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Development of methods to identify digitally excluded older people, and tailoring of interventions to meet their digital needs

Submission date 21/11/2023	**Recruitment status** No longer recruiting	[X] Prospectively registered [X] Protocol [_] Statistical analysis plan [_] Results [_] Individual participant data [X] Record updated in last year
Registration date 23/11/2023	**Overall study status** Completed	
Last Edited 03/08/2026	**Condition category** Other	

Plain English summary of protocol

Background and study aims
Older people are more likely to be 'digitally excluded'. This refers to them not using the internet, so missing out on things that could be helpful to their well-being and health (e.g. making appointments, banking, connecting with family). Support and training is available to increase digital inclusion but there is no process in place to identify everyone needing help. Support tends to be offered when people come into contact with health, social care or community services, rather than through actively identifying people who are digitally excluded. This means that some older people who might benefit from support are not offered it, and we don't know what support is best for them.
This study aims to:
• Develop an inclusive way of identifying older people who are digitally excluded
• Explore older people's views of the internet and what might help them get online
• Adapt available digital support so it addresses a wide range of needs
• Test this new approach with a group of older people

Who can participate?
Everyone aged 65+ years on 2-3 GP registers

What does the study involve?
We will send a survey to ask about their internet use. Using their responses we will develop a model that predicts who is more likely to not use the internet.
We will talk to older people about their internet use (interviews). We will also talk to voluntary and community organisations that currently provide digital help and support to find out what they do. In workshops with older people and service providers (in a process called co-production) we will explore the needs of those who don't use the internet. We will review and adapt existing digital support services to make them more accessible to and appropriate for people who are digitally excluded. We will test the adapted service with a group of older people to find out whether it is acceptable.

What are the possible benefits and risks of participating?
There are no direct benefits from taking part in the research. However, we hope participants enjoy taking part and value contributing to providing better services for older people in the future. Researchers will aim to sign-post people to appropriate services or information should problems be identified during researcher conversations. This sign-posting may support participants to access services or information that supports some aspect of their daily living.
We will be asking participants to take part in an interview or a workshop with a researcher. Whilst we do not foresee any risks to this - we will be talking about digital engagement rather than any particularly sensitive topics - people may become anxious or tired during the interview, or discussions may be upsetting if people have experienced frustrations due to difficulties with the internet. Researchers will be vigilant for distress or fatigue, and will offer to stop the interview / discussion where this is the case. We will at all times be respectful of and sensitive to people's
needs.

Where is the study run from?
Bradford Teaching Hospitals NHS Foundation Trust (UK)

When is the study starting and how long is it expected to run for?
November 2023 to August 2026

Who is funding the study?
The Dunhill Medical Trust (UK)

Who is the main contact?
Dr Liz Graham, liz.graham@bthft.nhs.uk

Contact information

Type(s)
Public, Scientific, Principal investigator

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Additional identifiers

Integrated Research Application System (IRAS)
332940

Central Portfolio Management System (CPMS)
58769

Protocol serial number
SDAF2302\15

Study information

Scientific Title
INCLUDE Study - Digital exclusion amongst older people

Acronym
INCLUDE

Study objectives
This study aims to:
1. Develop an inclusive way of identifying older people who are digitally excluded
2. Explore older people’s views of the internet and what might help them get online
3. Adapt available digital support so it addresses a wide range of needs
4. Test this new approach with a group of older people

Ethics approval required
Ethics approval required

Ethics approval(s)
Approved 24/10/2023, Yorkshire & The Humber - Bradford Leeds Research Ethics Committee (NHSBT Newcastle Blood Donor Centre, Holland Drive, Newcastle upon Tyne, NE2 4NQ, United Kingdom; +44 2071048083; bradfordleeds.rec@hra.nhs.uk), ref: 23/YH/0234

Primary study design
Interventional

Study design
Interventional non-randomized feasibility study

Study type(s)
Other

Health condition(s) or problem(s) studied
Digital use in older people

Interventions
Workstream 1 - Survey (Months 1-6)
A survey will be sent by participating GP practices (using text message and DocMail) to all those on their registers aged 65+ who are eligible to receive the survey. Recipients of the survey will be asked to complete it and send it back (in a pre-paid envelope) to the research team. It will take about 10-15 minutes of their time, and this is the only task we will ask them to do. There will be an opt-out period, after which time, a researcher based at the GP practice will telephone them to see if they would be willing to complete the survey over the phone.
We will also explore other ways to administer the survey to maximise engagement - for example, researchers attending GP practices for drop-in sessions, researchers visiting community or faith groups.
Surveys will be anonymous, but participants will have the option to provide their contact details if they would like to be entered into a prize draw (a thank you for taking part), hear about the study findings, or be contacted about future parts of this research project.

