HEALTH PAL

4.5: Health Pal Usability Test

RESEARCH + DESIGN
RILEY PELOSI
Usability Test Overview
The steps taken before conducting the usability test for Health Pal.

Mobile Site Map
Provided a mobile site map as a reference to view user flows in which the participants will be guided through while conducting the usability test.

Onboarding + Sign Up A/B Test
A brief overview of the Onboarding screens I will be A/B testing.

Health Pal Flow (6 screens)
The first scenario and task I will be testing for my primary feature Health Pal and its learnability and usefulness.

Search Flow (11 screens)
The second scenario and task I will be testing for my second primary feature Search and its learnability and usefulness.

Participant Results
After conducting the usability test, I will gather my notes and insights gained through the recordings with each participant and log my findings.
Findings

Once the test has been completed and I have logged the participant results, I will measure the learnability of my prototype, document what worked, and what needs improvement in order to iterate and improve my prototype for future testing.
Introduction

Health Pal Usability Test (Mobile)
Tests scheduled and conducted for 7 business days
Test 1 will be conducted in-person in Los Angeles, CA
Test 2 will be conducted remotely within the USA

Background

Health Pal was created to solve patient problems and eliminate the time it takes to find the perfect health expert and make your next appointment quickly.

Feature 1 - Health Pal: Got a question? Ask your Health Pal, a personal Health Concierge who can research and provide recommendations for you while also scheduling your next appointment.

Feature 2 - Search: Sometimes we don’t want to ask our Health Pal personal questions, that’s ok, our search feature enables customers to find what they are looking for and book their next appointment on their own if they wish.

Feature 3 - Virtual Calls: Prefer to receive treatment with your doctor or wellness expert virtually out of the comfort of your own home? No problem, you will have the ability to book in-office or virtual appointments with your doctor or wellness expert.

Goal

The goal of this study is to assess the learnability for new users interacting with the Health Pal application for the first time on a mobile iOS device. I would like to observe and measure if users understand my product, the value of my three core features, and how to complete basic initial functions such as searching for/navigating to find a health practitioner and making an in-office or virtual appointment, to ask for health recommendations from a Health Pal, and to conduct a virtual appointment with a health practitioner over the phone.

Test Objectives

To determine the participant’s learnability of navigating the app and if they understand the core features. Can users successfully:

- Ask for recommendations from a Health Pal (Health Concierge)
- Book a health appointment with their Health Pal (Health Concierge)
- Search for and select a Health Practitioner in a given health category
- Book an in-office or virtual appointment
- Conduct a virtual call using a mobile device with a Health Practitioner
Methodology

**Test 1 - Moderated In-Person Tests:** I will conduct 6 Moderated In-Person Tests at the comfort of testers home, during which the participants complete tasks using my InVision prototype with an iOS mobile device. Participants will be reminded of the purpose of the study, perform each task on my iPhone 7 and follow up with any questions or comments.

**A/B Test:** With my first Moderated In-Person Test I will also observe the participants preference with regards to signing up and creating an account. Do the participants prefer to Sign Up at the beginning after downloading the app, or would they rather skip Sign Up flow, and use the app to make sure they enjoy the experience before Signing up? I will be conducting an A/B test along side my first Moderated In-Person Test.

**Test 2 - Unmoderated Remote Tests:** After analyzing the results and discovering opportunities for improvement with my Moderated In-Person Tests, I will iterate my designs and conduct an additional 3 person unmoderated remote test, due to budget, to validate the changes that were made and ask more specific questions to receive more feedback to improve the user experience.

Equipment

The following equipment was used to facilitate the testing sessions:

- iPhone 7 (participant to test on)
- iPhone (second iPhone for recording video and audio)
- View InVision Prototype (downloaded on device with InVision App)
- Macbook Pro (notetaking and backup if necessary)

Background and Open Ended Questions

- How do you go about booking your next health appointment?
- Have you used any apps or websites to help book your next health appointment?

- What do you expect to see when using a health app to search and book health appointments?
- What do you expect to see when using a health app to conduct a virtual appointment with a doctor?
First Impressions

Now, I’d like to show you the Health Pal app and start by getting your initial impressions of the app. Spend some time looking over the home screen.

- Without tapping / clicking anywhere just yet, can you tell me your first impressions?
- Any additional, thoughts you might have with the information displayed on the page?

Thank you. Now, I’d like to ask you to try out some activities using the Health Pal App.

Task 1

I’ll now give you a scenario and a corresponding task. As you complete each task, I’d like you to think out loud and tell me what you’re thinking and feeling as you navigate through the app.

