

ARC East of England Ageing and Multi-Morbidity Grant Writing Workshop

**December 2020
Summary Report**



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Contents

1. Executive Summary	3
2. Introduction	4
3. Discussion Groups.....	6
3.1. Discussion Group 1: Implementation in Care Homes.....	6
3.2. Discussion Group 2: Deprescribing and Medicine Optimisation.....	6
3.3. Discussion Group 3: Assistive Technology for Older Adults	7
4. Post Event	8
5. Online Workshop Format.....	8
6. Summary	9
7. Next Steps	9
8. Appendix 1 Agenda	10
9. Appendix 2 Funding Calls.....	11
10. Appendix 3 Discussion Group Session Notes	12

1. Executive Summary

The Ageing and Multi-morbidity theme virtual grant writing workshop was held on the 27th November 2020. Bringing together 30 practitioners and researchers with an interest in Ageing and Multi-morbidity, the event offered the opportunity to form collaborative relationships with the goal of developing grant applications and research proposals. It attracted nine practitioners and researchers who had no prior association with the ARC East of England, linking them with people, with similar research ideas and interests around implementation. It is an approach to online workshops that has promise to build within theme interest groups leading on key topics in ageing and multi-morbidity.

Three research ideas were pitched to the group:

NEWsflash: An innovation collaborating with care homes in the Suffolk area to support care home staff to monitor signs of early deterioration in care home residents.

Implementation of an Opioid Tapering Intervention Within the Primary Care Setting: A toolkit for organisations to support opioid deprescribing.

Use of AI-Assisted Virtual Reality as an Assessment Tool and Preventative Intervention in Alzheimer's Disease: Evaluating brain function in conjunction with the use of virtual reality as an assessment tool.

The three presentations stimulated helpful discussion across three discussion groups identifying the following areas that have potential for future research and collaboration:

- Behaviour change intervention to support care staff to better identify subtle changes and deterioration of residents
- Outcomes of a shared understanding and better relationships between health and social care.
- Optimisation of opioid usage
- Big data
- Impact of cancer on older people

The group were also able to identify a list of new collaborators and people with shared interests, most notably in assistive technology for older adults.

There was limited feedback from the event, half (4) who responded to the online survey said participation would help them take forward a grant idea and would be likely to collaborate with another attendee because of the group. This indicates that this type of event could be useful in stimulating collaborative relationships and potential to develop grant applications.

We plan to monitor outcomes from the event working with the delegates in January 2021 and June 2021 and facilitate work that can take the ideas and projects forward. We also plan to organise a topic specific event in Summer 2021.

2. Introduction

The Ageing and Multi-morbidity theme virtual grant writing workshop was held on the 27th November 2020. Bringing together practitioners and researchers with an interest in Ageing and Multi-morbidity, the event offered the opportunity to form collaborative relationships with the goal of developing grant applications and research proposals.

In preparation for the workshop the event was advertised widely, including a call for research projects and ideas to be discussed. Three project ideas were received, and all were presented on the day.

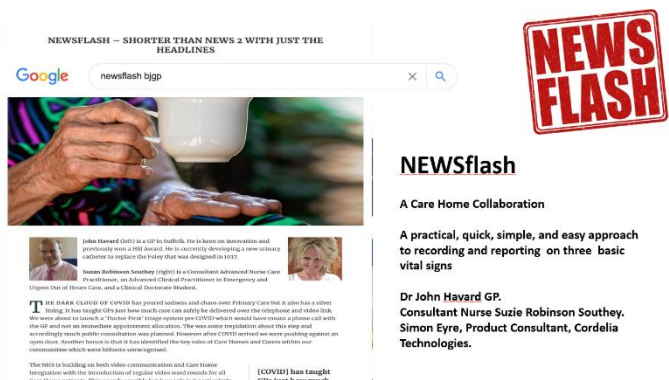
Due to the current meeting restrictions caused by the COVID-19 pandemic the workshop was held virtually via zoom. 30 people attended on the day, including researchers and health professionals.



The three-hour workshop opened with an outline of the session by theme lead, Professor Claire Goodman, followed by a presentation from lay representative, Liz Stokes who spoke about involvement of patient and public representatives in the design and delivery of research, (see Appendix 1, page 10). Links to current funding opportunities that may be relevant to the group were also shared. See appendix 2, page 11.

