

Appendix E: Interview Protocols

Background

With rising healthcare costs, including those stemming from unnecessary emergency room visits, we aimed to understand how a technology might help people more accurately identify and self-monitor their symptoms, determine what level of care they need, receive recommendations for care and when they should contact health providers or visit urgent care facilities.

Our Research Question:

How can a technology-based solution help people make informed decisions on when to contact a provider (ER, doctor's offices)?

Guiding Questions

1. Do individuals know what to do when they experience an illness or injury? (how do they make decisions about where to go, what to do)
2. How can individuals avoid unnecessary visits to the ER or doctor's office? (What information do they need to decide?).
 1. If an individual does need to go to the ER, is there a tool that would help them in the triage process?
3. Do individuals know what Telemedicine is? When would they use it?

Screening Questions

Questions	Possible Responses	Disqualifiers
Are you at least 18 years of age or older?	Yes, No	No
Are you a healthcare professional?	Yes, No	Yes

Table 1: Screening Questions

Introduction

My name is [YOUR NAME]. Thank you for your time today. I'm on a team of graduate students researching symptom monitoring practices.

Explain the purpose of the project:

My team is exploring user needs in tools that can help people decide when to contact a healthcare provider or go to the emergency room. The information you share today will be used for my class. I will be recording this session for note-taking purposes. Your name, voice, and the image will not be shared or kept. You can choose a pseudonym you prefer or I can assign you one.

Explain what will happen:

In our interview, you do not need to share information about your current health, medications, or conditions. After the interview, we will do a quick wrap-up where I will ask follow up questions. This session will take about 40 minutes.

Informed consent:

Your participation today is voluntary. You can ask to stop the session entirely or skip a question at any time. Your actions and responses are confidential. Any of these actions or responses can be removed at your request. I shared a consent form with you prior to this meeting. Do you understand and can you reaffirm with verbal consent? If you are uncertain, please read over the informed consent form and ask me any questions.

General Issues/Warm-Up

1. Tell me about the last time that you were not feeling well?
 - a. If they contacted a doctor
 - i. What is the response time?
 1. How do you share the information about your symptoms with your doctor?
2. IF they did not contact a doctor above - Tell me about last time you contacted a doctor?
 - a. Where do you go?
 - b. How do you get your questions answered?
 - i. *If they contact the doctor, ask:* What is the response time?
 1. How do you share the information about your symptoms with your doctor?
3. Do you use anything to monitor your health?
4. IF yes – tell me about that

Deep Focus/Interview Questions

Doctor Experience

1. [if discussed above – phrase this – like this...other than the time we discussed....Have you been or taken anyone to the doctor in the past six months to one year?
 1. Was it a routine visit?
2. Tell me about your visit to a doctor in the past 6 months to one year?

1. Probe for - Was it a positive or negative experience?
2. Probe for - How long was the wait to get an appointment?
3. Probe for - How long was the wait in the waiting room?
4. After your appointment do you feel that it was a necessary visit?
5. How did you share your health history during your visit?
3. Are there any tools that helped you decide if you needed to go to the doctor? {Tools like apps and online}
 1. Yes, go to *question in health tools questions*
 2. No, why?

Emergency Room Experience

1. Have you ever gone to the Emergency Room?
 1. If yes - Tell me about the last time.
 2. How did you make the decision to go?
 1. How long did you wait to be seen?
 2. Did your visit turn out to be an emergency?
 1. If no, ask: Was your visit a false alarm?
 1. If yes, ask, is there a tool you wished you had that could have prevented you from going to the ER?
 1. If yes ask, in a perfect world, what features would you want that tool to have?
 3. If no, *move to question 2*
2. Have you ever considered going to the ER?
 1. Do you think that you made the right decision?
3. Are there any tools that helped you decide if you needed to go ER or not? {Tools like apps and online}
 1. Yes, go to *question in health tools questions*
 2. No, why?

Health Tools Experience

1. Have you ever looked up your (or a family member) symptom using an online or other technology-based tool?
 1. If yes – tell me about the last time
 1. Probe for the names of the tools
 2. Did you have a negative or positive experience using those tools?
2. What makes online health information trustworthy?
3. What makes online health information untrustworthy?
4. What would make Search results easier to understand?
5. Have you ever shared any of the information that you found online with a doctor?
 1. If yes – tell me about that -

Wrap-up and Retrospective

Thank you for completing the interview. I have some follow-up questions I'd like to ask you.

1. Our team is trying to figure out how people make the decision to go to the doctor's office or visit the emergency room when they have symptoms of an illness or injury. Are there any questions we should have asked you on this topic that we didn't?
2. Do you know what telemedicine is?
 1. Yes, move to question 3
 2. No, move to question 4
3. Have you ever used Telemedicine before?
 1. Tell me about that.
 2. Would you use telemedicine again?
4. If there was a technology designed to help people know when to go to the doctor's office or visit the emergency room - what features should that technology include?
5. What do you think of these features?
 1. **Verified Health Information:** to increase the trustworthiness of health information
 2. **Health Data Sharing:** To increase the timeliness of provider response:
 1. It allows users to share health history data, including the ability to upload and transmit photos.
 2. On-Demand Provider Communication: Immediate, customized advice from a trusted source available in both real-time and asynchronously.
 3. **SmartSearch:** Tools that filter the most relevant information based on the ranking of symptom severity and personal health history
 4. **Symptom Education and Guidance:** Enables users to check their symptoms and recommend when to seek guidance.
6. Are you a caregiver for an adult with special needs, a child, or an elderly individual?
7. What gender do you identify with?
8. How old are you?
 1. Would you be more comfortable giving an age range?
9. Is there anything that you wish to share that I did not ask?
10. How did the interview make you feel?
 1. What would have made you more comfortable?
11. Do you have any questions or comments for me at this time?

Our session is over, thank you for your time today. May I reach out to you again in relation to this study?