

COVID-19 and cardiac rehabilitation

NICHOLS, Simon <<http://orcid.org/0000-0003-0377-6982>>

Available from Sheffield Hallam University Research Archive (SHURA) at:

<http://shura.shu.ac.uk/26909/>

This document is the author deposited version. You are advised to consult the publisher's version if you wish to cite from it.

Published version

NICHOLS, Simon (2020). COVID-19 and cardiac rehabilitation. *British Journal of Cardiology*, 27 (2), 41-72.

Copyright and re-use policy

See <http://shura.shu.ac.uk/information.html>

Retention of cardiac rehabilitation services during the COVID-19 pandemic

A joint position statement from the

British Association for Cardiovascular Prevention and Rehabilitation (BACPR)

British Cardiovascular Society (BCS)

British Heart Foundation (BHF)

The COVID-19 pandemic is arguably one of the greatest public health challenges of our time, however, cardiovascular disease (CVD) remains the most common global cause of morbidity and mortality with over 18 million deaths per year. Understandably, hospitals have postponed non-critical services so that healthcare professionals can be deployed to areas dealing with patients who have the COVID-19 virus. However, there remains an ongoing need to assess, support and rehabilitate those who have CVD or are newly diagnosed with it to prevent the significant risk of unintended, yet significant consequences in the long-term. The consequence of withdrawing or offering only minimal cardiac rehabilitation services is that there is likely to be an increase of 30% of unplanned hospital admissions of CVD patients for those eligible resulting in substantially reduced health-related quality of life, compromised mental health, and decreased daily activity / functional ability.

Cardiac rehabilitation is an evidence-based treatment which has been demonstrated to be highly effective in reducing morbidity and mortality in people with existing CVD. We know from BACPR members and from patients that cardiac rehabilitation programmes have been either withdrawn completely or are providing minimal services. Patients who require and are known to benefit from cardiac rehabilitation should not be left unsupported, particularly at this time. Although much of cardiac rehabilitation is normally delivered face-to-face in centre-based settings there is evidence that home / web / manual-based cardiac rehabilitation is effective when delivered by appropriately qualified health and exercise professionals. Services have been very fast to respond to the COVID-19 outbreak, with many initiating online / virtual services to maintain support for some patients. These resources will continue to develop in the future, benefitting all patients with heart or circulatory conditions through expansion of the reach of innovative practice in the home, and in community settings. These digitally supported options are an important part of reimagining cardiac rehabilitation for the future.

Recent trends have seen a substantial reduction (circa 37%) in people presenting to hospital with cardiac symptoms, often too worried about contracting COVID-19 to go to hospital. We know that time to reperfusion is critical in reducing myocardial damage and so the consequences of patients presenting much later, often with more severe symptoms, are that they are likely to have severe long-term problems including heart failure but they may also suffer premature, preventable death. Other CVD patients have concerns about continuing with certain medications such as Angiotensin Converting Enzyme Inhibitors, that have been incorrectly associated with worse outcomes if COVID-19 is diagnosed. Abrupt cessation of these medications is likely to adversely affect cardiovascular health and must be avoided. The COVID-19 virus also seems to have substantial effects on the cardiovascular system with catastrophic consequences, including thrombosis, acute myocarditis, heart failure, and arrhythmias. People who had no prior cardiovascular history, who are acutely unwell with COVID-19, and who survive to discharge, could have lasting CVD consequences and so post-virus cardiac rehabilitation support for those patients will be essential.

Cardiac rehabilitation teams would ordinarily support patients with CVD to be active in self-managing their condition, improve their physical and mental health outcomes, enhance their quality of life and medication concordance, all of which results in fewer hospital admissions and a better quality of life. The aim during the COVID-19 pandemic is to lessen the unnecessary burden on acute NHS services and so cardiac rehabilitation should be in place to support that and reduce the deleterious effects on the healthcare system.

In the future, as the risk of COVID-19 decreases further, cardiac rehabilitation teams will need to determine when group-based sessions can safely resume, and these should be brought back as early as possible to complement digital offerings. In the long-term, it will be important to maintain digital services alongside face-to-face forms of rehabilitation to improve choice for patients and help increase uptake of services, particularly among those groups that are currently poorly represented.

This position statement therefore sets out what cardiac rehabilitation services should be prioritised at this time of COVID-19 (See Appendix 1). It should be stressed that all efforts to adhere to the BACPR Standards and Core Components of cardiovascular prevention and rehabilitation provision should be made. Most

certainly, comprehensive cardiac rehabilitation should be reinstated as soon as practicably possible.

Support for cardiac rehabilitation is available from BACPR and resources can be accessed using the BACPR website. The online BACPR Forum is supported by BACPR Council and so questions and queries can be posted there, and we will answer.

BACPR / BCS / BHF strongly recommend that priority patients should continue to be offered cardiovascular prevention and rehabilitation support during the NHS response to COVID-19.

May 2020



Appendix 1

Recommended minimum provision in relation to BACPR Standards during NHS response to COVID-19.

| BACPR Standard | |
|----------------|--|
| Standard One | Cardiac rehabilitation should be provided by appropriately qualified healthcare and / or exercise professionals |
| Standard Two | <p><u>Eligible patients:</u> As a <u>minimum</u> the following priority patient groups should be offered cardiac rehabilitation:</p> <ul style="list-style-type: none"> • Acute coronary syndrome • Coronary revascularisation • Heart failure <p><u>Referral:</u> Referral methods for cardiac rehabilitation should continue in the normal manner if possible and ideally within 24-hours after patient discharge from hospital.</p> <p><u>Recruitment:</u> Cardiac rehabilitation professionals should contact priority patients by telephone within 3 working days.</p> |
| Standard Three | <p>Initial assessment of patients' rehabilitation needs and personalised goal setting should be completed within 10 working days after receipt of referral. Consideration should be given to conducting the initial assessment by telephone / video consultation.</p> <p>Initial assessment should consist of:</p> <ul style="list-style-type: none"> • Medical history • Assessment of lifestyle risk factors • Assessment of psychosocial health • Medical risk management (including medication concordance and symptoms management education and advice) <p>Formal assessment of functional capacity may not be possible but telephone assessment, knowledge of previous history and investigations and patient self-reported functional capacity (e.g. left ventricular ejection fraction, history of arrhythmia / symptoms) can assist with risk stratification for exercise and physical activity.</p> <p>The written cardiac rehabilitation care plan should define the pathway of care while meeting the individual patient needs, participation preferences and choices.</p> |
| Standard Four | <p>Using a menu-based approach consideration should be given to home-based, manual-based or web-based cardiac rehabilitation dependent on patient choice and availability.</p> <p>The duration should last a minimum of 8 weeks.</p> |
| Standard Five | <p>Where possible, on cardiac rehabilitation completion a final assessment of individual patient needs should be conducted by telephone / video consultation.</p> <p>Maintain referral / signposting to community-based support services, such as online / virtual classes and support with home-based activities for long-term maintenance.</p> |
| Standard Six | Where relevant and possible, data to the National Audit for Cardiac Rehabilitation (NACR) should be submitted. |