Mapping career development opportunities in applied dementia research

Final report (long version)

30th September 2024

Dr Sarah Fearn, Prof. Cathy Murphy

Acronyms and abbreviations	
ARC	Applied Research Collaboration
ARUK	Alzheimer's Research UK
AS	Alzheimer's Society
CI	Chief investigator
Dem-Comm	Dementia Community of Practice (NIHR ARC Post-doctoral Fellows)
DeNPRU	NIHR Policy Research Unit for Dementia and Neurodegeneration
DHSC	Department of Health and Social Care
DTC	Doctoral training centre
DTP	Doctoral training programme
ECR	Early career researcher
EDI	Equality, diversity and inclusion
ESRC	Economic and Social Research Council
Health and care professionals	Nurses, midwives, allied health professionals, pharmacists, health care scientists and social care practitioners
HEI	Higher education institution
MCR	Mid-career researcher
NIHR	National Institute for Health and Care Research
PhD	Researchers studying for Doctor of Philosophy
PI	Principal investigator
PPIE	Patient and public involvement and engagement
RDN	Research Design Network
SCP	Social care professional
SCR	Senior career researcher
Three Schools' Programme	NIHR Three School's Dementia Research Programme

Definitions of ECR, MCR and SCRs: We define an early career researcher as someone who has completed a PhD or has equivalent research experience and is in the early stage of their academic career, working towards independent research, MCRs to be embarking on independent research, and SCRs to have an established career in the field.

Executive Summary

This report presents the findings of a project to map and explore career development opportunities in applied dementia research in England (2019-2025). The Department for Health and Social Care (DHSC) commissioned National Institute of Health and Care Research Applied Research Collaboration Wessex (NIHR ARC Wessex) to undertake this work to better understand the current context and challenges in the field. This report summarises the findings from workshops with, and data provided by, national stakeholders, and presents a series of recommendations to inform future strategies and investment to build capacity and capability.

Applied Dementia Research Context

Capacity building in applied dementia research has increased significantly over the past decade. Initiatives such as the NIHR ARC Wessex-led Dem-Comm programme, the NIHR Three Schools' Dementia Research Programme and the Dementia Network Plus initiatives have successfully promoted capacity building and networks. Some of the remaining challenges are common across applied health research, whilst others are specific to applied dementia. These specific challenges include: a recent emphasis on capacity building at the PhD and early career researcher (ECR) levels creating a relative shortage of mid-career researchers (MCRs) and senior career researchers (SCRs); issues with attracting and retaining health and social care professionals from an over-stretched field; potential weaknesses with the feasibility of projects and plans for knowledge mobilisation in applied dementia funding applications; ECRs who have taken up opportunities in dementia research from a range of other fields and will have the option of returning to those fields when dementia-specific funding ends; specific challenges in the area of equality, diversity and inclusion of the research workforce.

Key Recommendations

1. The Landscape

- Recent investments in applied dementia research have been largely aimed at those wishing to undertake a PhD and post-doctoral ECRs, encouraging many more people to enter the field of applied dementia research. Further investment should maintain funding at these levels to attract people to the field, but also consider schemes for mid- and senior career researchers in order to retain and progress people in the field (Section 1.1).

- The Dem-Comm Programme attracted a diverse group of early career researchers, many from outside of applied dementia research, and established a nationwide network. Thought is needed about the kinds of opportunities that would encourage these individuals to remain in the field, and how to maintain the network once the current programme finishes. Simultaneously, a second Dem-Comm programme should be considered to continue to attract early career applied researchers to the field (Section 1.1).

- Combined funding calls, in which different funders produce calls together, have increased the focus on capacity building, improved the reach of opportunities, and facilitated networks. Further collaborations with existing and new funding partners should be considered (Section 1.1).

2. People and Skills

- Health and social care professionals face additional challenges in entering and remaining in the field of applied dementia research. Funders should work closely with health and care organisations to promote the benefits of research and explain the practicalities of combining dementia-focussed research and practice. Funders should promote case studies of researchers who have successfully combined practice and research (Section 2.1).

- More support is required to help ECRs identify suitable employment and development opportunities to progress a research career. ECRs have specifically identified training needs in developing leadership skills and transitioning to PI roles (Sections 2.1; 2.2).

- The relatively small pool of applied dementia senior leaders and the rapid increase in the numbers of doctoral fellowships and ECRs has created a shortage of supervisors, reviewers and mentors. Providing MCRs with training and opportunities to gain experience would help address this gap (Section 2.2).

- Funders would like to see greater clarity on the feasibility of projects and improved knowledge mobilisation plans in applications in applied dementia research. ECRs and MCRs require methodological training and mentorship to increase their skills in these areas (Section 2.3).

