully chosen. You can explore more detailed information about the diseases and your health status. We especially liked the reward system with gamification elements - that will help everyone to get rid of habits on a daily base. After two weeks of usage, we definitely feel healthier and motivated than before. WeCare is an app that we recommend for your healthcare!

## Kaiser Permanente launches WeCare app to rethink health action plans

WeCare empowers consumers to learn about preventable diseases, nutrition and healthy habits.

Healthcare is one of the most discussed topics in the United States. Latest number show staggering costs of healthcare and the need for active counteract of preventable diseases. There are more than 80 million Americans who have an increased risk of diabetes due to their lifestyle, without knowing it. Kaiser Permanente has a strong history of research and education of preventable diseases. But how can these cutting edge insights & knowledge improve the life of our members?

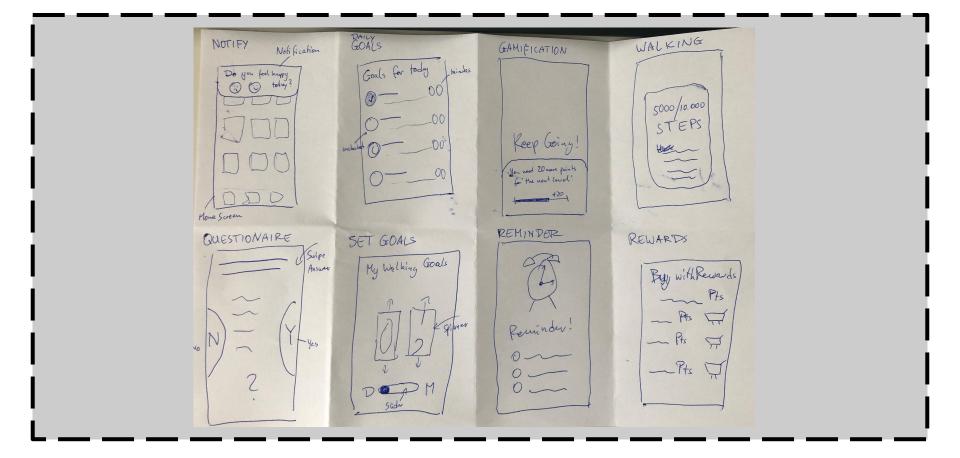
Today Kaiser Permanente released an app to fight preventable diseases and to support a healthy way of life. For the first time, WeCare will encourage consumers to get the latest information about preventable diseases, such as prediabetes and diabetes type 2, helping them improve their overall health. It is an all-encompassing preventive care. The WeCare app allows members to manage their activities and habits. It will improve the life of our patients by intelligent advisors and connecting experts with patients for tailor-made healthcare.

This new app will is available starting from today to all Kaiser Permanente members, for Android and iOS phones. Kaiser Permanente members will be able to login easily with their ident number. Registration for non-members of Kaiser Permanente will be available later this year.

