

This is a repository copy of *Alternative Models of Cardiac Rehabilitation Delivery Urgently Needed to Improve Access for Heart Failure Patients*.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/176743/>

Version: Accepted Version

Article:

Taylor, Rod S, Zinckernagel, Line, Thygesen, Lau Caspar et al. (2 more authors) (2021) Alternative Models of Cardiac Rehabilitation Delivery Urgently Needed to Improve Access for Heart Failure Patients. JACC. Heart failure. pp. 608-609. ISSN 2213-1787

<https://doi.org/10.1016/j.jchf.2021.04.015>

Reuse

This article is distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND) licence. This licence only allows you to download this work and share it with others as long as you credit the authors, but you can't change the article in any way or use it commercially. More information and the full terms of the licence here: <https://creativecommons.org/licenses/>

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.

Alternative models of cardiac rehabilitation delivery urgently needed to improve access for heart failure patients.

Short title: Alternative models of rehabilitation delivery needed

Rod S Taylorⁱ, Line Zinckernagelⁱⁱ, Lau Caspar Thygesenⁱⁱⁱ, Patrick Doherty^{iv}, Hasnain Dalal^v

- i. Rod S Taylor. MSc, PhD, MRC/CSO Social and Public Health Sciences Unit & Robertson Centre for Biostatistics, Institute of Health and Well Being, University of Glasgow
- ii. Line Zinckernagel, MSc, PhD, National Institute of Public Health, University of Southern Denmark, Copenhagen, Denmark
- iii. Lau Caspar Thygesen, PhD. National Institute of Public Health, University of Southern Denmark, Copenhagen, Denmark
- iv. Patrick Doherty, PhD. Department of Health Sciences, University of York, YO10 5DD, UK
- v. Hasnain Dalal MD, University of Exeter Medical School, Primary Care Research Group, Knowledge Spa, Royal Cornwall Hospital, Truro, Cornwall, UK

Address for correspondence

Professor Rod Taylor MSc, PhD

Chair of Population Health Research, Institute of Health and Well Being

MRC/CSO Social and Public Health Sciences Unit, University of Glasgow

Berkeley Square

99 Berkeley Street

Glasgow

G3 7HR

rod.taylor@gla.ac.uk

Phone 44 7968 152537

We read with interest the study, “Temporal trends and factors associated with cardiac rehabilitation utilization among Medicare beneficiaries with heart failure with reduced ejection fraction”.¹ Pandey et al show that only 2.2%-4.3% of patients with HF participated in CR within 6-months of discharge from hospital or outpatient visit. In this letter, we share recent European experience that underscore the importance of these findings.

The National Health Service (NHS) in England have set the ambitious target of increasing CR participation for HF from <10% to 33% by 2023.² However, a two-third decrease in HF patient CR attendance in UK has been seen in the 6-month periods from August 2019 to January 2020 (‘pre-COVID’) of 3,612 (6.8%) to 1,935 (5.4%, February-July 2020 (‘post-COVID’).³ With national public measures of lock down, there was a increase in the proportion of patients enrolling to home-based CR programmes (22.2% to 72.4%) in this same period. We are working with NHS providers to roll out the home-based REACH-HF programme to enhance access for HF patients.⁴

We recently undertook an analysis of all patients in Denmark with incident HF (33,257) from 2010 to 2018.⁵ Although, focused on referral (≤120 days of hospital admission) rather than CR participation, it still shows the problem of CR access in that only one in two HF patients in Denmark are referred to CR. Subgroups of HF patients found to be with highest risk of poor access were those who were older age, unemployed/retired, living alone, non-Danish, of lower education, and multimorbid.

In close, despite robust evidence of benefit, global participation in CR for HF remains stubbornly low. The challenge of COVID-19 pandemic offer us a unique opportunity to ‘fast-track’ the development/implementation of home-based CR to improve CR access for people with HF and their families.

References

1. Temporal Trends and Factors Associated with Cardiac Rehabilitation Utilization among Medicare Beneficiaries with Heart Failure with Reduced Ejection Fraction. Pandey A, Keshvani N, Zhong L, Mentz M, Piña IL, DeVore AD, Yancy C, Kitzman DW, Fonarow GC. *JACC HF*. 2021 (reference details to be added)
2. UK Department of Health, Cardiovascular Disease Outcomes Strategy, 5th March 2013
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/217118/9387-2900853-CVD-Outcomes_web1.pdf
3. National Audit of Cardiac Rehabilitation (NACR) *Quality and Outcomes Report 2020*.
<https://www.bhf.org.uk/information-support/publications/statistics/national-audit-of-cardiac-rehabilitation-quality-and-outcomes-report-2020>

4. Dalal HM, Taylor RS, Wingham J, Greaves CJ, Jolly K, Lang CC, Davis RC, Smith KM, Doherty PJ, Miles J, van Lingen R, Warren FC, Sadler S, Abraham C, Britten N, Frost J, Hillsdon M, Singh S, Hayward C, Eyre V, Paul K. A facilitated home-based cardiac rehabilitation intervention for people with heart failure and their caregivers: a research programme including the REACH-HF RCT. Southampton (UK): *NIHR Journals Library*; 2021 Feb. PMID: 33617178.
5. Thygesen LC, Zinckernagel L, Dalal H, Egstrup K, Glümer C, Grønbæk M, Holmberg T, Køber L, la Cour K, Nakano A, Nielsen CV, Sibilitz KL, Tolstrup JS, Zwisler AD, Taylor RS. *Cardiac rehabilitation: Nationwide study of predictors of referral and outcomes*. Abstract submitted to 24th Rehabilitation World Congress, Sept 7th-9th 2021, Aarhus, Denmark.