Workstream 2 - Interviews (Months 5-11)
Approximately 20 participants who agreed to further contact when they returned their workstream 1 surveys will be invited to take part in interviews. We will sample participants based on characteristics that have been identified in the literature as influencing digital exclusion e.g. age, gender, living status, deprivation, ethnicity; as well as a range of digital use. A researcher will telephone people to invite them to participate. Where the telephone conversation identifies concerns with capacity, the researcher will, sensitively, ask to speak to someone else who might support the person’s involvement, if available, and if feasible. Where a Consultee can be identified, they will be invited to provide agreement to the person's participation, as well as potentially support the person during the interview. Consent or agreement will be obtained before interviews take place. Interviews are expected to last for around 1 hour, and will happen on one occasion. They will be audio recorded with the participants' permission. Participants will be given the choice of location for the interview - they will probably be at their home, but alternative community venues will be identified if preferable.

Workstream 3 - service mapping (Months 5-10)
A literature review will identify existing evidence for digital support services for older people. Researchers will work with collaborating community partners (Age UK Leeds, Carers' Resource) and others who provide digital inclusion services to identify components of existing service provision. Each service will articulate the target population, format, content and purpose of their current offer. This information will be recorded and mapped by the research team, and cross checked with the providers to ensure accuracy and understanding. (TO NOTE: We have produced a short information sheet for service providers to explain what we would like them to do, but we do not consider them research participants as they are staff whose involvement is limited to them providing information about their professional activities. We will not be asking them for any personal information.)

Workstream 4 - Workshops (Months 10-21)
Approximately 6 older people (who have agreed to further contact after completing their survey) and 4 service providers will be invited to take part in workshops to identify key components of an intervention (or interventions) that would address digital exclusion. As for workstream 2, we will not exclude people lacking capacity if they have an appropriate consultee who can provide agreement and support for their participation. The exact location for workshops will be
decided upon once participants have been recruited; taking into account their accessibility needs, travel distance and transport requirements. It is possible that meeting room facilities in the Bradford Institute for Health Research (Bradford Royal Infirmary site), or Age-UK Leeds offices might be used for workshops; but there may be other locations (e.g. community group spaces) that would be more convenient. Each workshop will last for around 2 hours, and participants will be asked to attend 4-5 such workshops - alternate months for around 7-8 months involvement in total. Workshops will be audio recorded and notes taken. We will use pictorial representations of concepts and media clips to illustrate points for discussion. Other approaches to maximise workshop inclusion and engagement will be agreed in consultation with our PPIE group and wider PPI engagement. We will ask for and act on participants' feedback between workshops to ensure the presentation style and content are tailored to their needs and preferences; and they are able to actively contribute to the process.
At the end of workstream 4 an intervention will have been developed (months 17-21) that can be tested in workstream 5B.

Workstream 5A - Testing the identification model (Months 22-27)
Methods described for Workstream 1 will be used to distribute the survey from 1-2 GP practices. We require a minimum sample of 100 responses from those who are digitally excluded, so expect to need to distribute at least 2,500 surveys. The survey will be adapted to include factors identified as predictors for digital exclusion. Again, responses will be anonymous, and the survey should only take 10-15 minutes of people's time. Responses received will be used to test the validity of the model - whether it accurately predicts who is digitally excluded.

