

# DIALOR - Digital cOaching for fRailty

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<b>Registration date</b> 06/11/2023	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 06/11/2023	<b>Condition category</b> Other	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Frailty is a condition that affects one in ten people over the age of 65. It means people are at higher risk of falls, disability and poorer quality of life. Some may struggle with decreased energy levels, poor appetite, lower strength and having difficulty with household tasks such as shopping and cooking. As the population ages, frailty also impacts on health and social care services because of more GP appointments and increased hospital and care homes admissions. More people are owning a smartphone with applications (apps) and have access to the internet. This technology can help people to live well by enabling access to person-centred advice and care. It can help share in decision-making to meet well-being and health needs and reduce the burden on health and social care. However little research has been done, particularly for people with frailty, living at home. This study aims to explore whether a digital approach for long-term disease management with support from health coaches can help the lifestyle management of frailty (in its early stages). The approach has been used across the NHS in people with long-term conditions and this can be transferred to people with frailty.

### Who can participate

Patients aged  $\geq 65$  years scoring as mild or moderately frail using the Electronic Frailty Index and 1 or more long-term conditions including COPD, type 2 diabetes, heart disease or asthma who live in their own homes

### What does the study involve?

The study team will collaborate with individuals living with frailty, their caregivers, health coaches, and healthcare professionals, who are all considered key stakeholders. This collaboration will unfold through two distinct work-packages (WP) in Wessex, encompassing two regions: WP1 in Dorset and Hampshire, and WP2 in Dorset.

Within WP1, a novel digital health coaching approach will be developed. The process will involve conducting interviews with 20 individuals experiencing frailty, as well as family caregivers, in addition to holding focus groups with 20 healthcare professionals and health coaches. The data collected from these interviews and focus groups will be analyzed to identify recurring themes that will inform the development and refinement of the health coaching intervention.

In WP2, the study team will undertake the training of health coaches to administer the new digital health coaching intervention. Furthermore, they will assess the effectiveness of their

study procedures and evaluate associated costs. Data will be gathered from 50 individuals living with frailty, covering aspects such as physical activity, dietary habits, social engagement, mental well-being, and overall quality of life. Participants will also be asked about their perceptions and experiences with the new digital approach. To gain further insights, 20 of these participants will be interviewed, and focus group discussions will be conducted with 20 health coaches, 20 healthcare professionals, and commissioners of care services from both regions. The information collected will be used to gauge the acceptability and feasibility of the intervention, ultimately aiding in the planning of a more extensive study to implement the approach across Wessex on a broader scale.

#### Patient and public involvement

A group of family carers and health coaches will support the project by membership of a group to support project design, delivery, analysis and reporting and advise on how these findings are shared.

#### What are the possible benefits and risks of participating?

Participants may benefit from a reduction in their medical conditions, or find that their conditions remain stable, and do not worsen with the support of a health coach to reach their health-related goals. Anonymised findings will be shared with local health and social care organisations. This may lead to service changes that may also benefit them in the future.

The study team do not anticipate any risks directly by taking part in the study. Participants may discuss something upsetting with their health coach or researchers during interviews; if this happens, they are able to stop the session, and further support will be offered through the research team and signposting.

#### Where is the study run from?

Bournemouth University (UK)

#### When is the study starting and how long is it expected to run for?

April 2022 to October 2024

#### Who is funding the study?

National Institute for Health and Care Research (NIHR) Applied Research Collaboration (ARC) Wessex (UK)

#### Who is the main contact?

Professor Jane Murphy, [jmurphy@bournemouth.ac.uk](mailto:jmurphy@bournemouth.ac.uk)

#### Study website

<https://www.bournemouth.ac.uk/research/projects/dialor-digital-coaching-frailty>

## Contact information

#### Type(s)

Public, Scientific, Principal Investigator

#### Contact name

Prof Jane Louise Murphy

#### ORCID ID

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### **Contact details**

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## **Additional identifiers**

### **EudraCT/CTIS number**

Nil known

### **IRAS number**

314988

### **ClinicalTrials.gov number**

Nil known

### **Secondary identifying numbers**

12369, IRAS 314988

## **Study information**

### **Scientific Title**

Implementation of a digital health coaching intervention for older people with frailty in Wessex

### **Acronym**

DIALOR

### **Study objectives**

Is it feasible and acceptable to use a digital approach alongside support from health coaches to support the lifestyle management of frailty (in its early stages)?

