

Appendix 2 - Electronic survey

Using technology to deliver the exercise component of cardiac rehabilitation

Start of Block: Default Question Block

Background Information Cardiac Rehabilitation is a vital treatment for patients recovering from a cardiac event. Exercise is a core component of a comprehensive cardiac rehabilitation programme, however, the outbreak of Covid-19 has meant that patients in many countries can no longer attend assessments and exercise classes in person. As a consequence, healthcare services have had to adopt new ways of working to ensure that their patients continue to receive cardiac rehabilitation services. Anecdotal evidence suggests that some cardiac rehabilitation services have begun using technology to deliver their assessments, physical activity advice, and/or exercise programmes remotely. The Covid-19 outbreak may therefore represent a step-change in services capacity to use the technology when the disease is brought under control. This may provide an opportunity to increase participation in cardiac rehabilitation among those who are unable or unwilling to travel to centre-based cardiac rehabilitation. This brief survey is designed to help the British Association for Cardiovascular Prevention and Rehabilitation understand if, or how, technology is being used to deliver the exercise component of cardiac rehabilitation. It will also capture professional experiences of using technology to deliver exercise-based cardiac rehabilitation and obtain an estimate of the patient demographic that are engaging with alternative delivery methods of cardiac rehabilitation.

Page Break

Thank you for taking the time to complete our brief survey. It should take approximately 10 minutes to complete. We have asked you to complete this survey because you are involved in the delivery of exercise-based cardiac rehabilitation and we want to understand how your practice has changed in relation to the COVID-19 outbreak. By proceeding to the next page of the survey you are providing consent to take part in the study. Only information that is essential to answer our research question will be collected. Any information collected will be helpful, and will be processed in accordance with the General Data Protection Regulation (2018). If you would like to withdraw from the study, just exit the web page. We will keep the responses you have provide even if you don't complete the whole survey. If you would like any information about data protection or the study, please contact: Dr Simon Nichols Advanced Wellbeing Research Centre Collegiate Hall Collegiate Crescent Sheffield Hallam University S10 2BP s.j.nichols@shu.ac.uk

Next page (1)

Page Break

Screening Q Have you previously completed this questionnaire?

- Yes (1)
- No (2)

Q1 Which phase of cardiac rehabilitation do you work in: (please tick the phase which you spend most of your time)

- Phase I (1)
 - Phase II (2)
 - Phase III (3)
 - Phase IV (4)
-

Q2 Which country do you work in?

- England (1)
 - Northern Ireland (2)
 - Scotland (3)
 - Wales (4)
 - Non-UK (please state) (5) _____
-

Page Break

Q3 Have you continued to provide exercise-based cardiac rehabilitation services during the COVID-19 outbreak?

- Yes – We are able to see as many patients as we did before the COVID-19 outbreak (1)
 - Yes – But we aren't able to see as many patients as we did before the COVID-19 outbreak (2)
 - No – All services have been cancelled/there are no staff to run our programmes (3)
-

Q4 Since the COVID-19 outbreak, has your service found that:

- The same number of patients are accessing exercise-based cardiac rehabilitation (1)
 - Fewer patients are accessing exercise-based cardiac rehabilitation (2)
 - No patients are accessing exercise-based cardiac rehabilitation (3)
-

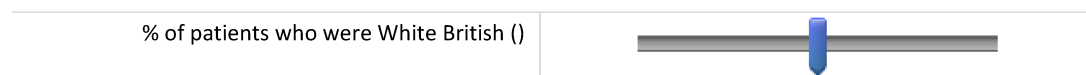
Page Break

Q5 Are the patients you are currently treating representative of the patients you would treat under normal circumstances, with respect to ethnicity?

- No - my patient population is less diverse (1)
- Yes - my patient population is as diverse as normal (2)
- No - my patient population is more diverse (3)

Q6 Only answer this question if you are a UK centre. Approximately what percentage of the patients you saw in the last 7 days were White British?

0 10 20 30 40 50 60 70 80 90 100



Page Break

Q7 Are the patients you are currently treating representative of the patients you would treat under normal circumstances, with respect to age?

- No - my patient population is younger (1)
- Yes - the age group of my patients is similar to normal (2)
- No - my patient population is older (3)
-

Q8 Approximately what percentage of the patients you saw in the last 7 days were over 65 years old?



Page Break

Q9 Are the patients you are currently treating representative of the patients you would treat under normal circumstances, with respect to female participation?

- No - the proportion of female participants is smaller (1)
- Yes - the proportion of female participants is the same (2)
- No - the proportion of female participants is larger (3)

Q10 Are the patients you are currently treating representative of the patients you would treat under normal circumstances, with respect to male participation?

- No - the proportion of male participants is smaller (1)
- Yes - the proportion of male participants is the same (2)
- No - the proportion of male participants is larger (3)

Q11 Approximately what percentage of the patients you saw in the last 7 days were female?