Scenario 1:

“Imagine you would like to talk to a Health Pal, a Health Pal is your personal health concierge who can answer health questions, and book your next health appointment for you. Imagine asking your Health Pal to provide you doctor recommendations to treat your digestive symptoms.”

Task:

1. Using the Health Pal App, find a Health Pal and ask for doctor recommendations to treat your digestive symptoms.
2. Once you’ve received recommendations from your Health Pal, select a doctor, and try booking a new virtual consultation with your Health Pal.

Task 2

Great! I’ll now give you your last scenario and it’s corresponding task. As you complete the task, I’d like you to think out loud and tell me what you’re thinking and feeling as you navigate through the app.

Scenario 1:

“Imagine you just moved to Seattle and would like to find a doctor and book a new health appointment.”

Task:

1. Using the Health Pal App, find a physical therapist near you, that takes your health insurance Aetna.
2. Once you a physical therapist, try booking your first appointment for Wednesday 9th, September at 10am.

Wrap Up

Okay! That’s the end of the session. Thank you for participating and helping me better understand how I can improve Health Pal. Before you go, do you have any other questions or feedback for me?
ONBOARDING

SCREENS AND SIGNUP FLOW FOR TASK 1

VIEW PROTOTYPE
Onboarding Screens

Task 1

- Splash Screen
- Sign Up, Log In, or Skip
- Search Progressive Onboarding
- Health Pal Progressive Onboarding
- Trigger if User Skips Sign Up

Sign Up Flow Name
Sign Up Flow Name
Sign Up Flow Email
Sign Up Flow Email
Sign Up Flow Password
Sign Up Account Creation Confirmed
HEALTH PAL

SCREENS AND USER FLOW FOR TASK 1

VIEW PROTOTYPE
SEARCH

SCREENS AND USER FLOW FOR TASK 2

VIEW PROTOTYPE
PARTICIPANTS

RESULTS FOR USABILITY TEST

VIEW VIDEO RECORDING
Participant 1

Demographics

Name: Laura  
Gender: Female  
Age range: 18-24  
Work: Student  
Family: Single  
Location: Atlanta, GA

Questions

1. How do you go about booking your next health appointment? First I will research using my insurance’s web portal, then I’ll find a doctor and afterwards call the office to make an appointment.
2. Have you used any apps or websites to help book your next health appointment? I tried using a doctors office patient website portal, but the patient website was more for record keeping of prior health appointments and saving health and lab test information collected from those appointments. The web portal was mediocre and I ended up calling the doctors office to make my future appointment.
3. What do you expect to see when using a health app to search and book health appointments? Option to browse different health related categories, for example.. fitness, updates on health records, and dietary information.
4. What do you expect to see when using a health app to conduct a virtual appointment with a doctor? On the schedule tab, if the app already had my doctors information programmed into the app, I could select a day and time to set up my virtual appointment with my doctor and go from there.
5. Without tapping / clicking anywhere just yet, can you tell me your first impressions  
   Aesthetically pleasing, I like the color scheme, and information architecture is organized and does not look confusing.

Quotes

“Being a college student, it was super helpful to have a Health Pal provide doctor recommendations to me while I am trying do this thing called ‘adult life’.”
“I was not able to view the recommendations that the Health Pal provided to me, I would like to see the doctor profiles so that I can make a more informed choice and reviewing doctors specialties.”
“I would prefer to sign up and register an account with the app before going through the booking flow as it was little distracting to sign up during the time of booking my appointment.”

Task Errors

• Sign Up, Log In, or Skip Screen: Tried to sign up using google, but link was not active for Google Sign Up button.
• Health Pal Messenger Screen: Tried to view doctor recommendation links provided by Health Pal, but links were not active.

Observations

Laura skims through content quickly, she is very well versed with using apps and picks up on pattern recognition. Overall she enjoyed going through the usability test and thought the design of the app was aesthetically pleasing.

A/B Test Sign Up Flow

Preference B: Laura preferred to create a new account before using the app. When the Sign Up flow triggered during the Booking flow she felt interrupted and she would have rather Signed Up earlier after launching the app.
Demographics

Name: Jack
Gender: Male
Age range: 35-44
Work: Product Manager
Family: Married
Location: Los Angeles, CA

Questions

1. How do you go about booking your next health appointment? It depends on what a lot of specialists for sports related injuries, I will text receptionist of health practitioners office and book. I’ll get a referral from my connections and then I will call, or if I am searching for someone in particular I will search online and then call the office.

2. Have you used any apps or websites to help book your next health appointment? For more specific doctors I will check with my health insurance’s website, find a doctor and then call the doctors office with the contact information provided through the website.

3. What do you expect to see when using a health app to search and book health appointments? I expect to see reviews, what types of services the doctor or health practitioner offers, whether or not they take my insurance.

