

11165**Outcomes from a digital cardiovascular prevention and rehabilitation programme delivered in Ireland during COVID 19**

Gibson I Ms, McCrudden Z Ms, Harris A Ms, Hynes L Doctor, Dunne D Ms, Murphy A Professor, Byrne M Professor, Mcevoy JW Professor

National University of Ireland, Galway, Ireland

Croí, West of Ireland Cardiology Foundation, Galway, Ireland

National Institute for Prevention and Cardiovascular Health, Galway, Ireland

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Background & Aim: COVID 19 has accelerated the uptake and acceptance of digital health tools for the prevention and management of Cardiovascular Disease. With health systems being urged to learn from the pandemic and to reassess how they will deliver services in future, robust audit and evaluation of digital interventions are required to inform best practice.

This study aims to evaluate the clinical outcomes of a digital CVD prevention and rehabilitation programme which was established during COVID 19 to provide cardiac patients with efficient and timely access to a home-based, structured, comprehensive programme of care.

Methods: Developed and delivered by an interdisciplinary team (Nurse Prescriber, Physiotherapist, Dietitian, Cardiologist), the core components of this 12 week programme included, behavioural change support, lifestyle modification, medical risk factor management and electronic prescribing of cardio-protective medication. To support self-management, patients were provided with a Fitbit, blood pressure monitor and a workbook to support goal setting and overall tracking of progress. Patients were given access to a bespoke web-based platform and invited to attend weekly (2hr) group-based sessions, which included an exercise component and an interactive educational workshop.

Results: Over a 4 month period, 105 patients were referred with an uptake rate of 73% (n=77). Of these, 97% (n=75) enrolled in the programme, with an 85% (n=64) completion rate. Significant improvements in CVD risk factors were observed between initial and end of programme assessment. The proportion of patients meeting guideline-recommended physical activity targets increased from 14 to 82% (p<0.001), mean BMI (kg/m²) reduced from 28.7 to 27.7 (p<0.001), mean Mediterranean diet score improved from 5.2 to 7.3 (p<0.001), and anxiety and depression levels ≥ 8 (Hospital Anxiety and Depression score) both reduced by more than 50% (p<0.001). The proportions achieving the recommended blood pressure (<130/80 mmHg) and LDL cholesterol targets (<1.4 mmol/L) increased from 24 to 68% (p<0.001) and 14 to 41% (p<0.001), respectively.

Conclusion: Outcomes from this programme demonstrate that digital CVD prevention and rehabilitation programmes can achieve the recommended lifestyle, medical and therapeutic targets associated with reduced CVD events and improved health outcomes. This programme represents a scalable, accessible and effective option to deliver vital CVD preventive care in the patient's home.