

## **Appendix: Patient Interview Questions for Focus Groups and In-Depth Interviews**

Preamble for participants:

Thank you for taking the time to participate in this interview (or focus group). I would like to first explain how this interview will take place. My name is XXX and I am a XXX doing a research study to develop a website that is helpful for patients like you to manage their high blood pressure.

The purpose of this interview is to understand how you understand your hypertension, how you are managing your hypertension, your thoughts on what are the barriers to and needs for blood pressure management, and how you feel about tracking certain kinds of information.

We would also like to discuss what you think of as potential solutions for digital health solutions for improving blood pressure management.

Our discussion should take up to two hours. With your approval, this discussion will be audio-recorded by a facilitator and then analyzed. The research team will not disclose what you tell us during this interview.

Please feel free to answer our questions based on your general ideas about this topic, or by thinking of examples from your own experiences, or those of your friends or families.

Semi-structured interview questions:

First, we would like to learn about your understanding of your blood pressure or hypertension

1. What do you see as the barriers or gaps in the way you are managing your blood pressure?

Next, we would like to discuss how you monitor your blood pressure and your health.

2. How are you currently monitoring your hypertension?

Probe: How do you know that your blood pressure is controlled?

Probe: How does monitoring your blood pressure affect your experience with high blood pressure?

3. Do you measure your blood pressure at home?

Probe: What were the advantages of using home blood pressure monitoring for you?

What were the disadvantages of using home blood pressure monitoring for you?

If you perform HBPM (home blood pressure monitoring), were you given instructions on how to measure your blood pressure?

If you perform HBPM, how did you know which home BP machine to buy?

How do you interpret your home BP readings? How do you get feedback on your readings? What feedback on your home readings would be helpful?

What were the barriers for you to performing home blood pressure monitoring?

What strategies did you do to remind yourself to measure your blood pressure?

What strategies did you use to make HBPM more manageable for you?

What do you do with your home BP readings once you have them?

How do you get your home blood pressure data to your health care provider?

What do you expect the care providers to do with the data?

What are some suggestions on how your care providers can make home blood pressure monitoring easier for you?

What kind of training or education would be helpful for monitoring your BP?

Are there other people you would like to share your blood pressure data with?

4. Now, we would like to talk to you about tracking information other than BPs.

What information about your health and quality of life do you feel should be tracked and shared with your healthcare providers? What are the things that matter to you that should be monitored for and tracked?

Do you find it important to track your symptoms and other impacts of having hypertension on your quality of life, including, for example, your emotional wellbeing?

Please take a look at the quality of life assessments - do you feel some of this information would be important/relevant to your situation?

Do you track your physical activity, your symptoms, weight, diet (calories), medication, or other measurements?

How are you tracking this information? Do you use any app to monitor your physical activity, symptoms, weight, diet, medication, or other measurements? (e.g., Fitbit, smart watch) If yes, What did you find useful about these websites or apps? Which features did you find most helpful?

If not, would you be interested in monitoring this information to be reported to your doctor later?

Does tracking this information help you and how so?

What type of feedback would you like to receive about your data?

What are some barriers to tracking this type of information?

6. What ways of visualizing the data make sense to you?

Our interview is coming to an end. Thank you very much for offering your thoughts on all these different issues.

Any questions for me at this time?