Three research ideas were pitched to the group:

1. NEWSflash: An innovation created by GP, Dr John Havard and Suzan Robinson Southey a Consultant Advanced Nurse Care Practitioner, collaborating with care homes in the Suffolk area to support care home staff to monitor signs of early deterioration in care home residents. NEWSflash is a simple screening tool that, if abnormal, can lead to both NEWS2 (National Early Warning Score 2) and a more formal clinical assessment. It is quick and easy for health care workers to do and therefore has the potential for every patient to have it recorded at least daily.



2. Implementation of an Opioid Tapering Intervention Within the Primary Care Setting: Professor Debi Bhattacharya and Dr Sion Scott from the University of East Anglia have developed a toolkit for organisations to support opioid deprescribing. In their presentation they described the contextual components required to effectively implement the toolkit and the challenges for wider implementation.

- We know we need to characterise the existing implementation landscape
- National survey with readiness to implement items for the seven Toolkit components
- Prioritise which characteristics of the toolkit need to address to support implementation



3. Use of AI-Assisted Virtual Reality as an Assessment Tool and Preventative Intervention in Alzheimer's Disease: Dr Vito De Feo, from the University of Essex described how the use of virtual reality (VR) technology could be used to safely test and evaluate the performance of people who are risk of Alzheimer's disease by evaluating the performance in spatial navigation and memory tasks in virtual environments. Brain function will be monitored before, during and after to evaluate the results.

Our Idea

VR technology can help people who are at risk of Alzheimer's disease in multiple ways:

- Develop VR-based tests to evaluate the performance in spatial navigation and memory tasks.
 - People are asked to navigate within virtual environments, and then remember, the location of cones displayed within the environment.
- Train environmental spatial memory and conceptual spatial memory.
 - In our simulated world, the patient will have the "coffee shop of concept A" followed by "the petrol station of concept B" -> -> from places to concepts and from concepts to places

Where?

- In a controlled and safe environment, and with the help of specialised neuropsychologist, we can successfully perform navigation-based tasks and increase the performance of our participants.
- In the real world with the help of our app and GPS -> Safety and Equality




3. Discussion Groups

Following the research idea pitches, participants were asked to choose one of three topics for discussion in the breakout rooms. The breakout sessions were facilitated by members of the Ageing and Multi-morbidity research theme. A summary of each of the discussions can be found below:

3.1. Discussion Group 1: Implementation in Care Homes

The group discussed learning from the implementation of the NEWSflash initiative in care homes.

Relationships: Building a strong relationship between the innovator and care home staff is vital to support staff involvement and engagement.

Supporting staff: Taking forward work around how to ensure staff are confident to use new technology and systems. How to assess the capacity of staff to use the new technology and be involved in planning the innovation. Shared understanding and value of resident focused language, for example decline prevention or optimising care may be more appropriate than “avoidance of hospital admission”.

Context: Factors such as staff turnover; culture and structure of the care home; locality differences and the complexity of the intervention will influence the relative success of implementation. Going forward there is a need to have a systematic way of mapping this for innovation and its implementation.

Resident behaviours staff find challenging: Know from recent trials the need to involve all staff in embedding the innovation into the culture and routines of the care home.

Evaluation: A spectrum of measures need to be considered to ensure positive outcomes can be evaluated including minimising exacerbations in ill health; quality of life; preventing poor death; residents’ perspective on optimising care; value. Recognised that some attempt at standardisation of care home sensitive tools is needed for assessment.

Major themes/ideas that have potential for future research and collaboration:

- Behaviour change intervention to support care staff to better identify subtle changes and deterioration of residents.
- Outcomes of approaches to implementation that reflect shared understanding and systematic approaches to building working relationships between health and social care.

Next steps

Revisit in the new year to identify subgroup to take ideas forward.

3.2. Discussion Group 2: Deprescribing and Medicine Optimisation

The group discussed the implementation of the opioid deprescribing toolkit. A national survey to assess readiness for implementing to toolkit is planned by the research team.

Case studies: The group suggested case studies to identify difficulties in applying the toolkit. This could include ascertaining the capacity of organisations to roll out the toolkit, identification of a champion in the organisation and training.

Economic Modelling: Ideas for economic modelling were also generated and included identifying the cost of implementing the toolkit, pre-post implementation costs, cost impact rather than cost effectiveness.