Workstream 5B - Feasibility testing the new intervention (Months 22-32)
We will undertake a mixed-methods single-arm feasibility study. A non-randomised design with quantitative and qualitative outcomes is appropriate during the early stages of intervention development, where key questions regarding intervention acceptability and feasibility need to be explored. We will invite 30 older people to take part, contacting those who indicated when they returned the survey that they were willing to be contacted about later stages of the research. It is not yet possible to specify the time commitment or location of the intervention as it has not yet been developed; however, we expect that it will be delivered in a suitable community location (for example, Age-UK premises) but with the option for it to also be delivered remotely (perhaps over the telephone). Similarly, we will be able to collect data from participants in-person (in their home or a community location to suit them) or over the telephone. We expect follow-up (from joining to completing the study) to be around 4 months in duration. A sub-set of people will be invited to an interview to elicit their views on the intervention. All participants will be asked to provide baseline and follow-up measures (e.g. level of internet use).

Intervention Type
Behavioural

Primary outcome(s)

1. The interviews in workstream 2 will explore:
1.1. extent of digital use (e.g. internet and device use);
1.2. what internet/devices are used for (e.g. finances, socialising);
1.3. whether technology helps or hinders management of health and social aspects of life;
1.4. extent to which they feel included/excluded and the associated impacts;
1.5. financial concerns;
1.6. privacy and security concerns;
1.7. digital needs;
1.8. how interventions can better address their needs and skills;
1.9. factors that influence digital behaviours (framed around the COM-B model)
Thematic analysis will be used.

2. In Workstream 5, feasibility testing the invervention, baseline and follow-up measures regarding their internet use and a measure of their satisfaction with the intervention will be used. But until we have completed workstream 4, we are not able to define the intervention, and therefore are not able to specify in detail what data will be collected to describe it, and which measures will be most appropriate to monitor its acceptability and feasibility.

Key secondary outcome(s)
There are no secondary outcome measures

Completion date
31/08/2026

Eligibility

Key inclusion criteria
1. For the survey work (workstreams 1 and 5A), we will include all older people registered at participating GP practices who are aged 65 years and over. For all later workstreams we will also include those aged 65 years and over.

Additional inclusion criteria for workstreams 2 (interviews) and 4 (workshops) are:
2. Consented to further researcher contact upon completion of the workstream 1 survey.

Additional inclusion criteria for workstream 5B (feasibility study) are:
3. Have never used the internet, or not used it within the last 3 months; and
4. Consented to further researcher contact upon completion of either the workstream 1 or workstream 5A surveys.

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Senior

Lower age limit
65 Years

Upper age limit
120 Years

Sex
All

Total final enrolment
3990

Key exclusion criteria
For the survey work (workstream 1 and 5A), we will exclude:
1. Those who have opted out of data sharing for research purposes, and
2. Those receiving palliative / end of life care

For the interviews (workstream 2) and workshops (workstream 4), we will exclude:
3. Those who lack capacity to contribute to the interviews, even with the help of a supporter
4. Those with no consultee available or willing to support involvement where a potential participant lacks capacity to consent.

5. For workstream 4 (workshops) we will also exclude those who took part in workstream 2 interviews.

For workstream 5B (feasibility study) we will exclude those who:
6. Lack capacity to engage with the intervention or provide data; or
7. Took part in earlier workstreams.

Date of first enrolment
01/01/2024

Date of final enrolment
31/03/2026

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
Bradford Royal Infirmary
Duckworth Lane
Bradford
England
BD9 6RJ

Sponsor information

Organisation
Bradford Teaching Hospitals NHS Foundation Trust

ROR
https://ror.org/05gekvn04

Funder(s)

Funder type
Charity

Funder Name
Dunhill Medical Trust

Alternative Name(s)
The Dunhill Medical Trust, Dunhill Medical Trust, DunhillMedical, DMT

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
The datasets generated during and/or analysed during the current study will be available upon request from Dr Liz Graham (Chief Investigator) liz.graham@bthft.nhs.uk Data arising from the study is owned by the Sponsor organisation - Bradford Teaching Hospitals NHS Foundation Trust. Following publication and dissemination of findings, reasonable requests from external researchers for the anonymised dataset would be considered and agreed by the Project Management Group.

IPD sharing plan summary
Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article		18/09/2025	22/09/2025	Yes	No
Study website	Study website	11/11/2025	11/11/2025	No	Yes