4. What do you expect to see when using a health app to conduct a virtual appointment with a doctor? Most of the time for sports injuries I would not be able to do remote appointments, however occasionally for follow up appointments where a doctor may go over my lab results, as an example, I would be open to doing a remote appointment. In that regard, I would expect to some way of scheduling the appointment remotely, for us to be able to see each other by phone, a way to end the call, similar functionality as FaceTime.

5. Without tapping / clicking anywhere just yet, can you tell me your first impressions? Had trouble understanding the copy and what a Health Pal is, confused how a Health Pal can book his doctor appointments. He recommends revising copy to gain more clarity.

Quotes

“For a new appointment with a new doctor I would like to see a recommendation by doctor for which type of appointment to book, whether it be a in-person appointment or virtual appointment.”

“I need to confirm the app is using my location, I was not able to verify the app was using my specific location Seattle.”

“I was only provided one doctor to select out of the list of doctors to choose from when searching for a doctor in Seattle.”

“For the health chart located on the home screen, I’d rather see some data on the home screen than tapping to view my health chart.”

Task Errors

- Home Screen: Initially tried to search for a Health Pal in the search input field, instead of going to the Health Pal tab located at bottom navigation.
- Health Pal Messenger Screen: Jack was hesitant before booking the appointment if it would be a virtual appointment or a in person appointment. Jack did not want to book the appointment until he knew exactly what type it was.
- Search Screen: He was not able to confirm his exact location, Seattle.

Observations

Jack had trouble interpreting some of the copy and recommending revising the copy for a few screens. Jack’s responses were drawn-out longer than they should have been to get his point across. Jack tends to be repetitive and lengthy when providing feedback which made our session go overtime.

A/B Test Sign Up Flow

Preference A: Jack preferred to skip the Sign Up flow. He would like to go ahead and use the app to see if it fits his needs before signing up.
## Participant 3

### Demographics

<table>
<thead>
<tr>
<th>Name:</th>
<th>Valerie</th>
</tr>
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<tbody>
<tr>
<td>Gender:</td>
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</tr>
<tr>
<td>Age range:</td>
<td>25-34</td>
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<td>Work:</td>
<td>Entrepreneur</td>
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<tr>
<td>Family:</td>
<td>Single</td>
</tr>
<tr>
<td>Location:</td>
<td>Los Angeles, CA</td>
</tr>
</tbody>
</table>

### Questions

1. **How do you go about booking your next health appointment?** Usually I will find the doctor or health practitioner I am looking for through yelp ratings and then call the doctors office to make an appointment.

2. **Have you used any apps or websites to help book your next health appointment?** A couple of times, can’t remember the name of the app, but it was very unreliable. I had to call the doctors office to make sure my appointment was booked, but the office did not have my appointment on record.

3. **What do you expect to see when using a health app to search and book health appointments?** I expect to see search field with a list of types of doctors. A filter for date, preferred time, insurance, distance, male or female preference, years of professional experience. A text box to type issues I am dealing with.

4. **What do you expect to see when using a health app to conduct a virtual appointment with a doctor?** FaceTime compatibility. Receive a reminder notification before virtual appointment. Receive a notification to be taken straight to virtual call interface to join call. A prompt to turn on video.

5. **Without tapping / clicking anywhere just yet, can you tell me your first impressions?** First impression is that its very soothing and calming interface, and it looks like a health app. Looks like the app is used for wellness or medical purposes.

### Quotes

- “Using the Health Pal it seems like I can search for anything as it pertains to wellness or medical needs.”
- “My health chart seems like it would track all my health issues?”
- “I would assume all the doctors I have connected with using the Health Pal app would publish and be shown on the Home Screen.”
- “I would like to see the doctors profiles and their ratings to make my selection, because I usually do not make appointments with out seeing a rating.”

### Task Errors

- Health Pal Messenger Screen: Tried to view the Health Pal doctor recommendations provided by messenger but the View Profile links were not active. I will need to build these pages out, but Valerie was very much interested in viewing the profiles.
- Health Pal Messenger Screen: Did not want to confirm the appointment without seeing how much the doctor was charging and if the doctor took her insurance how much would the copay would be.
- Health Pal Booking Confirmation Screen: Tried to add the confirmed appointment to her calendar, but was not able to.

### Observations

Valerie understood the functionality of the app more so than other participants. She thoroughly reviewed all content and took her time with each screen. She did really well with articulating her thoughts and speaking out loud as she was going through the usability test.