### **Ethics approval required**

Ethics approval required

### **Ethics approval(s)**

Approved 19/01/2023, Health and Care Research Wales (5-15, Castlebridge, 19 Cowbridge Rd E, Cardiff, CF11 9AB, United Kingdom; +44 (0)29 2023 0457; [HCRW.approvals@wales.nhs.uk](mailto:HCRW.approvals@wales.nhs.uk)), ref: 22/SS/0064

### **Study design**

Non-randomized single-group pretest/post-test study using qualitative and quantitative methods

## **Primary study design**

Interventional

## **Secondary study design**

Non randomised study

## **Study setting(s)**

Community, GP practice, Internet/virtual

## **Study type(s)**

Other, Prevention, Quality of life

## **Participant information sheet**

Not available in web format, please use the contact details to request a participant information sheet

## **Health condition(s) or problem(s) studied**

Improve the management of the symptoms of early to moderate frailty and long-term health conditions

## **Interventions**

The digital health coaching intervention (DIALOR - Digital cOaching for fRailty) has been developed for implementation to older adults, aged 65 years or older with mild to moderate frailty and diagnosis of one or more long-term health conditions in the community. The DIALOR intervention will include two key components:

### **1. Digital Health Coaching**

This will include digital health coaching sessions with a qualified health coach. An online platform (Zoom/Accurx/Microsoft Teams) will be used to deliver the digital HC intervention.

### **2. Mobile health platform**

A suite of web-based platforms offering tailored clinical advice and support and self-management resources for the management of chronic obstructive pulmonary disease (COPD), asthma, cardiovascular disease (CVD) and type 2 diabetes (details of the online platform can be accessed via <https://mymhealth.com/>). The platforms can be accessed by any electronic device (e.g., smartphone, tablet or television) that has an active internet connection.

Participants will undertake 12 weeks of fortnightly 45-minute digital health coaching appointments delivered digitally (via Zoom or Microsoft Teams) supported by 6 months of access to a long-term condition self-management platform for the following conditions; diabetes mellitus, asthma, chronic obstructive pulmonary disease or heart disease.

1. Older adults (>65y) are identified by participating PCN/GP surgery via reporting measures built into the electronic clinical record system (SystemOne) and/or:

1.1. Older adults (>65y) identified from secondary care services during clinical consultation (within medical and falls clinics in a geriatric department at UHD) and/or:

1.2. Older adults (>65y) who respond to traditional recruitment means (posters/leaflets) visible in public clinical waiting areas and contact the research team

2. Participants are given information sheets/consent forms

3. Participant completes and sends consent form to the research team and registers interest

4. The research team screens participants' eligibility with the participating GP surgery

5. Eligibility confirmed and the research team completes the pre-study assessment battery digitally

6. Participating GP surgery activates my mHealth account and sends a referral to the Dorset self-management service
7. (Optional) Participant takes part in 1-1 interviews with the research team
8. Participant attends 12 weeks of digital health coaching
9. Research team completes the second assessment battery within 2 weeks of finishing health coaching
10. Participant continues using my mHealth applications for LTC self-management for 6 months
11. (Optional) Participants take part in 1-1 interviews with the research team
12. Research team completes the third and final assessment battery/final study interview

## **Intervention Type**

Behavioural

## **Primary outcome measure**

Primary outcome measures are the feasibility and acceptability of the DIALOR intervention. Feasibility will be determined from the number of health coaches trained, the number of participants recruited, retention, adherence to the intervention and adverse events measured using study records at one timepoint.

