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Person-centred care for patients with two or more chronic conditions

Submission date 31/08/2022	**Recruitment status** No longer recruiting	[X] Prospectively registered [_] Protocol [_] Statistical analysis plan [X] Results [_] Individual participant data
Registration date 30/09/2022	**Overall study status** Completed	
Last Edited 09/04/2025	**Condition category** Other	

Plain English summary of protocol

Background and study aims
Multimorbidity is the presence of two or more long-term health conditions. The prevalence of multimorbidity increases substantially with age and has a significant impact in primary care. People with progressive multimorbid illness and their families often suffer complex and multiple symptoms. Palliative care has developed to meet these complex needs and address their physical and psychological symptoms and provide social, practical, and spiritual support. There is strong evidence that palliative care improves patient outcomes and enables patients to remain at home while saving costs. The hospice movement has provided a model of good palliative care for those with advanced progressive disease, however, there are marked diversity and inequities in the provision of this care.

Palliative care and primary health care share common principles and emphasise the continuity of care and solidarity (accompaniment), respecting patients' values and preferences, responding to social suffering, and paying attention to both patients and their families. The aim of this study is to improve person-centred nurse-led care for primary care patients with progressive multimorbid illnesses.

Who can participate?
Patients aged 55 years or older with two or more chronic conditions receiving care from the two primary care sites and their family caregivers

What does the study involve?
This study is a mixed-methods study which will develop and pilot a telehealth approach (IPOS-APP) in primary care, to better identify and address complex unmet needs of patients and families in primary care, reduce unnecessary emergency hospital admissions, and improve patients' experience of primary care.

What are the possible benefits and risks of participating?
This project promotes the implementation of a telehealth approach in primary care and has enormous implications for public health policy and clinical practice, particularly in response to the current COVID-19 pandemic. It leads directly to patient benefit through early identification and management of unmet needs and symptoms, and provides stakeholder views and an

evidence-based implementation strategy for a full evaluation of IPOS-APP routine use in primary care. No risks are anticipated.

Where is the study run from?
University of Birmingham (UK)

When is the study starting and how long is it expected to run for?
April 2022 to August 2023

Who is funding the study?
The Burdett Trust for Nursing (UK)

Who is the main contact?
Dr Ping Guo, p.guo@bham.ac.uk

Contact information

Type(s)
Principal investigator

Contact name
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Additional identifiers

Integrated Research Application System (IRAS)
315161

Protocol serial number
RG_20-015

Study information

Scientific Title
Improving person-centred nurse-led care for primary care patients with progressive multimorbid illness

Study objectives
A telehealth approach (a mobile app IPOS-APP and clinician portal) is feasible to implement in primary care to early identify priority symptoms and concerns among patients with multimorbid illness.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 16/08/2022, East of England - Essex Research Ethics Committee (The Old Chapel, Royal Standard Place, Nottingham, NG1 6FS, UK; +44 (0)207 1048106; Essex.REC@hra.nhs.uk), ref: 22/EE/0148

Primary study design
Observational

Study design
This is a mixed-method project at two primary care sites. It applies the first two stages of the Medical Research Council (MRC) framework for developing and evaluating complex interventions, i.e. development, feasibility and piloting

Study type(s)
Quality of life

Health condition(s) or problem(s) studied
People have two or more chronic conditions

Interventions
A telehealth approach (IPOS-APP) will be tested in primary care, to better identify and address complex unmet needs of patients and families in primary care, reduce unnecessary emergency hospital admissions, and improve patients' experience of primary care. This IPOS-APP is not a medical device as it is designed based on the validated Integrated Patient care Outcome Scale (IPOS) questionnaire for patients (or caregivers) to self-report symptoms and needs of the patients and to facilitate good self-care for the patients. The questionnaire has previously been paper-based and used in routine clinical care to support the needs assessment process. The change in this study is its delivery on an app aligned with the priority for digitalisation in health. The IPOS-APP is being used within its intended purpose and is a means of delivering the IPOS questionnaire. Surveys and interviews will be conducted to assess the feasibility and acceptability of the IPOS-APP.

Data captured within the APP include a patient-reported outcome measure – the Integrated Patient care Outcome Scale (IPOS). The patient participants will use the IPOS patient version, and caregiver participants will use the IPOS caregiver version as a proxy. It takes approximately 5-7 minutes to complete. Each participant will have individual login details and won't have access to data reported by others. They use the IPOS-APP to self-report needs and symptoms monthly for 3 months, and staff will use the clinician portal to make timely decisions and clinically manage patients according to the results of the IPOS.

