Powerability App Usability Plan

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Background

In September of 2012, I became a family caregiver for my father with Lyme disease. As a family caregiver, I understood the difficulties of moving a patient. Interviews were conducted with various family caregivers to understand the pain points for caregivers. It was discovered that caregivers pain points included the difficulty of moving patients and not knowing proper equipment know-how. After conducting empathy maps and affinity maps, personas were developed. Sketching, wireframes, wireflows were made to develop a prototype of an application that applied the understanding of the caregiver's pain points.

The prototype of the high-fidelity mock-up will be used to test the usability of the powerability application. In addition to the tasks that will be performed, users will be used to identify problem areas with alignment, components, and colors.

Objective: *Identify the strengths and weaknesses of navigation for learning about equipment used for mobility and provide solutions for improvement.*

Research Questions

1. How do caregivers learn about mobility equipment?
2. How do caregivers create a sense of stability and safety for themselves and their patients?
3. What do caregivers need to learn about mobility equipment to safely move patients?
4. How do caregivers create a sense of self-care for themselves in the midst of caring for their patients?

Methodology

A usability study will be held over Zoom with 4-5 participants in individual meetings. Each participant session will last 30 minutes and will include a short briefing, an interview, a task performance with the Powerability App and a debriefing.

Tasks

- *navigate from login screen to profile*
- *navigate from forget password to email retrieval screen*
- *View types of equipment*
- *View types of wheelchairs*
- *View media on equipment*
- *Contact expert through form*
- *Schedule an appointment*

Participants

- *Family caregiver (or was one)*
- *Never used a mobility equipment app*

- *Semi-tech savvy (familiar with a mobile phone)*

Recruiting

Participants will be recruited through the researcher's contacts from the interviews during the research process, personal contacts, and through a survey (if needed). There will be a total of 5 participants.

Script

Hi, _____. My name is Dr Cybele Wu, and I'm going to be walking you through this session today. Before we begin, I have some information for you, and I'm going to read it to make sure that I cover everything. You probably already have a good idea of why I asked you here, but let me go over it again briefly. I am asking people to try using an app that I am working on so we can see whether it works as intended. The session should take about half an hour.

The first thing I want to make clear right away is that we're testing the app, not you. You can't do anything wrong here. In fact, this is probably the one place today where you don't have to worry about making mistakes. As you use the app, I'm going to ask you as much as possible to try to think out loud: to say what you're looking at, what you're trying to do, and what you're thinking. This will be a big help to me. Also, please don't worry that you're going to hurt my feelings. I'm doing this to improve the app, so I need to hear your honest reactions.

2 If you have any questions as we go along, just ask them. I may not be able to answer them right away, since I'm interested in how people do when they don't have someone sitting next to them to help. But if you still have any questions when we're done I'll try to answer them then. And if you need to take a break at any point, just let me know. . With your permission, I'm going to record what happens on the screen and our conversation. The recording will only be used to help me figure out how to improve the site, and it won't be seen by anyone except me. And it helps me, because I don't have to take as many notes.

Do you have any questions so far? OK. Before we look at the app, I'd like to ask you just a few quick questions. Now, roughly how many hours a week altogether—just a ballpark estimate— would you say you spend using mobile apps?

4 What kinds of sites are you looking at when you browse the Web? Do you have any favorite Web sites? OK, great. We're done with the questions, and we can start looking at things. Click

on the bookmark for the site's Home page. First, I'm going to ask you to look at this screen and tell me what you make of it: what strikes you about it, whose site you think it is, what you can do here, and what it's for. Just look around and do a little narrative. You can scroll if you want to, but don't click on anything yet. Allow this to continue for three or four minutes, at most.

5 Thanks. Now I'm going to ask you to try doing some specific tasks. I'm going to read each one out loud and give you a printed copy. I'm also going to ask you to do these tasks without using Search. We'll learn a lot more about how well the site works that way. And again, as much as possible, it will help us if you can try to think out loud as you go along. Hand the participant the first scenario, and read it aloud. Allow the user to proceed until you don't feel like it's producing any value or the user becomes very frustrated. Repeat for each task or until time runs out. Thanks, that was very helpful.

6 Do you have any questions for me, now that we're done? Give them their incentive, or remind them it will be sent to them. Stop the screen recorder and save the file. Thank them