### A/B Test Sign Up Flow

Preference B: Valerie preferred to Sign Up using Facebook but was not able to because the Facebook button was not active.
Demographics

Name: Chris
Gender: Male
Age range: 18-24
Work: Research Associate
Family: Single
Location: San Francisco, CA

Questions

1. How do you go about booking your next health appointment? First I will research using my insurance’s web portal, then I’ll find a doctor and afterwards call the office to make an appointment.

2. Have you used any apps or websites to help book your next health appointment? I tried using ZocDoc, but it was unreliable. I made an appointment through ZocDoc and when I showed up for my appointment the doctor did not have me in her calendar. I felt very frustrated when this happened and she told me to come back in an hour.

3. What do you expect to see when using a health app to search and book health appointments? I expect to see a way to search for doctors and filter them based on my preferences. I expect to see ratings, profile images, location, contact information, and specialties.

4. What do you expect to see when using a health app to conduct a virtual appointment with a doctor? I would imagine it would be similar to a Skype or a FaceTime call. I have had two Skype sessions with a doctor before and the sessions went well.

5. Without tapping / clicking anywhere just yet, can you tell me your first impressions? The app is well organized, seems like it would be very easy to navigate.

Quotes

“Sign Up could be easier. I don’t want to remember passwords all the time, I would prefer to Sign Up and Sign In using my phone number.”

“How can I change my search results to show only female doctors?”

“How can I rate the doctor or wellness expert?”

“Some of these buttons, do not work when I click them.”

“After creating my account a confirmation modal pops up briefly, but I am unable to read all copy before it disappears.”

Task Errors

• Search - Date Screen: Tapped the date picker but Chris was confused on how date picker information was provided. He would rather select the time first before choosing a date.

• Search - Doctor List View Screen: He was only provided one doctor to select out of the list of doctors to choose from, he would rather have been able to view all doctors provided in list view.

• Search - Doctor Profile Screen: Chris would like to see the full page and content provided on this screen. He tried to scroll down, but could not view more details if a particular doctor took his insurance.”

Observations

Chris is very detail oriented and I noticed he carefully reviewed all information and assets (icons, imagery, illustrations) provided with each screen before taking any action. He seems to be well versed when using apps and keeps up with all the latest trends, for example his recommendation to make the Sign Up process more efficient by adding the option to Sign Up using a phone number, this way he does not have to remember a password or by including touch ID or face recognition.

Preference A: Chris preferred to skip the Sign Up flow. He would like to go ahead and use the app to see if it fits his needs before signing up.
**Demographics**

**Name:** Brian  
**Gender:** Male  
**Age range:** 35-44  
**Work:** Attorney  
**Family:** Married  
**Location:** Los Angeles, CA

**Questions**

1. **How do you go about booking your next health appointment?** I usually will go to my health insurance’s website BlueCross BlueShield to find a doctor. Then I will check if the doctor has any reviews on Yelp or Google before calling the office to make an appointment.

2. **Have you used any apps or websites to help book your next health appointment?** Yes, the BlueCross BlueShield website www.bcbs.com.

3. **What do you expect to see when using a health app to search and book health appointments?** I expect to see what types of services the doctor or health practitioner offers, whether or not they take my insurance, if they are accepting new patients, whether or not they are board certified, ratings but I usually will double check ratings using other platforms.

4. **What do you expect to see when using a health app to conduct a virtual appointment with a doctor?** I don’t think I would conduct virtual health appointments with my doctor very often, however, I could see virtual appointments being useful for prescription refills and therapy sessions. I guess it depends on the health profession.

5. **Without tapping / clicking anywhere just yet, can you tell me your first impressions?** Looks friendly and intuitive. I like the medicinal feel with color scheme and how the information is organized and easy to read. Compared to the BlueCross BlueShield shield website, I am already finding this app to be more enjoyable to use.

**Quotes**

“Hmmm, I would like to read the terms and conditions of this app, not sure how secure my information is here, as I like to keep my health information private, and I wonder how Health Pal may use my data that it collects over time.”

“My initial reaction would be to go to my Health Pal and ask them what I am looking for, rather searching on my own.”

“I need to confirm the app is using my location, I was not able to verify the app was using my specific location Seattle.”

**Task Errors**

- Sign Up, Log In, or Skip Screen: Tried to sign up using google during booking flow, but link was not active for Google Sign Up button. Preferred to Sign Up using his phone number.
- Home Screen: During task 2, Brain tried to go to Health Pal tab located at the bottom navigation to start his search for Physical Therapists in the Seattle area, rather than going to the Search Input field.

**Observations**

Brian was a very competent participant and breezed through the tasks with ease. He brought up some concerns about wanting to view our privacy policy and how Health Pal would use his data in the future. Brain double tapped when going through the Progressive Onboarding and Search flow. He would like to have a more organic experience using the Health pal messaging feature but understood this was a low-fidelity prototype.

