SUPPLEMENTAL FILE 1: INTERVIEW TOPIC GUIDE

Main questions formed the core structure of the interview, further follow-up questions were put forward dependent on initial response.

- What methods would you currently use for monitoring and feedback during patient rehabilitation?

Example of follow-up questions:

- What about outside of the clinic?
- When do you employ these methods?
- Does that provide the information that you need? Why?
- Do you know anything about wearable technology?
 Example of follow-up questions:
 - If so tell me what you know, how they're used and your view of them.
 - Why do you have that view of them?
 - What do you think are the benefits / drawbacks of those you're aware of?
- What do you think are the opportunities of using technology in orthopaedic rehabilitation?

Example of follow-up questions:

- Have you been involved in / are you aware of any projects taking place?
- Why do you think technology might help in that instance?
- Equally what do you think are the challenges? Example of follow-up questions:
 - What do you think the risk would be when encountering that challenge?
 - How do you think those challenges could be overcome?
- What do you think of the role of mobile phones and tablets in monitoring of patients?

Example of follow-up questions:

- You say you think it'd be useful, in what way could it help?
- Why do you think smart phones can play that role?

DEMONSTRATION OF EXEMPLAR SYSTEM PROVIDED

- Having used this technology, what do you think about using software like this for this purpose?

Example of follow-up questions:

- Why does this system have that effect?
- You think it'll improve the quality of rehabilitation How?

- How did you find using this particular application?
- What impact do you think this could have for patient rehabilitation? Example of follow-up questions:
 - And what about any impact on your practice?
 - How do you see the difference using that might have on the way you work?
- Based on your experience, what could be improved in the system? Example of follow-up questions:
 - What did you think about the way the information was presented in the app?
 - Did you encounter any difficulties whilst using the software, any tasks that you found difficult or technical issues?
 - How would you comment on the user experience of the system?
 - What else needs to be considered in the design of the system?