0 10 20 30 40 50 60 70 80 90 100



Page Break

Q12 Are you using any of the following technology to deliver a cardiac rehabilitation exercise assessment? (tick all that apply)

- Paper/postal services (1)
- Telephone (2)
- Text messaging (3)
- E-mail (4)
- Recorded video e.g. YouTube (5)
- Live video conferencing e.g. Zoom, Skype, Microsoft Teams, Facebook (6)
- Other (please state) (7) _____
-

Q13 How are you assessing functional capacity during your assessment? (tick all that apply)

- I am not assessing functional capacity (1)
- Self-reported fitness (2)
- Duke Activity Status Index/Other questionnaire (3)
- Step count from patients own physical activity tracker (4)
- Remotely supervised exercise test (please state which test) (5)

- Other (please state) (6) _____
-

Q14 Are you using any of the following technology to deliver the physical activity/exercise component of cardiac rehabilitation? (tick all that apply)

Paper/postal services (1)

Telephone (2)

Text messaging (3)

E-mail (4)

Recorded video e.g. YouTube (5)

Live video conferencing e.g. Zoom, Skype, Microsoft Teams, Facebook (6)

Other (please state) (7) _____

Page Break

Q15 Did you use this technology before the COVID-19 restrictions?

- Yes (1)
- No (2)



Q16 On approximately what date did you start using this technology?

Q17 If you used remote technology before the COVID-19 restrictions, have you found that:

- The same number of patients are accessing exercise-based cardiac rehabilitation using technology (1)
- Fewer patients are accessing exercise-based cardiac rehabilitation using technology (2)
- No patients are accessing exercise-based cardiac rehabilitation using technology (3)

Page Break

Q18 Are you able to use technology to deliver exercise-based cardiac rehabilitation to: (tick all that apply)

Low risk patients (1)

Moderate risk patients (2)

High risk patients (3)

Q19 I am able to offer physical activity recommendations to patients that have not had an assessment in person? (i.e. in the same room as the assessor)

Yes (1)

No (2)

Q20 I am able to offer an exercise prescription to patients that have not had an assessment in person? (i.e. in the same room as the assessor)

Yes (1)

No (2)



Q21 Can you briefly describe what kind of physical activity recommendations you are making and/or exercises you are prescribing?

Examples may include chair-based exercise, resistance bands, walking, running on the spot and body weight exercises.

Page Break

Q22 How many supervised physical activity/exercise training sessions can a patient attend, each week?

Q23 Are the physical activity/exercise sessions you are supervising: (tick all that apply)

Group exercise (1)

One-on-one (2)



Q24 How long is each supervised physical activity/exercise session? Please provide your answer in minutes.

Page Break



Q25 How many unsupervised physical activity/exercise training sessions are you prescribing for a patient, each week?



Q26 How long is each unsupervised physical activity/exercise session? Please provide your answer in minutes.

Page Break

Q27 What intensity range do you recommend/prescribe? (tick all that apply)

Low (e.g. RPE 11) (1)

Moderate (e.g. RPE 13) (2)

High (e.g. RPE 15) (3)

Q28 Is this intensity: (Tick one option only)

Lower than normal (1)

The same as normal (2)

Higher than normal (3)

Page Break

29 Do you think that the programmes you are providing are: (Tick one option only)

- More effective than normal (1)
- As effective as normal (2)
- Less effective than normal (3)

Page Break

Q30 What barriers have you encountered when using technology to deliver cardiac rehabilitation?
(tick all that apply)

- No barriers (1)
- Patients have no internet connection (2)
- Patients do not have access to computers/tablets/smart phone (3)
- Patients are not confident in using technology (4)
- Patients are concerned about personal safety (5)
- Patient lack of interest in receiving services using technology (6)
- My Trust/Health Board /employer do not support the delivery of health services using technology (7)
- Internet security and patient confidentiality concerns (8)
- Professionals are not confident in delivering services using technology (9)
- Professionals are concerned about patient safety (10)
- Other (please specify) (11) _____

Page Break

Q31 How many adverse events resulting in minor injury have been reported since you have started delivering cardiac rehabilitation remotely? Please only report incidents that are related to exercise-based cardiac rehabilitation.

Page Break



Q32 How many adverse events resulting in life changing injury have been reported since you have started delivering cardiac rehabilitation remotely? Please only report incidents that are related to exercise-based cardiac rehabilitation.

Page Break



Q33 How many adverse events resulting in death have been reported since you have started delivering cardiac rehabilitation remotely? Please only report incidents that are related to exercise-based cardiac rehabilitation.

Page Break

Q34 Do you think that the way you are using technology now should be an option for patients in your future standard practice?

Yes (1)

No (2)

Page Break



Q35 Is there anything else you would like to tell us about your experience or approaches to delivering exercise-based cardiac rehabilitation using remote technology? (500 characters max)

End of Block: Default Question Block