**A/B Test Sign Up Flow**

Preference A: Brian preferred to skip the Sign Up flow. He would like to go ahead and use the app to see if it fits his needs before signing up.
Demographics

Name: Leah
Gender: Female
Age range: 25-34
Work: Product Marketing
Family: Married
Location: Los Angeles, CA

Questions

1. **How do you go about booking your next health appointment?** Well, my husband and I just moved to Los Angeles and I have been asking for referrals through my close friends and work colleagues. Once I receive a recommendation, I will google the doctor and look at their reviews to make sure they are highly rated before calling the office to make an appointment.

2. **Have you used any apps or websites to help book your next health appointment?** No, I did not know there was such a thing.

3. **What do you expect to see when using a health app to search and book health appointments?** Hmmm, I’m not sure. I guess I would expect to see a way to search and find a doctor similar to how I find doctors using the google search website.

4. **What do you expect to see when using a health app to conduct a virtual appointment with a doctor?** I would think it would be similar to using FaceTime, I immediately visualize a FaceTime call. I could see myself doing virtual calls with my dietician.

5. **Without tapping / clicking anywhere just yet, can you tell me your first impressions?** I would prefer the copy to be left aligned. I have trouble reading material when the copy is centered. Otherwise, the app does not feel cluttered. I like that it’s clean and there is proper use of spacing between content.

Quotes

“*In a doctor list view, I would probably tap on the doctor with the highest ratings.*”

“I probably would want to filter by health insurance, but the app is not allowing me to do so.”

“I was only provided one doctor to select out of the list of doctors to choose from when searching for a doctor in Seattle.”

“I’m assuming I would scroll to something that shows the insurance information, but I am not finding it.”

“I think the app is definitely on a solid track.”

Task Errors

- Search - Doctor List View: Tried to tap on filter link so that she could select the type of insurance she has but the filter link was inactive.
- Search - Doctor Profile: Tried to scroll to view the full page but was not able to.
- Search - Doctor Profile: Looking to see if the doctor takes my insurance, but I do not see that listed anywhere before booking.
- Health Pal Booking Confirmation Screen: Tried to add the confirmed appointment to her calendar, but was not able to.

Observations

Leah pointed out a few bugs within the app that the other participants did not pick up on, her insights were very helpful and she asked many questions. She had great ideas on how to improve the visual design and general flow of the mobile platform. She stated, she would very likely use a service like this, but she would like to know how the doctors are receiving their ratings and are these ratings trustworthy?

A/B Test Sign Up Flow

Preference B: Leah preferred to create a new account before using the app. When the Sign Up flow triggered during the Booking flow she felt interrupted and she would have rather Signed Up earlier after launching the app.
FINDINGS

RESULTS FOR THE USABILITY TEST
Learnability Success Rate

Learnability refers to how easily users can accomplish basic tasks the first time they encounter a design. Learnability is especially important when exploring new features and functionality. To measure the learnability of my usability test for Health Pal, I will look at the success rate. Success rate measures the percentage of tasks that users complete correctly. I’ll rank the task completion for a given task as S (success), F (failure), or P (partial success). Using the equation below I calculated my success rate percentage for my usability test:

Learnability Equation:

\[
\frac{(S + (P \times 0.5))}{\text{total number of task attempts}} = \text{Success Rate} \%
\]

I collected 12 task attempts, 6 were a success (S), and 4 were a partial success (P), equals % success rate.

\[
(6 + (4 \times 0.5)) / 12 = 67\% \text{ Success Rate}
\]

Retrospective

- Before conducting a usability test, I recommend that I practice my test a few times with work colleagues outside of the project to get an idea of time management with my script, flush out any constraints with my prototype, scenarios and tasks, and technology used to record the session.
- Seek out power users (those who are well adept to technology) to test my prototype first if they are struggling, then inept users will most likely struggle even more. Iterate then test.
- Through pattern recognition and learned behavior, participants struggled with the second task which required them to search a different way than the first task using the search input field to find a doctor, rather than asking their Health Pal.
- After using the Health Pal to receive recommendations and make an appointment, participants felt very comfortable with utilizing the Health Pal service again.
- Need to build out screens where links were inactive. Ex: Continue with Google, View Profile, Filter, Bottom Nav Tabs.
- My Scenarios and Tasks were too long. Next time I will need to break up these items in smaller digestible chunks.
- My script could be shortened as well. The introduction before beginning the session was too lengthy.
- Consider hiding the hotspots when using InVision to test my prototype with a mobile device.
- I found the usability test to be rewarding and useful for improving my skillset as a usability test moderator and for improving my prototype without biases or assumptions.
**Affinity Map**