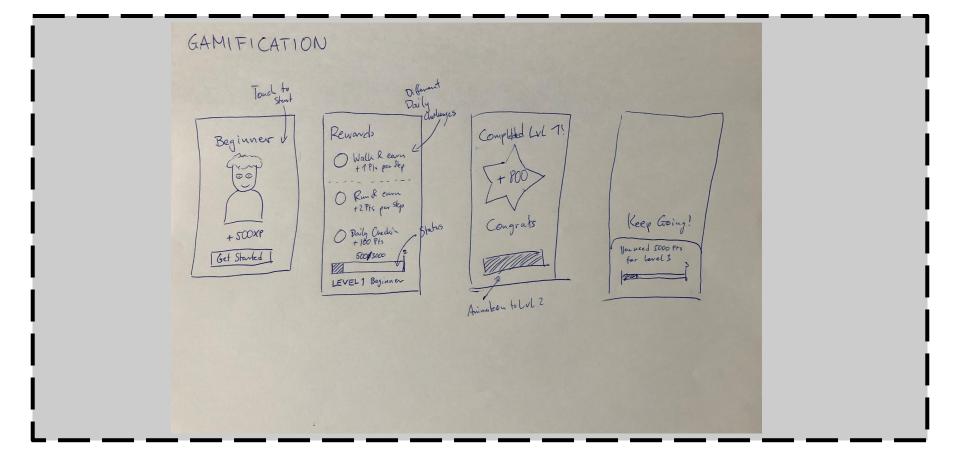
# Sketch

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

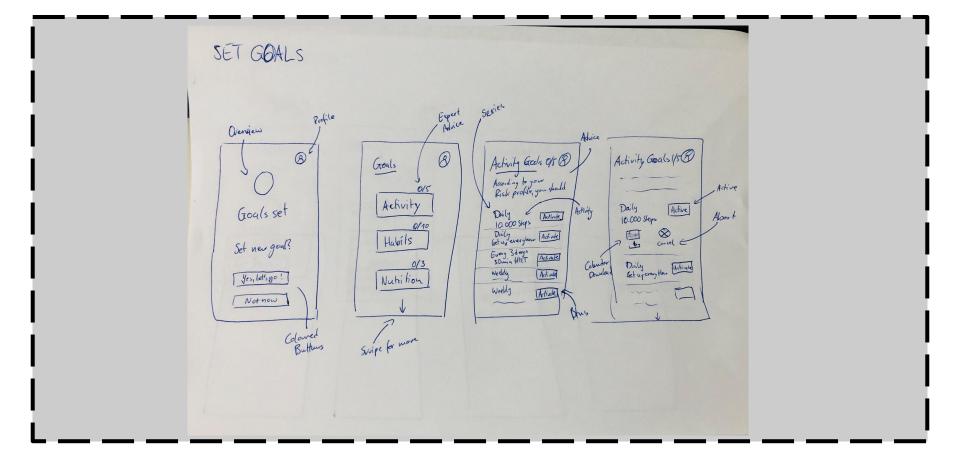
### 8 Sketches



### Solution Sketch 1



### Solution Sketch 2



# Decide

Pick the final concept that you develop into a prototype

### Decision

Decision	SETGOALS (Slide #24)
Rationale	"SET GOALS" is an important aspect for the user journey in learning new habits and getting more active. The App should advice and coach customers to increase physical activity and healthy habits, therefore a mechanism to set goals for activities is a valuable and crucial part of the app.

# Prototype

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

## Storyboard

Note: I can't share a public link to "ThePlot.io" since I don't have a premium account (I'm only allowed to share it with email addresses). Here is a screenshot only, but on request I can add an email for the storyboard. Also discussed in the KB https://knowledge.udacity.com/guestions/91683



Link your plot



lasmin got divorced 1 year ago. During these stressful times in her life, she didnt live very healthy. She felt constantly unwell and asked her doctor Lisa for advice. Lisa suggests to try the WeCare app from KP to change her lifestyle.





lasmin is notified after the survey to set some goals as a first step. She accepts and starts the assistant.



- away. As a KP member, she is able to login in immediately with her KP iD. She takes the initial personal risk survey to get the intelligent advices.
- 3 Jasmin is notified after the survey to set some goals as a first step. She accepts and starts the assistant.
- 4 The intelligent expert advice is clever and recommends to look for activities and nutrition. Jasmin likes the idea to be more active and drives deeper into that topic
- 5 The 3 activity goals recommended for Jasmin look ambitious. But Jasmin is determined to take it from here make a positive change. She activates alle 3
- 6 To be notified every time, she downloads the calendar series for the next weeks. Now she gets reminded to be more active every day. With a smile she starts the next morning into day 1 of being active.
- 7 Fast forward: After setting and completing goals for the last 3 months, Jasmin feels healthy and fit again. Jasmin has her self-confidence back. She feels great! It's noticeable too: She and Jeff meet at a cafe and start talking. The first date after her divorce is soon a



The intelligent expert advice is clever and recommends to look for activities and nutrition. Jasmin likes the idea to be more active and drives deeper into that topic.



The 3 activity goals recommended for Jasmin look ambitious. But Jasmin is determined to take it from here make a positive change. She activates all three goals.



To be notified every time, she downloads the calendar series for the next weeks. Now she gets reminded to be more active every day. With a smile she starts the next morning into day 1 of being active.



Fast forward: After setting and completing goals for the last 3 months, Jasmin feels healthy and fit again. Jasmin has her self-confidence back. She feels great! It's noticeable too: She and Jeff meet at a cafe and start talking. The first date after her divorce is soon a reality.

### Prototype

#### Description

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

#### Assumptions

 Any assumptions within the prototype

#### **Tasks**

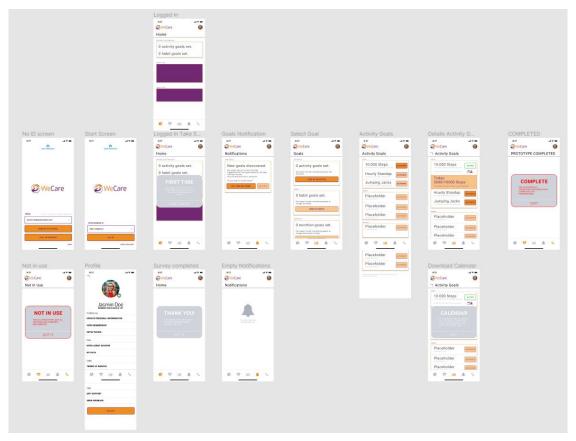
 What are the tasks that a user can complete in the prototype? The user is asked to login with his/her ID. Then the user will be notified to take the initial risk survey (is done automatically). Afterwards, he will be notified about new goals. The user can select the activity goals. In the follow up, the user is able to activate the Daily 10.000 steps goal. The user is also able to download calendar notifications.

