

BARRIERS AND MOTIVATORS IN ENGAGING WITH TECHNOLOGY-ENABLED CARDIAC REHABILITATION: A PATIENT AND HEALTH PROFESSIONAL PERSPECTIVE.

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Background Cardiovascular disease (CVD) is the leading cause of premature death and disability in Europe. Effective cardiac rehabilitation (CR) can improve mortality and morbidity rates, yet uptake of community-based CR is low (Department of Health and Children, 2010). PATHway (Physical Activity Towards Health) is a technology enabled behaviour change intervention designed to enable patients to self-manage their health.

Aims From a patient's perspective, this study aims to determine the key personal, social and physical factors that inhibit or promote a patient's capacity to engage with a technology enabled CR programme. From a healthcare professional's perspective, this study aims to explore a) opinions and preferences for the most appropriate content and most viable approach for delivery of the PATHway intervention, b) strategies for recruitment and retention of study participants, c) treatment adherence, and d) strategies to overcome barriers to the acceptability of the intervention in the proposed study.

Methods 40 individual patient interviews and 21 individual healthcare professional interviews were conducted across two sites (Dublin, Ireland and Leuven, Belgium). The COM-B model of behaviour change (Michie et al. 2011) was used to develop interview scripts and provided a framework to analyse all interviews assessing 1) capability, 2) opportunity and 3) motivation to engage with PATHway. Thematic analysis was also used (Braun & Clarke, 2006).

Results **Capability:** Some patients felt unsure of physical capability to engage with PATHway, while psychological capability could be summarized in terms of patients' psychological readiness but also technological readiness to engage with the intervention. **Opportunity:** Participants felt the main obstacles were around time, space and equipment. Patients suggested a family-wide intervention may facilitate greater opportunity for engagement. **Motivation:** Patients identified several factors that influenced motivation including goal setting, social interaction, perceptions, monitoring, personalization and present/future health and well-being. **Health professional themes** which they deemed would influence engagement with a technology-enabled intervention, including 1) capitalizing on the 'age of measurement', 2) harnessing Phase 2 connections, 3) practical 'barriers to PATHway implementation', 4) adopting a 'patient-centred approach' and 5) implementing key 'technology recommendations'.

Discussion and Conclusion This formative work has outlined key patient and stakeholder concerns regarding engagement with a technology enabled behavior change intervention in CR. Factors that inhibit and promote engagement have been explored using the COM-B framework. Motivational factors related to social interaction were deemed one of the integral aspects for engagement and adherence to PATHway. In terms of capability factors, technology ease-of-use was highlighted among patient and stakeholders as important for uptake and continued use. This project has received funding from the

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