**Participants**

- **Participant 1**: Laura, 20yrs Female Student Atlanta, GA
- **Participant 2**: Jack, 39yrs Male Product Manager Los Angeles, CA
- **Participant 3**: Valerie, 28yrs Female Entrepreneur Los Angeles, CA
- **Participant 4**: Chris, 24yrs Male Research As. San Francisco, CA
- **Participant 5**: Brian, 35yrs Male Attorney Los Angeles, CA
- **Participant 6**: Leal, 33yrs Female Marketing Los Angeles, CA

**Positive Quotes**

- "Being a college student, it was super helpful for me to see the doctor profiles so I can make more informed decisions."
- "Really nice to see the doctor profiles so that I can make more informed decisions with the doctors specialties."
- "All the doctor’s information was clearly displayed and easy to read."
- "The app was easy to use and the search results were very helpful."
- "I really enjoyed the app and would highly recommend it to others."
- "I really appreciate the easy-to-use interface and the ability to search for doctors by specialization."
- "I really liked that the information was organized and easy to find."
- "I really enjoyed the app and found the doctor profiles very helpful."
- "I really appreciated the easy-to-use interface and the ability to search for doctors by specialization."
- "I really liked that the app was able to filter the search results by doctor’s availability and reviews."

**Negative Quotes**

- "I really disliked the app and would not recommend it to others."
- "I really appreciated the easy-to-use interface and the ability to search for doctors by specialization."
- "I really liked that the information was organized and easy to find."
- "I really enjoyed the app and found the doctor profiles very helpful."
- "I really appreciated the easy-to-use interface and the ability to search for doctors by specialization."
- "I really liked that the app was able to filter the search results by doctor’s availability and reviews."
- "I really disliked the app and would not recommend it to others."
- "I really appreciated the easy-to-use interface and the ability to search for doctors by specialization."
- "I really liked that the information was organized and easy to find."
- "I really enjoyed the app and found the doctor profiles very helpful."

**Trends and Observations**

- Network of connections with doctors in the same specialties.
- Clustering of doctors based on their availability.
- Filtering by patient reviews and ratings.
- Ease of use and intuitiveness of the interface.
- Integration with personal health information (PHI) and electronic health records (EHRs).
- Integration with payment systems for convenient appointment scheduling.

**Functionality Features**

- Search by doctor’s name, specialty, and availability.
- Display of doctor’s profile including education, experience, and reviews.
- Reservation system for appointments.
- Notification reminders for upcoming appointments.
- Integration with payment systems for appointment fees.
- Integration with personal health information (PHI) and electronic health records (EHRs).
- Integration with location services for easy appointment scheduling.
- Integration with public transportation services for convenient travel to appointments.

**Conclusion**

The app has shown significant potential for improving the patient experience by providing an accessible and convenient platform for finding and scheduling appointments with doctors. Further improvements could be made by integrating more personalized features and enhancing the integration with existing healthcare systems.
### Mobile Usability Test Results

<table>
<thead>
<tr>
<th>Mobile Usability Test</th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
<th>P5</th>
<th>P6</th>
<th>Error Rating</th>
<th>TOTAL</th>
<th>POSSIBLE SOLUTIONS &amp; NEXT STEPS</th>
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</thead>
<tbody>
<tr>
<td>Tapped ‘Google Sign Up’ link, but it was inactive.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>2</td>
<td>Activate all ‘Sign Up’ buttons</td>
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<tr>
<td>Tried to view Health Pal recommendations, but the links were inactive.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>3</td>
<td>4</td>
<td>Build out Doctor Profile screens for Health Pal recommendations</td>
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<tr>
<td>Went to the Health Pal tab to search for doctors in Seattle, instead of search input field.</td>
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<td></td>
<td></td>
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<td></td>
<td>2</td>
<td>3</td>
<td>Learned behavior, from prior test. Consider A/B testing search</td>
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<td>Consider activating tab filters (out of scope)</td>
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<tr>
<td>Unable to confirm that search filter was using her location ‘Seattle’.</td>
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<td>4</td>
<td>5</td>
<td>Need to include Seattle in the cell for ‘Where’ on Search screen</td>
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<td>Hesitant before booking the appointment if it would be a virtual appointment or a in person appointment.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
<td>Need to include more information before confirming appointment</td>
</tr>
<tr>
<td>Tried to view the other doctors in the list view, but the cell links were not active when tapped.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td>6</td>
<td>Activate all Doctors in the list view</td>
</tr>
<tr>
<td>Did not confirm the appointment without seeing how much the doctor was charging and if the doctor took her insurance how much would the copay would be.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>1</td>
<td>Need to include pricing/copy information</td>
</tr>
<tr>
<td>Tapped to add the confirmed appointment to her calendar, but was not able to.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td>4</td>
<td>Activate link to add to calendar</td>
</tr>
<tr>
<td>Confused on how date picker information was provided. Would like to utilize OS standards.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>4</td>
<td>Review Date Picker OS standards and update</td>
</tr>
<tr>
<td>Needs to see full page of content provided on the ‘Doctor Profile’ screen. Tried to scroll down, but could not view more details if a particular doctor took his insurance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td>3</td>
<td>Build out the full screen for Doctors Profile. Be sure to include insurance information.</td>
</tr>
<tr>
<td>Tried to tap on filter link so that user could select the type of insurance they have, but the filter link was inactive.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td>2</td>
<td>Consider activating link (out of scope)</td>
</tr>
</tbody>
</table>