- User is KP member, has an ID for login
- User will fill out initial survey automatically, survey not part of this prototype
- Intelligent Advisor will analyze data, finds tailor-made goals for the user
- User needs no password, just the KP member ID
- User logs in for the very first time, profile is created automatically (+picture)
- User can login with KP member id, User is able to log out
- User can be denied if he/she has no KP member ID
- User is notified about new goals
- The user can view the proposed goals, user can select activities
- User can explore activity goals. User is able to activate 10.000 steps goal
- User can lookup status of steps goal
- User can download calendar notifications
- User can lookup own profile settings.



Link your prototype

## Prototype v1 Screenshot



# Validate

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

### Plan and recruit for research



## **User Testing**





MP3: <u>Link your</u> audio recording M4A: Link

#### Key Findings from Participant 1

#### What worked well

- Structure and general UX concept is clean, reasonable and comprehensible
- Navigation was clear for the user
- User profile well understood
- Download function of calendar notifications was well recognized. User appreciates
- No problems with login or logout mechanism
- Overall: User could complete tasks without knowledge. User thinks this is feature is useful

### Where participants got stuck

- Manual edit of activities was missing
- Icons/pictograms for activities would be beneficial
- Percentage of achievement per goal would be beneficial
- Confusion about the grouping of goals, needs to be revised from user's perspective
- Profile pic is too small, wasn't discovered easily

#### Other observations

- User confirms importance of Goals, achievements, rewards
- General questions leading to "what is working, what not" due to prototype reasons
- Confusion of the survey conducted automatically in the background
- Missing options in the profile section (e.g. connect devices/wearables)
- User would use this function
- Share achievements with friend would be awesome

## **User Testing**





#### Key Findings from Participant 2

rey i mamgs nom i articipant	
What worked well	<ul> <li>Navigation was clear for the user, minor issues at some points (prototype reasons)</li> <li>Grouping and sorting of activities (time series wise) good, no complaints</li> <li>User did like messages about how many achievements already earned, motivates her</li> <li>Download function of calendar notifications was well recognized. User appreciates</li> <li>No problems with login, logout or "No ID" mechanisms</li> <li>Overall: User could complete tasks without knowledge. User thinks the features are useful</li> </ul>
Where participants got stuck	<ul> <li>Icons/pictograms for activities would be beneficial, also some more text at specific places</li> <li>User frequently complained about small font or bad contrast of colors</li> <li>Couldn't edit or add manually some goals</li> </ul>
Other observations	<ul> <li>User not sure about privacy, data usage because of sensitive of her health data</li> <li>User Profile: Payment information, subscription status is missing</li> <li>User mentioned Missing: delete goals, delete data? quit (membership)?</li> <li>Navigation via Bottom Nav Bar without complaints</li> </ul>

## Improvements

Improvement #1	Adaptation of Goals UI with Icon/pictograms
Rationale	This feature was requested by every participant, therefore it should be implemented to give the user more guidance and improve the speed of grasping what the SET GOALS feature will do.
Improvement #2	Add and edit of goals
Rationale	All participants are missing the option to add or to edit goals within the user study. It does make sense to Add or edit goals manually, hence we need to implement it.
Minor Improvement #3	Feature Addon: Percentage of status of pursuited goals Feature Addon: Grouping of goals based on Time series or Feature (not functional)

