PROJECT PROPOSAL

2025/6 Academic Entry Year – Cohort 4

Supervisory Team

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Project Details

Title: Is a digital rehabilitation intervention feasible for the management of multiple long term conditions?

Summary: Multiple Long Term Conditions (MLTC) is a growing concern within the NHS, and its effective management is vital. Evidence indicates that many long-term conditions benefit from exercise-based rehabilitation or however access is poor, and treatment is often single disease specific. Individuals seldom attend rehabilitation as it often relies on centre based interventions which presents barriers in relation to travel and time, particularly in those of working age. This project will explore the use of a digital intervention in the management of MLTC. This will be achieved through modifications of a single disease web based programme to suit the needs of those with MLTC and a feasibility study to assess the acceptance, recruitment and retention to a digital rehabilitation programme. This study will utilise

qualitative and quantitative methods and will allow for development of the applicant in the areas of rehabilitation, digital technologies and MLTC

Aim: To understand the feasibility an acceptability of a digital rehabilitation intervention in the management of Multiple Long Term Conditions (MLTC)

Background: Exercise based rehabilitation is a clinical and cost effective intervention for many single chronic conditions such as respiratory, cardiac, renal, diabetes, and long COVID, however access is limited and where available patients that attend single disease programmes are commonly living with more than one condition, termed Multiple Long Term Conditions (MLTC). Rehabilitation programmes can be burdensome, and require travel to a centre multiple times per week for a period of 6-12 weeks. This can often present a barrier to accessing this key treatment, particularly in those of working age whereby the presence of MLTC is growing. Therefore there is an appetite to deliver interventions remotely, through digital strategies. This project will aim to modify a single disease digital rehabilitation programme, and determine its feasibility as an intervention for the treatment of MLTC. The project will complement the NIHR Programme Grant PERFORM.

Research Plan: This will be a mixed methods project to adapt an intervention for multiple long term conditions, and determine the feasibility of a digital rehabilitation intervention in the management of MLTC. The project will be comprised of the following stages: 1. Qualitative needs assessment through interviews and focus groups to explore the unique needs of those with a MLTC to complete rehabilitation interventions. The needs assessment will contribute to adapting the I-Impact web-platform, a rehabilitation intervention, for those with a single chronic conditions to suit the needs of those with MLTC. 2. A quantitative feasibility study to understand the feasibility of a digital rehabilitation intervention for those with MLTC and suitable for a single disease programme (i.e respiratory, cardiac, diabetes, renal, painful conditions, long COVID). This study will recruit participants from single disease clinics, who meet the criteria for MLTC and are eligible for a rehabilitation intervention for their single disease. Outcomes will explore recruitment, retention, adherence and completion. This feasibility study will also incorporate user testing video diaries, requiring participants to report their experiences of using the programme, any thoughts, frustrations and suggestions in real time whilst Google analytics will allow a deeper dive into digital engagement and pathways.

Expected outcomes and impact: This project will allow for the development/modification of a digital rehabilitation to suit the needs of those living with MLTC and determine the feasibility of recruiting individuals to a digital rehabilitation programme.