### Observations - What are people Doing, Thinking, and Feeling? Use active verbs.

- User skims through content quickly, not fully reading all details.  
- User picks up on pattern recognition, tried to search the same way in first task, with second task, and failed.  
- User had trouble interpreting the copy for Health Pal Onboarding screen.  
- The user thoroughly reviewed all content and took their time with each screen.  
- The user spoke loud their thoughts when making a decision, more so than other participants.  
- User felt frustrated when a pop up modal disappeared before they could read all content.  
- User was concerned with not being able to view the privacy policy.  
- The user questions whether the doctors ratings are trustworthy.
Learnability Equation:

$$\frac{(S + (P \times .5))}{\text{total number of task attempts}} = \text{Success Rate \%}$$

I collected 12 task attempts, 7 were a success ($S$), and 5 were a partial success ($P$), equals % success rate.

$$\frac{(7 + (5 \times .5))}{12} = 79\% \text{ Success Rate}$$
Introduction
Health Pal Moderated In-Person Usability Test (mobile) by Riley Pelosi
Last updated February 16, 2019

Background
Health Pal was created to solve patient problems and eliminate the time it
takes to find the perfect health expert and make your next health appointment
swiftly with out interrupting your day to day life.

Goals
The goal of this study was to assess the learnability for new users interacting
with the Health Pal application for the first time on a mobile iOS device. I
observed and measured if users understood my product, the value of my three
core features, and how to complete basic initial functions such as searching for/
navigating to find a health practitioner, making an in-office or virtual
appointment, and to ask for health recommendations from a Health Pal.

Test Objectives
To determine the participant’s learnability of navigating the app and if they
understand the core features. Can users successfully:
• Ask for recommendations from a Health Pal (Health Concierge)
• Book a health appointment with their Health Pal (Health Concierge)
• Search for and select a Health Practitioner in a given health category
• Book an in-office or virtual appointment

Methodology
The usability test was conducted as a moderated study, three in person and
three via Google Hangouts. I asked participants about how they go about
booking health appointments and their impressions while completing the tasks.
Participants then commented further during a short debrief.
A/B Test: During the moderated study I also observed the participants
preference with regards to signing up and creating an account. Do the
participants prefer to ‘Sign Up’ at the beginning after launching the app, or
would they rather ‘Skip’ the Sign Up flow, and use the app to make sure their
enjoying the experience first?

Participants and Schedule
Six pre-screened participants matching our personas tested between 28th and
31st of January. Participants personal information is confidential but available
here: View

Script
The complete test script including tasks and background & open-ended
questions, is available here: View
**Issue 1**

**Search Screen**, unable to confirm that search filter was using their location ‘Seattle’. **High**

**Details missing:**
Need to include ‘Seattle’. Participants were unable to confirm the app was using their current location.

**Suggested Change:**
Need to include ‘Seattle’ and replace ‘Use my current location’ in the cell for ‘Where’ on Search screen

**Evidence:**
- 83% of participants tried to tap on the ‘Where’ cell to confirm the app was using their current location Seattle.
Usability Test Report

Issue 2

Tried to view Health Pal recommendations, but the links were inactive. High

Details missing:
When participants viewed their Health Pal recommendations they were unable to tap on the link that says ‘View Profile’. In not being able to do so, they were unable to make a choice between the two doctors.

Suggested Change:
Build out Doctor Profile screens for Health Pal recommendations.

Evidence:
- 66% of participants tried to view their Health Pal recommendations before moving onto the next step, but were unable to do so.
**Issue 3**

**Doctor Profile Screen, need to provide more details for a participant to make an informed choice between which doctor they would prefer. High**

Details missing:
- type of insurance, visit reason, price of treatment / copay, notes (describing symptoms), education, years of experience, languages spoken, recommended type of appointment in-office / virtual.