3. Research Opportunities

- Funders should make clear what career stage opportunities are aimed at, including which awards are suitable for ECRs to lead or co-lead and/or for those without permanent contracts (Section 3.1).

4. The Environment

- The success of the applied dementia funding initiatives has attracted researchers from non-traditional career pathways. The workforce is predominantly female, with many joining the field later in their career. Funders' EDI strategies should consider how to accommodate and support people who might require periods of parental leave, a career break or have caring responsibilities; how to attract underrepresented groups including males, those from ethnic minorities, and those from more diverse socioeconomic backgrounds (Section 4.2).

Contents

Final Report (long version)

Aim

With a view to increasing capacity in dementia-focussed applied health and care research, this project aimed to map and explore the context and challenges around career development opportunities in the field in England (2019 to 2025). Information contained in this report is based on workshops held with, and data provided by, national stakeholders. The recommendations can help inform future strategies and investment in applied dementia research.

Method

The mapping of career development opportunities was informed by the Research Capacity Development Framework, developed by National Institute for Health and Care Research (NIHR). Data related to four domains were gathered and reported, relating to:

1. **The Landscape**, including current investments in this area and funder engagement.
2. **People and Skills**, including career pathways and awareness of opportunities, availability of supervisors and expertise, available training, mentoring and research support.
3. **Research Opportunities**, including programmes available to early career researchers, public involvement, team science.
4. **The Environment**, including how supportive the environment and infrastructure is, equality, diversity and inclusion initiatives, networks.

Data were gathered through:

- Initial conversations with stakeholders to finalise aims, methods, outputs
- 4 x 90-minute workshops with representatives of: Department for Health and Social Care (observer), NIHR Academy, Economic and Social Research Council (ESRC), Alzheimer's Society (AS), NIHR Three Schools' Dementia Research Programme, ARC / Dem-Comm, Dementia Researcher, public contributor with lived experience of dementia
- 1 x 90-minute workshop with early career researchers participating in the Dem-Comm and Three Schools' Dementia Research Programme
- 1 x outreach session with a dementia support group
- Individual consultations with: Person living with dementia; ARC leads for Ageing and Dementia; Research Delivery Network Speciality Lead for Dementia; Alzheimer's Research UK; The Dementia and Neurodegeneration Policy Research Unit (DeNPRU) Exeter; DeNPRU Queen Mary University London.
- Additional data supplied by key contributors

Key Contributors

National Institute for Health and Care Research
NIHR Three Schools' Dementia Research Programme
(Programme Manager and ECRs)
NIHR Dem-Comm Programme
(Programme Lead and Fellows)
NIHR Applied Research Collaborations

Economic and Social Research Council
Alzheimer's Society
Dementia Researcher
Public contributors with lived experience
of dementia

Results

1. The Landscape – Evidence and context

NIHR mapping of activity
What does current NIHR investment in this area look like?

NIHR, non-dementia specific

The NIHR Academy builds on and adds value to the investment in training and academic career development that is happening throughout the NIHR.

Infrastructure and Schools

The NIHR Infrastructure, Schools and wider capacity building structures which have a remit to support and grow future research capacity include:

BRCs – Biomedical Research Centres (20 centres)
PSRCs – Patient Safety Research Collaborations (6 centres)
ARCs – Applied Research Collaborations (15 centres)
HPRUs – Health Protection Research Units (15 units)
SPCR – School for Primary Care Research (1 centre, 9 partner sites)
SPHR – School for Public Health Research (1 centre, 8 partner sites)
SSCR – School for Social Care Research (1 centre, 7 partner sites)
Each of these centres/units invests NIHR funds in research training for individuals within their locality.

NIHR Academy

NIHR develops and coordinates academic training, career development and research capacity development through the NIHR Academy's awards and programmes. The NIHR Academy provides training and support to all professionals across health and social care and at all stages of their careers (from undergraduate to professorships).

It also has dedicated career pathways for nurses, midwives, allied health professionals (AHPs), via the NIHR Integrated Clinical Academic (ICA) Programme; as well as for doctors, dentists via the Integrated Academic Training (IAT) Programme and finally individuals employed within local authority settings via the Local Authority Academic Fellowship (LAAF) Programme.

At pre-doctoral level: Pre-doctoral Fellowship (those aiming for a career in research methodology); Pre-doctoral Clinical and Practitioner Academic Fellowship; Academic Clinical Fellowship (doctors and dentists only); In Practice Fellowship; Pre-doctoral Local Authority Fellowship.

At doctoral level: Doctoral Fellowship; Doctoral Clinical and Practitioner Academic Fellowship; Doctoral Local Authority Fellowship.