Patient outcomes including physical, psychological, social, and spiritual symptoms, information and practical needs will be measured by the IPOS-APP. A baseline measure will be taken when the participants first log in. After this, the participants (including patient participants and

caregiver participants) will receive a reminder to self-complete and submit the questionnaire via the IPOS-APP at least monthly for 3 months. The research team will monitor the patients' IPOS data over 3 months to evaluate improvements in patients' health status. In between, the questionnaire will remain unlocked to allow as many questionnaires as they wish to submit (optional), through which the researchers can assess the acceptability and usage of the APP.

A sub-sample of participants will be interviewed to explore their experiences of using the IPOS-APP and clinician portal. Recruitment will take place for the first 3 months and follow-up will continue for 3 months.

The patient demographic data will be collected separately, and no identifiable data will be collected on the IPOS-APP. The anonymised data will be extracted from the IPOS-APP for analysis and interview data will be analysed using NVivo.

Intervention Type
Other

Primary outcome(s)
Patients' needs, symptoms and concerns are measured using the app version of the Integrated Patient care Outcome Measure (IPOS) at baseline, 1, 2 and 3 months

Key secondary outcome(s)
Collected through interviews which will be conducted close to 3 months or soon after 3 months:
1. Emergency hospital admission captured by interviews with patients or caregivers and primary care health professionals
2. Patient experience of care captured by individual interviews with patients or family caregivers
3. Quality of primary care assessed through individual interviews with primary care nurses and other health professionals
4. Feasibility and acceptability assessed through interviews with patients or caregivers and primary care health professionals and activities on IPOS-APP

Completion date
31/08/2023

Eligibility

Key inclusion criteria
Patient participants are eligible for inclusion in the study if:
1. They are 55 years of age or older who are receiving care in the participating primary care sites
2. People have two or more chronic conditions
3. All participants have no serious self-reported cognitive impairment and are cognitively capable of participating in the study
4. Those who are able to read and speak English fluently and who have access to a smartphone

Family caregivers are eligible to participate if they are 18 years old or above and currently providing support for a patient who is receiving care in one of the study sites but cannot self-report on the IPOS-APP due to disability or other reasons.

Any healthcare professionals working at the participating GP sites will be eligible to take part in this project including nurses, GPs, pharmacists, and so on. Those who have experience of using the clinician portal will be invited for interviews.

Participant type(s)
Patient, Health professional, Carer

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 Years

Sex
All

Total final enrolment
49

Key exclusion criteria
Patient participants:
1. Patients who are outside of stated age range and outside of stated GP sites
2. Do not have multimorbidity
3. Are considered by nurses too ill to be approached
4. Those who are not able to read and speak English
5. Have no access to a smartphone

Caregiver participants:
1. Family caregivers who are under 18 years old
2. Caring for patients with no multimorbidity
3. Outside of stated GP sites
4. Not able to read and speak English
5. No access to a smartphone

Healthcare professionals:
Those who have not got a chance to use the clinician portal will be excluded to take part in the interviews

Date of first enrolment
09/01/2023

Date of final enrolment
30/04/2023

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
Cape Hill Medical Centre
Raglan Road
Smethwick
Birmingham
United Kingdom
B66 3NR

Study participating centre
Omnia Practice
Yardley Green Medical Centre
73 Yardley Green Road
Birmingham
United Kingdom
B9 5PU

Sponsor information

Organisation
University of Birmingham

ROR
https://ror.org/03angcq70

Funder(s)

Funder type
Charity

Funder Name
Burdett Trust for Nursing

Alternative Name(s)
The Burdett Trust for Nursing, Burdett Trust for Nursing | London, burdetttrust, The Burdett Trust

Funding Body Type
Private sector organisation

Funding Body Subtype

Trusts, charities, foundations (both public and private)

Location
United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan
Individual participant data cannot be shared publicly because of the risk of violating privacy. Data access requests can be sent to the project lead via Dr Ping Guo (p.guo@bham.ac.uk) from researchers who meet the criteria for access to confidential data. Anonymised IPOS data and interview data will become available after the publication. For any further analysis, separate consent from participants and ethical approvals will need to be obtained.

IPD sharing plan summary
Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
HRA research summary			28/06/2023	No	No
Other publications	Digital technology to optimise care access and quality for patients with multimorbidity; (poster number P 1.005)	07/06/2023	09/04/2025	Yes	No
Poster results	Abstract: 3.312	09/05/2024	09/04/2025	No	No
Study website	Study website	11/11/2025	11/11/2025	No	Yes