To determine the acceptability of the intervention and to explore barriers and enablers to the implementation of the intervention, semi-structured interviews will be conducted with patients with mild-moderate frailty (and their carers where appropriate), healthcare professionals and health coaches who participated in the study before the start of the digital health coaching and after the intervention and 6-month access to the mHealth applications.

## **Secondary outcome measures**

A range of secondary outcomes measures will be assessed at baseline, on completion of 6 health coaching sessions and at 6 months, unless otherwise stated:

1. Functioning measured using the Modified Barthel Index (MBI)
2. Activities of daily living measured using the Lawton-Brody Instrumental Activities of Daily Living Scale (IADL)
3. Complex activities of daily living measured using the IADL
4. Physical activity levels measured using the International Physical Activity Questionnaire Short Form (IPAQ-SF)
5. Quality of life measured using the EuroQol- 5 dimensions- 5 levels (EQ-5D-5L)
6. Frailty severity measured using the Groningen Frailty Index (GFI)
7. Diet quality measured using the Short Form Food Frequency Questionnaire (SF FFQ)
8. Social engagement measured using the Lubben Social Network Scale (LSNS-6)
9. Mental well-being measured using the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS)
10. Self-reported indicators such as height, weight, BMI (Body Mass Index), number of falls (per year), goal attainment, alcohol intake and smoking habits (if applicable) measured at baseline, throughout the study during digital health coaching interventions and at 6 months

## **Overall study start date**

01/04/2022

## **Completion date**

01/10/2024

## **Eligibility**

**Key inclusion criteria**

1. Aged  $\geq 65$  years
2. Scoring as mild or moderately frail using the Electronic Frailty Index
3. Diagnosis of 1 or more long-term conditions including COPD, Type 2 diabetes, heart disease or asthma
4. Living in their own homes
5. Capacity to consent to participate
6. Able to communicate fluently enough in English to take part in the study
7. Able to recall their experiences sufficiently to engage with a health coach
8. Self-reported ability to use digital technology independently or with support

**Participant type(s)**

Patient

**Age group**

Senior

**Lower age limit**

65 Years

**Sex**

Both

**Target number of participants**

50

**Key exclusion criteria**

1. Nursing home resident or on active waiting list for a place
2. Individuals who have a terminal illness and are being managed for end-of-life needs
3. Lacking capacity to consent (e.g., advanced dementia)

**Date of first enrolment**

09/10/2023

**Date of final enrolment**

30/04/2024

**Locations****Countries of recruitment**

England

United Kingdom

**Study participating centre**

The Blandford Group Practice  
Whitecliff Mill Street

Blandford Forum  
United Kingdom  
DT11 7BH

**Study participating centre**  
**Christchurch Medical Practice**  
1 Purewell Cross Road  
Christchurch  
United Kingdom  
BH23 3AF

**Study participating centre**  
**South Coast Medical Group**  
12 Walpole Rd,  
Bournemouth  
United Kingdom  
BH1 4HA

**Study participating centre**  
**Christchurch Day Hospital**  
158 Fairmile Rd  
Bournemouth  
United Kingdom  
BH23 2JX

## **Sponsor information**

**Organisation**  
Bournemouth University

**Sponsor details**  
Bournemouth Gateway Building  
St. Pauls Lane  
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United Kingdom  
BH8 8GP  
None provided  
AScott@bournemouth.ac.uk

**Sponsor type**

University/education

**Website**

<https://www.bournemouth.ac.uk/>

**ROR**

<https://ror.org/05wwcw481>

## **Funder(s)**

**Funder type**

Government

**Funder Name**

NIHR Applied Research Collaboration (ARC) Wessex

## **Results and Publications**

**Publication and dissemination plan**

The findings will be shared in academic and professional publications, social media, a website, conferences as well as hold an event at the end of the project for key stakeholders.

**Intention to publish date**

01/10/2025

**Individual participant data (IPD) sharing plan**

All data generated or analysed during this study will be included in the subsequent results publication.

**IPD sharing plan summary**

Published as a supplement to the results publication