At post-doctoral level: Development and Skills Enhancement Award; Advanced Fellowship; Advanced Clinical and Practitioner Academic Fellowship; Clinical Lectureship (doctors and dentist only); Advanced Local Authority Fellowship; NIHR Senior Clinical and Practitioner Research Award.

At Chair level: Research Professorship.

Other NIHR Academy capacity building opportunities: Undergraduate Internship Programme, INSIGHT: Inspiring Students in Research (institutionally led programmes across 12 regions that offer research masters studentships); team science awards; pre-application support (support for individuals to prepare an application for NIHR career development funding).

The Research Programme for Social Care encourages applications from researchers from all stages of their careers and includes a sub stream for early career researchers as well as funding for capacity building. Although this is not dementia-specific, it does attract dementia-related applications.

Overview of NIHR Academy awards starting in the last five complete fiscal years (2018/19 to 2022/23) in the research area of 'dementia'

1. NIHR Academy awards (these relate to the NIHR Fellowship programme (open to individuals from any professional background) and the NIHR Integrated Clinical Academic (ICA) Programme (supports health and care professionals) across all career stages.

- NIHR Fellowship Programme (2 doctoral, 4 post-doctoral = 6)

- NIHR Integrated Clinical Academic Programme (2 doctoral, 3 post-doctoral = 5)

Total = 11

2. NIHR Infrastructure and NIHR School awards (these relate to research training awards within those part of NIHR Infrastructure and NIHR Schools that have a remit to build capacity and offer local research training awards. These centres include the NIHR BRCs, NIHR ARCs, NIHR HPRUs and NIHR PSRCs, as well as the three NIHR Schools in public health, primary care and social care).

- NIHR BRCs (5 pre-doctoral, 8 doctoral, 1 post-doctoral and 1 other career development award = 15). Please note; the BRC's focus on early translational and experimental research (but may include some applied dementia research).

- NIHR ARCs (16 doctoral, 16 post-doctoral and 5 other career development awards = 37)

Total = 52

3. Integrated Academic Training (IAT) Programme (available to doctors and dentists). NIHR Academic Clinical Fellowships (ACFs) (pre-doctoral level) and Clinical Lectureships (CLs) (post-doctoral) fall under the IAT programme and are institutional awards run in partnership with HEIs and NHS England. These awards provide the post holder with clinical and protected academic time which is managed and overseen by the relevant HEI and NHS England local office.

- 40 ACFs (dementia priority theme)

- 8 CL's (dementia priority theme)

Total = 48

NIHR, dementia specific

The Integrated Academic Training (IAT) programme is available to doctors and dentists. NIHR Academic Clinical Fellowships (ACFs) and Clinical Lectureships (CLs) which fall under the IAT programme are institutional awards run in partnership with HEIs and NHS England and provide the post holder with clinical and academic time which is managed and overseen by the relevant HEI and local NHS England office. The IAT programme has different priority research themes for different application years and since 2018, the IAT Competition has targeted multidisciplinary research areas identified as being of strategic significance by DHSC and the NIHR. Dementia is one such priority research theme. Dementia specific funding from NIHR:

- Partnerships with Alzheimer's Society
- Three Schools' Dementia Research Programme
- Dem-Comm programme within the ARCs

NIHR also fund the three national NIHR Schools, which include applied dementia research projects.

NIHR Schools

The three national NIHR Schools (School for Primary Care Research, School for Social Care Research and School for Public Health) all have a bespoke capacity building programme of work offering personal career development awards and opportunities.

School of Social Care Research (SSCR)

- Capacity building programme of work. Research can be on any area related to social care, researcher can be at any career level. There are currently 14 award holders focussed on dementia (out of total of 91).
- The 'developing research leaders' scheme is aimed at MCR to SCRs. There are 2 award holders focussed on applied dementia research.

Three Schools' Dementia Research Programme

The three NIHR Schools have joined together to collaborate on a programme of work focussed on dementia, led by SSCR. Originally 2021-2024, now extended for another 5 years to 2029. 50 researchers currently being funded. All research is in applied dementia research. No applications in basic or biomedical science received. Awards available include:

- Doctoral studentship scheme (15 studentships in 2024)
- Research projects and career development awards at any career level
- Rapid and impact calls. Any career level. Must cover 2 of: public health, primary care or social care
- Career development awards, predominantly early to mid-career (about 26 award holders)
- Research projects
- Awards specifically focused on bringing in new and emerging and principal investigators
- Seed fund call

The NIHR Applied Research Collaborations (ARCs)

15 ARCs. 3 ARCs have specific 'dementia' research themes, whilst others include dementia research within themes such as 'ageing'.

