Development of an intervention to improve adherence to medication in older patients with heart failure

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Background

Heart failure (HF) is a serious global health challenge effecting approx. 1-2% of the adult population in developed countries. Despite recent advances in treatment, survival rates remain comparable with most common cancers with hospital admissions for HF having significant cost implications for global healthcare systems[1].

Increasingly complex pharmacological treatment regimens are the main intervention for improving outcomes in HF however, while HF medication is associated with improved survival rates, non-adherence to HF medication may lead to exacerbations, decline in physical functioning, reduced QoL, readmission to hospital and death.

For many older adults with HF complexity of their drug regimes, multimorbidity and heterogeneity of the condition itself increases the probability that they will not take their medications as prescribed. Consequently, around half of older adults with HF not taking their medications as recommended by the prescriber resulting in sub optimal benefit being derived from their treatment[2].

Despite extensive medical research into treatment for HF and evidence to suggest adherence to medication can be improved there are still very few interventions that have been shown to improve medication adherence, self-care behaviours, health-related quality of life, and reduce inpatient readmissions consistently and significantly among patients with HF[3]. Given the extent and impact of patient non-adherence designing interventions to address non-adherence in this population is vital.

This project seeks to address this gap.

Aims & Objectives

In collaboration with HF patients & carers we will co-develop an intervention to *enhance medication adherence in older HF patients in preparation for a future pilot RCT*

Objectives:

1. To determine what intervention components and strategies are necessary and acceptable to create a support package to help and encourage HF patients to take their medication regularly.

2. To co-develop a novel evidence-based intervention to improve medication adherence in HF patients ready for evaluation in a future randomised trial.

Research Methodology

Using a theory and evidence -based approach guided by The Medical Research Council (MRC) framework for the development of complex interventions we will map findings from previous CSO funded PhD work and a literature review around barriers and facilitators to adherence in HF.

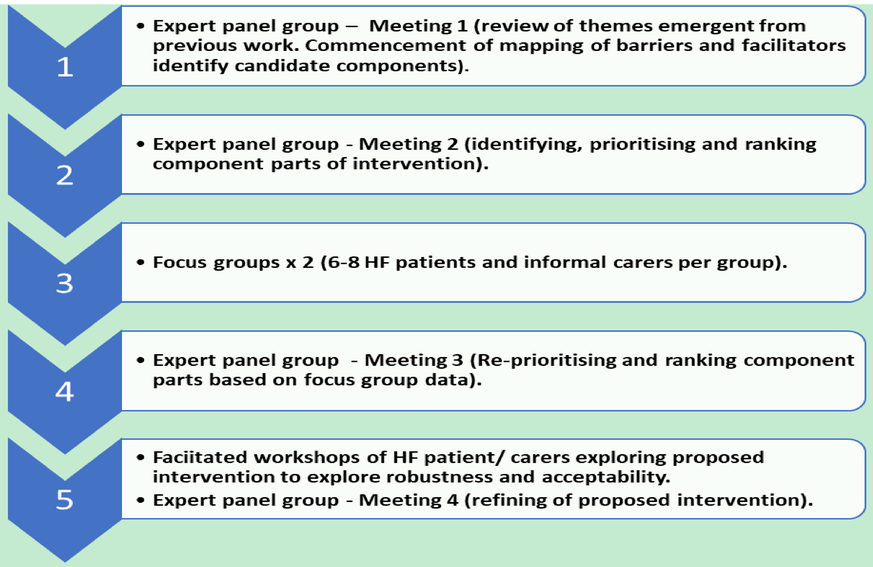
The use of a behaviour change intervention development framework: The Behaviour Change Wheel (BCW) / Theoretical Domains Framework (TDF)) will help specify the behaviours identified as target for change in terms of who needs to do what differently, when, where how and with whom.

By also utilising a Person-based approach (PBA) our intervention development study will ensure the components of the intervention are drawn not only from theory and evidence, but from the perspective of the people who will use the. The use of focus groups and qualitative workshops will ensure the intervention is co-developed with all relevant stakeholders including clinicians, patients and carers.

Plan of Action

Study Duration: 12 months commencing 1st September 2024

- Establishment of the expert panel group: (pharmacist; HF nurse; GP; HF specialist doctor, health psychologist & 2 experts with lived experience) to meet on 4 occasions during the 12-month duration. The role of the multidisciplinary panel is to identify, prioritise and rank component parts of intervention in conjunction with output from literature review and qualitative focus groups.
- Obtain of REC ethical approval to undertake patient/carer focus groups.
- Recruitment of patients (and carers) with lived experience of HF via The Scottish Health Research Register (SHARE) / local HF clinics and via HF nurse specialists to participate in a number focus groups evaluating the outcomes from the mapping exercise undertaken by the expert panel.
- Following the final meeting of expert panel we will conduct a workshop of patient/ carers exploring proposed intervention to explore robustness and acceptability.
- Development and manualisation of Protocol for pilot study



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If you would like more information on the project please contact Dr Roberta Fulton: r.l.z.fulton@dundee.ac.uk. https://orcid.org/0000-0002-6079-0142

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