VALIDITY AND RELIABILITY OF SHORT-TERM HEART-RATE VARIABILITY FROM DISPOSABLE ELECTROCARDIOGRAPHY LEADS

1Nduka Charles Okwose*, 1Sophie Lauren Russell, 1Mushidur Rahman, 1Charles James Steward, 1Amy Elizabeth Hanwood, 1Gordon McGregor, 2Srdjan Ninkovic, 1Helen Maddock, 1Pritwish Banerjee, 1Dijorde G Jakovljevic. 1Cardiovascular and Lifestyle Medicine Research Theme, Faculty Research Centre (CSFL), Institute for Health and Wellbeing, Faculty of Health and Life Sciences, Coventry University, Coventry, CV1 2DS, UK; 2Department of Surgery, Faculty of Medical Sciences, University of Kragujevac, Clinical Centre, Kragujevac, Serbia; 3Department of Cardiology, University Hospitals Coventry and Warwickshire NHS Trust, Coventry, UK

Aim The aim of this study is to conduct a narrative review of the HM over the last 30 years, considering its outcomes as a HBCRP.

Results The search revealed 48 papers; 7 studies were already included in the 2011 systematic review (SR), with 4 new papers remaining and 1 grey-paper, others were duplicates. Of the studies and those included in SR, 9 reported on efficacy, 4 on programme adherence, and 2 on qualitative outcomes (1 digital-HM, 1 HM patient reported outcomes). Outcomes on efficacy and adherence were all positive. Qualitative findings (n=2) cited positive attitudes towards the HM from patient representatives, general user-friendliness and useful content. An audit on HM patient feedback reported high engagement with health behaviour change(s), positive gains from psychosocial support, and improved understanding and awareness of condition. A grey-paper on patient reported outcomes during COVID-19 reported improvements in managing other health conditions, including diabetes, blood pressure, and mental health, through using the HM. Patients also reported feeling reassured by the HM.

Conclusion The HM continues to be the most widely studied HBCRP, and has played a key role in demonstrating the effectiveness of HBCRP over the last 30 years. Recent surveys have shown reported benefits in managing other health conditions, accessibility, and providing psychological support.

IMPLEMENTING A HOME-BASED CARDIAC REHABILITATION PROGRAMME FOR PEOPLE WITH HEART FAILURE AND THEIR CAREGIVERS: FINDINGS FROM THE SCOT: REACH-HF STUDY

1Rod Taylor, 1Carrie Purcell*, 1Anthony Punvis, 2John Cleland, 1Aynsley Cowie, 2Hasnain Dalal, 1Tracy Ibbotson, 2Clare Murphy, 1MRC/CSO Social and Public Health Sciences Unit, University of Glasgow, Glasgow G3 7QR, UK; 2Robertson Centre for Biostatistics, University of Glasgow, Boyd Orr Building University of Glasgow, Glasgow G12 8QQ, UK; 3NHS Ayrshire and Arran, Lister Centre, University Hospital Crosshouse, Kilnamannock Road, Crosshouse, Kilnamannock KA2 0BE, UK; 4University of Exeter, St Luke’s Campus, Heavitree Road, Exeter, EX1 2LU, UK; 5General Practice and Primary Care, University of Glasgow, 1 Horseclegh Road, Glasgow, G12 9LX, UK; 6NHS Greater Glasgow and Clyde, Royal Alexandra Hospital, Carsebar Dr, Castlehead, Paisley PA2 9PP, UK

Aim Despite robust evidence and national guidance recommending cardiac rehabilitation (CR) for heart failure (HF), access remains poor, a situation magnified by COVID-19. The Rehabilitation EnAblement in CHronic Heart Failure (REACH-HF) randomised controlled trial demonstrated the clinical and cost-effectiveness of a novel home-based CR self-management programme. The SCOT:REACH-HF study was