

Supplementary Exhibit 4 – Interview Guide PD Patients WITH Wearable Experience

Title:

Attitudes Towards the Adoption of Remote Patient Monitoring and Artificial Intelligence in Parkinson's Disease Management: Perspectives of Patients and Neurologists

Journal:

The Patient – Patient-Centered Outcomes Research

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Parkinson's Disease + AI and Remote monitoring

Interview Guide – Individual Patients (**With** wearable experience)

Aims:

1. Understand patients' attitudes and beliefs related to early detection of advanced PD.
2. Understand patients' experiences, thoughts and feelings related to the use of digital technology and AI for remote monitoring.
3. Explore the factors that would impact (positively or negatively) patients' acceptability of AI-based remote monitoring

General Instructions

1. Conducting the interviews

- **Present** yourself and **Thank** for participation in advance:
 - Good morning and welcome to our interview. Tanks for taking the time to join us to talk about the use of remote monitoring and artificial intelligence in Parkinson's disease. My name is **[say your name]**, and I am a researcher of the XXX University.
- Explain **shortly purpose** of interview:
 - Briefly explain the **aim** of the project: The AICCELERATE project aims to develop artificial intelligence solutions to improve efficiency and quality of patient care, contributing to medical device development by applying methods that involve both patients and clinicians.
 - Briefly explain how the **results** will be used: The results will help to create intelligent digital services using artificial intelligence that can improve the quality of care for patients with Parkinson disease. By talking with you, we will be able to develop solutions that Parkinson's patients accept, trust and use.
 - Briefly explain **people's selection** for the interview: we selected Parkinson's disease patients who have had Parkinson's for more than 2 years and use levodopa at least 3 times a day.
- Put interviewee at ease:
 - We can call each other by the first name, if you want to be called by the last name let us know.
 - Your responses will be treated confidentiality. Your name will be removed from the transcriptions and will not be used in any report.
 - Your participation is voluntary, you do not have to answer anything you do not feel comfortable answering.
 - You can stop the interview at any time, without having to give a reason.

- There are no right or wrong answers, feel free to share your point of view.
- The interview audio will be digitally recorded. The session will be recorded to ensure we hear and understand all your comments.
- The interview will last approximately 45 minutes to an hour.
- Finally, rules for cell phones apply. Please, turn off your phone.
- The patients' interview guide includes questions at multiple levels
 - Each of the questions marked with numbers (e.g., 1.; 2.) should be posed during the interview
 - Sub-questions marked with letters (e.g., a.; b.) need to be addressed. However, if the subject is already discussed after posing the main question, the question does not need to be asked explicitly

Probes are merely provided as conversation starters and do not need to be covered.

2. Start the recording

3. Begin the Interview

Part 1 - Questions regarding the progression of the disease and the current clinical assessment for Parkinson's disease severity

1. Can you tell me about the moment you were diagnosed with Parkinson's disease? How has your disease progressed since then?
Probes: Onset, evolution of the symptoms.
2. Could you describe how your condition is currently followed?
Probes: Where? How often? By whom?
 - a. Why is it important to you that your disease is monitored?
 - b. How do you feel when your disease progression is assessed (Bad feeling/Good feeling)?
 - c. Tell me about positive and negative aspects of the follow up in current care.
 - d. Tell me about positive and negative aspects of the current monitoring processes.

Part 2 - Questions regarding remote monitoring and AI for Parkinson's disease

Now, we will ask you some questions related to the use of wearable devices.

1. Imagine the doctor could monitor your disease remotely using a wearable device such as a smart watch. What do you think about that?
 - a. Based on your current experience with the disease, which benefits do you foresee?
 - b. What downsides do you see?

2. How would you like to be monitored at home?
 - a. What would be the best part of the body to wear the device? Describe three parts of the body that you would prefer to wear the device in order of preference.
 - b. What are your feelings about more than one device?
 - c. How do you feel about others seeing the device?
 - d. How would you feel about a camera in your home?
 - e. How do you feel about having a Robot at home who helps you keep track of your medications?

If needed show some pictures of the Robot – Power Point

- f. Would you be willing to fill out short surveys or answer spoken surveys?
- g. What about reporting when you take your medicines?

Explain what AI is: Artificial intelligence or AI describes the ability of computers to think like a human. In doing so, computers can assist clinicians in their decision making by processing many types of information simultaneously. A chess computer game is an example of AI. So artificial intelligence can process much more, relevant information than the doctor can at a single time. Artificial intelligence could for instance use all the data from your Smart Watch to track your movements and identify problems relating to your disease. If the AI sees anything abnormal, it could notify your doctor.

4. What do you think about AI analyzing your data?
 - a. Do you have any concerns about the use of AI?
 - b. How do you feel about automatically sharing your data with your clinic/doctor over the Internet?

Part 3 - Closing

1. Does the second attending interviewer have any questions?
2. Is there anything else you would like to share with us about what we have discussed?
3. Do you have any questions?