Major themes/ideas that have potential for future research and collaboration:

- Optimisation of opioid usage
- Big data
- Impact of cancer on older people

Next steps:

- A lead needs to be identified to take the opioid project forward
- Case studies and a survey
- Potential collaboration identified to incorporate natural language processing (machine learning)

3.3. Discussion Group 3: Assistive Technology for Older Adults

The group discussion focused on the third presentation of the day: Use of AI-assisted virtual reality as an assessment tool and preventive intervention in Alzheimer's Disease presented by Vito De Feo.

Patient and public involvement: The benefits of involving people with dementia/Mild Cognitive Impairment (MCI)/older adults as co-researchers was discussed. People with lived experience have not yet been involved in the design of the technology/study, the group were able to offer suggestions of relevant groups that could be introduced.

Digital exclusion: Grant applications will often ask about digital exclusion, including the challenges in using assistive technology in "hard to reach" rural areas due to limited internet connection. Healthwatch Norfolk / Sussex were suggested as a helpful contact point who may be able to discuss the issues of digital exclusion.

Data Security: The suggestion of using Google Maps as a way of making the environment more "personalised" and realistic to each participant was discussed. It was mentioned that involving big co-corporations can sometimes make participants more suspicious of how their data will be handled.

Next steps:

- It was agreed the project needs to decide on which funding body to apply for as this will shape the priorities for the project. A feasibility study was suggested as an option for this bid as this might be favourable to some funding bodies. The following potential funders were suggested: EPSRC, MRC, ESRC.
- A list of potential collaborators/people with an interest in the area was provided by the group and circulated after the meeting.

4. Post Event

Following the workshop, a short online survey was circulated together with copies of the presentations and the list of current funding opportunities relevant to the group.

8 out of 30 people completed the survey. Half (4) of those who responded found the event useful in taking forward a grant idea. Half (4) said that they would likely collaborate with an attendee because of attending the workshop. Half (4) also thought the session was useful in taking forward a grant idea. Feedback indicated that follow up or more frequent events of this type could be helpful to give further opportunities for ideas to be pitched and the possible involvement on the Research Design Service.

The structure of the workshop enabled everyone to contribute. Future workshops could focus on single issues to build collaborations that can lead on specific implementation projects.

5. Online Workshop Format

The mix of presentations and breakout group discussion ensured everyone could participate. It engaged practitioners and researchers. Future workshops could focus from the outset on a priority topic with specific questions for the breakout groups to discuss.

6. Summary

The three presentations stimulated helpful discussion across the breakout groups and identified the following areas that have potential for future research and collaboration:

- Behaviour change intervention to support care staff to better identify subtle changes and deterioration of residents
- Outcomes of a shared understanding and better relationships between health and social care.
- Optimisation of opioid usage
- Big data
- Impact of cancer on older people

The group were also able to identify a list of potential collaborators and people with an interest in assistive technology for older adults.

It attracted practitioners and researchers with no prior history of association with the ARC

Feedback from the event, was relatively low, and indicated that half (4) of those who responded to the survey believed the event would help them take forward a grant idea and would be likely to collaborate with another attendee because of the group. This type of event could be useful in stimulating collaborative relationships. It will, however, need ongoing facilitation to have the potential to develop grant applications.

7. Next Steps

Follow up with the delegates in January 2021 and June 2021 and facilitate groups to take specific project ideas forward. We also plan to organise another event in Summer 2021 to respond to new funding calls and ideas.

Involve representatives from the Clinical Research Network, Eastern Academic Health Science Network and local professional special interest groups in planning future work with this group and follow up workshops.

Focus from the outset on a priority topic with specific questions for the breakout groups to discuss could be considered for future workshops.