## Feasibility

	Your Assumptions	Specific feasibility questions
<ul> <li>Drawing the UI</li> <li>What data is needed to draw the UI on the screen?</li> <li>Where is the data coming from</li> </ul>	<ul> <li>Survey results: Data for the dynamic generation of goals needs data at the right time         (Figma Screen "Goals Notifications"; "Select Goal")</li> <li>We need a profile Picture (Figma Screen "Profile")</li> <li>Data for goals, e.g. activities needed         (Figma Screen "Activity Goals")</li> </ul>	<ul> <li>What do we do if the survey does not generate any suggestions for the user?</li> <li>Where is the profile picture coming from? Is there an initial photo to be used in our backend?</li> <li>Where do we get a sufficiently list with goals/activities? Can we leverage any proven data pools (e.g. icons connected to sports)?</li> </ul>
<ul> <li>User generated data</li> <li>Is it stored?</li> <li>Where/how?</li> <li>How wll that data be used again?</li> </ul>	<ul> <li>KP Member ID is unambiguously (Figma Screen "Start Screen")</li> <li>Private health data (including goals), location data, survey results needs to be encrypted (Figma Screen "Profile")</li> <li>Calendar data needs access to user's data outside of the app (Figma Screen "Download Calendar")</li> </ul>	<ul> <li>Can we map a user to a specific KP member ID?</li> <li>How is the private health data encrypted?</li> <li>Is it stored on the phone only, in the cloud only, cloud and phone synced?</li> <li>In case of data loss: can we/are we allowed to restore the data?</li> </ul>
<ul> <li>Latency</li> <li>How quickly should things load?</li> <li>Are there any operations that might slow down load time (ie: a call to another service)?</li> </ul>	<ul> <li>Check KP member ID, load profile needs time to load (Figma Screen "Start Screen")</li> <li>Analyze survey results needs time to calculate (Figma Screen "Logged In Take Survey")</li> <li>Generating + download of the CalDav needs time on the server (Figma Screen "Download Calendar")</li> </ul>	<ul> <li>How does our backend system with the KP member IDs come into play?</li> <li>How can we improve the algorithms for the calculation of user goals?</li> <li>Can we use the native app APIs of the smartphone for the Calendar integration to be faster than a download?</li> </ul>
Other	Subscriptions	Can we have paid subscriptions?

## Iterate

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

### Prototype v2

#### Description

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

#### **Assumptions**

 Any assumptions within the prototype

#### Tasks

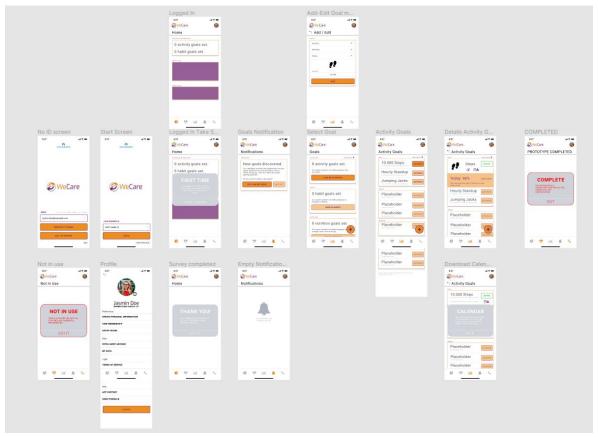
 What are the tasks that a user can complete in the prototype? The user is asked to login with his/her ID. Then the user will be notified to take the initial risk survey (is done automatically). Afterwards, he will be notified about new goals. The user can select the activity goals. In the follow up, the user is able to activate the Daily 10.000 steps goal. The user is also able to download calendar notifications. The user can add or edit goals within the app. Icons will lead the user.

- User is KP member, has an ID for login
- User will fill out initial survey automatically, survey not part of this prototype
- Intelligent Advisor will analyze data, finds tailor-made goals for the user
- User needs no password, just the KP member ID
- User logs in for the very first time, profile is created automatically
- User wants to add or edit goals manually
- User can login with KP member id, User is able to log out
- User can be denied if he/she has no KP member ID
- User is notified about new goals
- The user can view the proposed goals, user can select activities
- User is able to add or edit goals on his own
- User can explore activity goals. User is able to activate 10.000 steps goal
- User can lookup status of steps goal
- User can download calendar notifications
- User can lookup own profile settings.



<u>Link your</u> prototype v2

## Prototype v2 Screenshot



## User Testing Round 2





#### Key Findings from Participant 3

#### Navigation was clear for the user, minor issues at some points (prototype reasons) What worked well Add / Edit function was very well received • User did like messages about achievements and goals, motivates her • User likes the icon for the goals a lot • No problems with login, logout or "No ID" mechanisms • User could recognizes the navigation bar icons fast • Overall: User could complete tasks without knowledge. User thinks the features are useful Download function of calendar notifications was not understood at first Where participants got • User frequently complained about small font or bad contrast of colors stuck • User said, that overall smartphone notifications would be beneficial • User recognized an intelligent advisor (mentioned Artificial Intelligence) Other observations Company/Health insurance company recognized and mentioned • User is not happy with colors. Does not fit to healthcare in her opinion

Social Sharing feature is missed by the user

Minor data privacy concerns
User would use this function

# Handoff

## Updated PRD

