

The Usability of Mobile Devices for Elderly patients

I am undertaking research into the current strain the National Health Service is having in regard to the strain on beds for patients, and the problems the healthcare industry are having specifically with the elderly staying in hospital much longer than necessary. Bed-blocking has risen more than 40% in a year as hospitals continue to be overwhelmed with people needing care.

This questionnaire will help determine your opinions on the current care that is being provided to elderly patients, and how this could be improved upon, specifically through the use of technology.

The aim of the project is to determine a solution that could be useful for elderly patients, when they have come out of hospital, in order to help care for their own medical needs without the constant need for help from social workers. The aim is to ease the pressure for the workers in the NHS.

I am not a medical professional myself, I am trying to gather research so that I can plan my project effectively. Therefore, I apologise if the questions do not show a great medical understanding. This is why I need your results to the questionnaire, so that I can learn more from the results and feedback gathered.

Your response is appreciated, and will be very important in determining the best fit solution for patients.

The questionnaire should only take 5-10 minutes to complete. Thank you, your feedback is very valuable!

*Required

Demographics

This section is to determine your relation in regard to the NHS. The answers will be kept anonymous, and no identifiable questions will be asked.

Question 1

1. What is your occupation? *

Question 2

2. Which age group do you fall in to? *

Mark only one oval.

- 18-23
- 24-29
- 30-39
- 40-59
- 60+

Question 3

3. How are you related to the medical field? *

Mark only one oval.

- GP
- Surgeon
- Nurse
- Social Worker
- Carer
- Medical Student
- Junior Doctor
- Other: _____

Question 4

4. How many years experience have you had working in the medical field? *

Mark only one oval.

- None
- 1-5 years
- 6-10 years
- 11-20 years
- 21-30 years
- 30+

Medical Experience

For the following questions, I would like you to think about your own experience, and everything you have seen, heard or read recently in the news and media

Question 5

5. Have you ever been in a situation where an elderly person you know has been well enough to be discharged from hospital, but could not do so due to lack of care when at home? *

Mark only one oval.

- Yes
- No
- Other: _____

Question 6

6. Hospital records suggest nearly three-quarters of NHS trusts had seen patients stranded for more than 100 days in the past three years. Do you feel this can lead to further complications if elderly people are left in the hospital for longer than is necessary? *

Mark only one oval.

- Yes
- No
- Depends on the individual, and their health condition
- Other: _____

Question 7

7. From your experience, how would you rate the communication between the hospital and the social care? *

Mark only one oval.

- Extremely Poor
- Poor
- Adequate
- Satisfactory
- Good
- Great
- Other: _____

Question 8

(Optional)

8. Based on your previous answer to Question 7, please explain why you selected this option.

Question 9

9. What do you feel puts the most pressure on the NHS to deliver the service it provides? If 'Other', please explain your answer. Please select all that apply. *

Tick all that apply.

- Ageing population
- Lifestyle factors
- A&E departments
- Rising costs
- Change in people's expectations
- Advances in medicine and technology
- Lack of integration between the hospital and social care
- Poor social care resources
- Other: _____

Technology

I am looking into determining a prototype technology which could potentially help elderly patients who have recently been discharged from hospital, to help keep track of their mobility, vitals and track their medicine intake. The following questions will help to determine the most important factors you feel would be necessary for this.

Question 10

Consider an application which allows a patient who has just been discharged from hospital after having an operation. The app would allow the patient to send their Blood Pressure/Heart Rate to their GP/Social Worker/Carer (dependent on the individual) regularly.

10. Based on the above scenario, do you think the discharged patient would benefit from an application such as this? If 'Other', please elaborate. *

Mark only one oval.

- Yes
- No
- Other: _____

Question 11

Consider an application which allows a patient who has just been discharged from hospital after having an operation. The app would allow the patient to send their Blood Pressure/Heart Rate to their GP/Social Worker/Carer (dependent on the individual) regularly.

11. Have you ever used a similar app to the one described above? *

Mark only one oval.

- Yes, for myself
- Yes, for a patient
- No
- Other: _____

Question 12

Consider a patient who has recently been discharged from hospital after an operation, and has been ordered by their GP that they must be relatively active throughout the day. If the patient kept still too long, their health would deteriorate. This would also benefit patient's whose awareness is poor. The patient has an app that sends regular updates to their GP/Social Worker if they are not completing their daily tasks.

12. Based on the above scenario, what do you think would be the most important features for this application? Please select all that apply. If 'Other', please suggest your opinion. *

Tick all that apply.

- Ability to send mobility activity via the app to patient's GP
- Ability to send mobility activity via the app to patient's Social Worker
- Ability to send mobility activity via the app to the patient's family
- Ability to call 111 or 999 at the press of a button
- Alerts to family members if patient is wandering or leaving the house at odd hours
- Other: _____

Question 13

Consider a patient who has been ordered to monitor their blood pressure every day for a month after being discharged from the hospital. The patient has an application that would allow them to take their blood pressure (and other vitals) without the need for a carer to take their readings.

13. What do you think would be the most important features for a mobile application that would monitor the patient's vitals? If 'Other', please suggest your opinion. *

Tick all that apply.

- Easy to monitor vital signs without extra equipment
- Ability to send information to GP/Social Worker
- Daily reminders to ensure the correct vitals have been checked
- Auditory commentary on how to complete tasks
- Ability to track and view history of previous vital recordings
- Tailored reminders dependent on patients home-care plan
- Other: _____

Question 14

Consider a patient who has several medications to take throughout the day, and needs to monitor their intake, and the times they take their medication.

14. What do you think would be the most important features for a mobile application that would remind patient's to take their medicine? If 'Other', please suggest your opinion. *

Tick all that apply.

- Track prescriptions
- Refill reminders
- Alarms to remind the patient to take medicine
- Images of medication so patient can identify which pill to take
- Alert sent to GP/Social Worker if medication has not been taken
- Other: _____

Question 15

Please answer this question using the information from the previous questions. The apps that would track mobility, vital signs and medication reminders for the recently discharged from hospital elderly patients.

15. **What features of an application do you feel would be most appropriate for an app for the elderly? Please select all that apply. ***

Tick all that apply.

- Ability to change text size
- Ability to change font style
- Ability to change colour scheme
- Simple design
- Auditory guidance
- Large icons
- Clear instructions
- Simple navigation
- No unnecessary features
- Positive feedback when an action is completed
- Limit the usage of multi-touch gestures within the app
- Other: _____

Question 16

The question is specific for the features necessary for the medical professional, such as yourself.

16. **What features would you, (as a medical professional) like to see on the app? ***

Tick all that apply.

- Ability to manage multiple patient's at the same time
- Non-intrusive notifications
- Reminders to check on specific patients
- Alerts if patient has been inactive for a specific amount of time
- Ability to share information with other medical professionals
- Patient profiles connected through those who need access to their profile
- Easy to use
- Other: _____

Thank you for completing this questionnaire!

I really appreciate all your feedback! If you would like to stay anonymous for the survey, the following questions are not required. Please don't forget to click 'Submit' at the bottom so your response is still received!

I am hoping to use this information in order to create a prototype application that will hopefully support the elderly as they return from hospital. As the study continues, I will require some more support in providing feedback on my prototype design. If you are happy to be contacted again, to help provide further feedback for this project, please fill in your email address below.

Thanks again for your valuable feedback.

17. Please enter your email address

18. What Mobile Operation System do you prefer?

Mark only one oval.

- Apple iOS
- Android
- No Preference
- Neither

19. Do you think there is anything that could be done to improve this questionnaire?