8. Appendix 1 Agenda

ARC East of England Ageing and Multi-Morbidity Grant Writing Workshop

Friday 27th November 2020, 9:00-12:00

AGENDA

Click [here](#) to register and receive the Zoom login

Time	Activity	Speaker
<i>08.50-09:00</i>	<i>Login</i>	
09:00-09:05	Welcome and outline of the session	Claire Goodman
09:05-09:15	PPIE for research into practice	Liz Stokes
09:15-10:15	Research idea pitches for discussion <ul style="list-style-type: none">○ Presentation 1: Creating an opportunity out of the Care Home crisis (NEWSflash)○ Presentation 2: Implementation of an opioid tapering intervention within the primary care setting○ Presentation 3: Use of AI-assisted Virtual Reality as an assessment tool and preventive intervention in Alzheimer's disease	Suzie Southey Sion Scott Vito De Feo
10:15-10:20	Summary and outline of next session	Claire Goodman
<i>10:20-10:35</i>	<i>Comfort/Coffee break.</i>	
10:35-10:40	Welcome back and goals of next session	Claire Goodman
10:40-11:40	Collaborative group work by area of interest: <ul style="list-style-type: none">○ Breakout room 1: Implementation in Care Homes○ Breakout room 2: Deprescribing and medicine optimisation○ Breakout room 3: Assistive technology for older adults	
11:40	Summary, feedback and next steps	
12:00	Close	Claire Goodman

9. Appendix 2 Funding Calls

Funder	Closing date	Link
NIHR		
Efficacy and Mechanism Evaluation Programme	01 Dec 2020	https://www.nihr.ac.uk/funding/2086-efficacy-and-mechanism-evaluation-programme-researcher-led/25400
Artificial Intelligence Health and Care Award - Phases 1-4	08 Dec 2020	https://www.nihr.ac.uk/funding/artificial-intelligence-health-and-care-award-phases-1-4/23919
Invention for Innovation	09 Dec 2020	https://www.nihr.ac.uk/funding/invention-for-innovation-product-development-awards-call-21/25824
National Multiple Long-Term Conditions Implementation Programme	11 Dec 2020	If you have any further questions regarding the application process or the National Multiple Long-Term Conditions Implementation Programme, please contact Dr Ash Routen via ar516@leicester.ac.uk
Health Technology Assessment Programme (primary research and evidence synthesis)	06 Jan 2021	primary research https://www.nihr.ac.uk/funding/2090-health-technology-assessment-programme-researcher-led-primary-research/25562 evidence synthesis https://www.nihr.ac.uk/funding/2089-health-technology-assessment-programme-researcher-led-evidence-synthesis/25561
Programme development grants	13 Jan 2021	https://www.nihr.ac.uk/explore-nihr/funding-programmes/programme-development-grants.htm
Research for Social Care (RfSC)	20 Jan 2021	https://www.nihr.ac.uk/funding/research-for-social-care-competition-3/25745
Health Services and Delivery Research (HS&DR) Programme	04 Feb 2021	https://www.nihr.ac.uk/funding/20113-health-services-and-delivery-researcher-programme-standard-researcher-led/25928
Research for Patient Benefit (RfPB)	10 March 2021	https://www.nihr.ac.uk/funding/research-for-patient-benefit-competition-44/26207
HS&DR Programme - Adult Community Health and Social Care services to avoid planned and unplanned hospital admissions	8 April 2021	https://www.nihr.ac.uk/funding/20124-adult-community-health-and-social-care-services-to-avoid-planned-and-unplanned-hospital-admissions/26210
Wellcome Trust Technology development grants	12 Jan 2021	https://wellcome.org/grant-funding/schemes/technology-development-grants
Alzheimer's Society Project grants	February 2022	https://www.alzheimers.org.uk/research/researchers/our-funding-schemes/project-grants

10. Appendix 3 Discussion Group Session Notes

Discussion Group 1: Implementation in Care Homes

- NEWSflash learnings were discussed including:
 - Relationship building is vital, e.g., the role of Suzie as the point of contact for the residents and staff of the care homes; Suzie (as nurse) was the champion for the intervention and ensured staff involvement and engagement
 - Need for embedding any innovation or intervention in routines and culture of the care home
 - Recognition of resources needed to have a point of contact or champion to work with care homes as well as to support embedding in the home
 - Simplicity of the intervention (sometimes better to strip down to the basic and essential components); it is easier to implement and integrate into care than a large complex intervention
 - Having objective, recognised measure allowed staff to be more confident in reporting decline/deterioration
- The key role of staff in any implementation, not only managers but also carers
 - Need to address confidence in perform new task and the skills that may be needed (especially for clinical skills)
 - Training and support
 - Capacity must also be considered
 - Need to address staff perceptions and explain the possible benefits to them for greater engagement
- Context must be acknowledged and its impact on implementation
 - Importance of the culture and structures of the care homes (staff and residents)
 - Locality differences (e.g. Quality Improvement Nurses in HVCCG)
 - Different working relationships with care homes in different CCGs, GP practices, etc.
 - Changing staff and staff turnover in care homes
- Evaluating 'good' and positive outcomes
 - How to evaluate the value
 - reduce avoidable acute admissions but may not always be good working relationships
 - reduce deterioration or acting on subtle changes in health
 - health costs
 - Quality of life
 - preventing poor death
 - resident perspective on optimising care, not just objective physiological parameters
 - need better tools for assessment
- Behaviour change must occur for any implementation to be successful
 - change human behaviour and should be able to use these principles/ideas to this setting and population
 - Link to changing in thinking/behaviour to identify subtle changes