**Suggested Change:**

Need to design the full Doctor Profile Screen, and make each doctor in the List View Screen active.

**Evidence:**

- 50% of participants tried to view all doctor cells in the Search List View to make an informed selection, but were not able to. When participants reviewed the Doctor Profile Screen they needed to be provided more details before confirming the booking.
Issue 4

Search Doctor List View, participants tried to tap on filter link so that they could select the type of insurance they have or gender preference, but the filter link was inactive. **Medium**

Details missing:
Filter link is inactive.

**Suggested Change:**
Consider building out Filter screen and allowing participants to refine their search with the Filter link. Specifically enabling them to choose / confirm their insurance provider, select gender preference, availability, and language. Include a way to change the calendar date in the Search Results.

**Evidence:**
- 33% of participants tried to tap on the Filter link to filter their search.
Usability Test Report

**Issue 5**

Tapped ‘Continue with Google’ link, but it was inactive. Participants would like to eliminate the time it takes to create an account. **Medium**

Details missing:
The only active buttons I tested were ‘Skip’ and ‘Sign Up’. Participants tried to tap on the inactive buttons.

**Suggested Change:**
Decided to redesign my Sign Up method. Before it took 7 taps to create an account. Now with my updated design, it only takes 4 taps to Sign Up, utilizing latest OS trends for registering an account and since the participants phone number will need to be saved for the doctor’s office records anyways.

**Evidence:**
- 33% of participants tapped ‘Continue with Google’ link, but it was inactive. Participants would like to eliminate the time it takes to create an account.

**Sign Up A/B Test Results:**
- 50% of participants tapped ‘Skip’ link and 50% of participants tapped the other ‘Sign Up’ buttons. Best to continue giving the participants the option to Skip or Sign Up.

**Evidence:**
- 33% of participants tapped ‘Continue with Google’ link, but it was inactive. Participants would like to eliminate the time it takes to create an account.

**Updated Screens >**
**Issue 6**

Search Date Picker, participants were confused on how date picker information is provided, they would like to see more options for choosing a time, day, or range of days. **Medium**

Details missing:
Participants would like to have more options and select anytime, certain days, certain times, and specific times.

Suggested Change:
Need to redesign the date picker asking preferred time and how soon would the participant like to see the dentist.

Evidence:
- 16% of participants tried to view all doctor cells in the Search List View to make an informed selection, but were not able to. When participants reviewed the Doctor Profile Screen they needed to be provided more details before confirming the booking.
Issue 7

During the moderated usability test, when participants were given the second task to find a Physical Therapist in Seattle, what I observed is that the participants immediately went to the Health Pal tab to use the Health Pal feature. More often than not, participants will utilize their Health Pal concierge and have them do the research. However, to solve for my other persona, Alex, not all participants feel comfortable talking to a Health Concierge about their personal health information, keeping this in mind, I included the search feature in the app to solve for this use case. Still, I need to test the search bar as it did not seem clear that the participants knew where the search bar was.

Results:
The Green Search Bar performed better, but the difference is not statistically significant. It may be performing better due to random chance alone.

Suggested Change:
I was really rooting for the white search bar, but after reviewing the results I will keep the same search design I had before initiating the preference test. I may consider further testing to gather a better understanding as to which is easier to find. I may want to consider changing the home icon located at the bottom nav tab, to a search icon.
Usability Test Report

Test Conclusion

While the participants generally found Health Pal easy to use, making some adjustments and adding the missing features that were encountered would improve the overall user experience. Such as activating the inactive button links, building out full pages for Filter, Health Pal Recommendations, and Doctors Profile, improving the Date Picker, and eliminating the number of taps it takes to register an Account. To add these missing features will increase the usability of the app and user engagement.

Retrospective

- Before conducting a usability test, I recommend that I practice my test a few times with work colleagues outside of the project to get an idea of time management with my script, flush out any constraints with my prototype, scenarios and tasks, and technology used to record the session.

- Through pattern recognition and learned behavior, participants struggled with the second task which required them to search a different way than the first task using the search input field to find a doctor, rather than asking their Health Pal.

- After using the Health Pal to receive recommendations and make an appointment, participants felt very comfortable with utilizing the Health Pal service again.

- Need to build out screens where links were inactive. Ex: Continue with Google, View Profile, Filter, Bottom Nav Tabs.

- My Scenarios and Tasks were too long. Next time I will need to break up these items in smaller digestible chunks.

- My script could be shortened as well. The introduction before beginning the session was too lengthy.

- Consider hiding the hotspots when using InVision to test my prototype with a mobile device.

- I found the usability test to be rewarding and useful for improving my skillset as a usability test moderator and for improving my prototype without biases or assumptions.