- Need to reflect if this is changing staff behaviour meaning they absorb nursing skills (doing nursing with less pay or no formal training)
- Shared understanding and language
 - Prevention may not be appropriate for this group, instead subtle change, deterioration/decline prevention, optimising care, stages of prevention
 - EHCH initiative could be supporting more communication and understanding with care homes and health professionals
 - Using examples from practice to inform that reflect staff and resident experience

Major themes/ideas that could be pursued in further research:

- Behaviour change intervention to support care staff to better identify subtle changes and deterioration of residents
- Outcomes of a shared understanding and better relationships between health and social care

Next steps

- Ask who wants to be involved in furthering these ideas and continue their involvement
- Identify possible lead for bids and further work

Discussion Group 2: Deprescribing and Medicine Optimisation

Participants:

- Seven participants ranging from researchers, practitioners and a patient representative attended the breakout session.
- Attendees were from across the Eastern region and Manchester.
- The group had a wealth of expertise in medicines/pharmacy, epidemiology, machine learning, health economics, statistics and behavioural medicine.

Key discussion points for implementation of an opioid tapering intervention within the primary care setting:

There was huge interest in the opioid deprescribing toolkit

- Implementation of the toolkit can be challenging
- Some practices have already implemented some elements of the toolkit
- The research team plan to do a national survey to assess readiness to implement the seven components of the toolkit
- Other suggestions included case studies to identify difficulties in applying the toolkit, ascertain capacity of organisations to roll out the toolkit, identification of a champion in the organisation, creating a dashboard? and training?
- Ideas for economic modelling were also generated and included identifying the cost of implementing the toolkit, pre-post implementation costs, cost impact rather than cost effectiveness

Major themes/ideas that have potential for future research and collaboration:

- Optimisation of opioid usage
- Big data
- Impact of cancer on older people

Next steps:

- Lead identified to take the opioid project forward
- Case studies + survey
- Potential collaboration identified to incorporate natural language processing (machine learning).

Discussion Group 3: Assistive Technology for Older Adults

- The discussions in this session focused around the third presentation of the day: Use of AI-assisted virtual reality as an assessment tool and preventive intervention in Alzheimer's Disease presented by Vito De Feo.
- The term Mild Cognitive Impairment (MCI) was discussed. How would this be defined/measured? Using participants from this sample might not represent the majority of the population.
- Discussed involving people with dementia/MCI/older adults as co-researchers. People with lived experience have not yet been involved in the design of the technology/study. Grant applications will usually ask for this. Different suggestions and offers of introductions were made: patient and public involvement group (PIRAD) University of Cambridge and Stevenage Dementia Involvement Group. Contact details of a useful person at University of Essex was also provided.
- Digital exclusion was discussed as something that grant applications will likely want to ask about. Healthwatch Norfolk/Sussex raised as a useful group to visit to discuss this with.
- Briefly spoke about the challenges of using assistive technology. "Hard to reach"/rural areas may struggle with connection. At present, the technology for this study consists of a laptop with 2 VR glasses so researchers believe that this reduces the risk of exclusion as it is portable and easily transported to participants.
- Data security and privacy was discussed. Suggestion of using Google Maps as a way of making the environment more "personalised" and realistic to each participant. It was mentioned that involving big co-corporations can sometimes make participants more suspicious of how their data will be handled. The more "links" in a chain mean the more risk.
- Omniconnect BT bid was mentioned by Chris Fox who has sent details over by email.

Next Steps

- It was agreed the project needs to decide on which funding body to apply for as this will shape the priorities for the project. Depends on how confident they

are with the technology and how developed it is. Feasibility study was suggested as an option for this bid as this might be favourable to some funding bodies.

- Some potential funders suggested: EPSRC, MRC, ESRC.
- A list of potential collaborators/people with an interest in the area was provided by the group and circulated after the meeting.