Dem-Comm Programme

The Dem-Comm programme sits within the ARCs, spread nationally. 60 ECRs/MCRs funded for 2 years + 1 year extension (Jan 2023 – March 2026).
Dem-Comm has the explicit aim to build capacity in applied dementia research, including through:
- Establishing a peer-to-peer learning community of researchers through regular facilitated opportunities for dialogue, reflective learning, mutual support, and feedback.
- Developing and providing a Chief Investigator development programme through face-to-face and online learning and development activities.
- Signposting the post-doctoral researchers to resources and membership of relevant communities.

Dem-Comm has been very successful at attracting people from other research areas - people who are not necessarily new to research but bringing them to dementia research from other fields. ARCs appreciated the flexibility to use the funding for different FTEs and career levels. This enabled a more diverse cohort of fellows. Similarly, intern positions were made available to people outside of academia and typical heath and care settings.

Dem-Comm has more prominently embedded and brought together dementia research in ARCs, especially where dementia was not an explicit theme.

The structure and co-ordination of Dem-Comm has been excellent. The positive impact has extended past the fellows themselves. For example, ARCs have taken some of the positive learning from this to other research areas such as mental health or social care.

NIHR Biomedical Research Centres

There are 20 BRCs. Newcastle BRC and UCLH BRC have dementia themes.
The NIHR Dementia Translational Research Collaboration (Dementia TRC) comprises of a group of research active dementia themes within the national network of NIHR BRCs, along with Clinical Research facilities (CRFs) and members of the devolved nations.

The BRCs/TRCs focus on early translational and experimental medicine but may include some applied dementia research.

Partners

What does the investment of other funders active in this area look like?

ESRC

Non-dementia specific opportunities include:

- Responsive mode funding opportunities, which are general research grants that anybody can apply to.
    - 6 dementia projects funded since 2019.
- New investigator research grant scheme for those at the beginning of their career.
    - Jan 2019 – Dec 2023, 152 new investigators funded, 1 in dementia.
- Fellowships that are available periodically throughout the year.
- Studentships and PhDs, which are devolved to doctoral training partners and the centre for doctoral training partnerships.

Previous dementia specific opportunities:

- ESRC-NIHR dementia research initiative 2018.
    - All projects finished by December 2024.
    - Managed mode opportunity, with 4 grants funded.
    - All led by SCRs but with a focus on ECR development. Within the 4 grants there were: post-doctoral and early career researchers embedded in the leadership of each workstream and 2 linked studentships, 1 lectureship, 1 post-doctoral fellowship, 9 PhD studentships, and mentoring for mid-career researchers.

Current dementia specific opportunities:

- Dementia Network Plus with NIHR, DHSC and Alzheimer's Society.
    - 4 networks funded in April 2024.
    - Strong focus within that to include all career stages.
    - Network Plus funds can be used to build capacity and capability in the dementia space.
    - There was a good response to the call with good quality applications.

Alzheimer's Society (AS)

All AS funding is related to dementia and has a big focus on opportunities for ECRs.

The number of applications is increasing; funding is becoming more competitive (from about 100 applications in 2020 to 150 in 2024).

Current fellowship grants have had two rounds, and from those:

- Clinician and healthcare professional training fellowship (7 funded – 6 applied, 1 basic/biomed; PhD or ECRs).
- Career development grants (3 funded – 1 applied, 2 basic/biomed; ECRs).
- Project grants (25 funded - 7 applied, 18 basic/biomed; few ECRs, mostly SCRs).
- Post-doctoral fellowship (9 funded – 1 applied, 8 basic/biomed; almost all ECRs).
- Dementia research leader fellowship (9 funded – all basic/biomed; MCRs).
- Clinician and healthcare pre-doctoral bursaries, which provide funding for promising clinical staff to gain experience within dementia research, up to £30,000 for 6 months (no applications received).

AS currently receives more applications from basic and biomedical science than applied research, with the number of applications in applied dementia research falling compared to basic and biomedical research.

Many applications in applied research are later declined by applicant due to lack of time available to carry out the research.

AS finds that the quality of applications in applied dementia research is often lower than basic and biomedical research and therefore fewer are short-listed. Issues include unrealistic expectations of what is feasible and insufficient implementation / knowledge mobilisation plans within the applications, with the path to impact unclear. Applied applications sit much closer to implementation and often have to consider implementation or next steps to implementation, whereas for biomedical applications this is usually less of a focus.

AS used to have separate funding committees for applied and biomedical research but in the last few years there has been just one committee covering the full spectrum. This could also underlie various contributing factors to the predominance and perceived higher quality of biomedical awards.

AS is now considering more targeted calls for applied dementia research and how to tailor more support at application stage to support applied dementia research applicants in particular.

AS also had its Centres of Excellence programme that started in 2018 and funded 3 Centres for 5-year programmes. These were similar strong opportunities for researcher career development, like the ESRC-NIHR programme above. AS have previously offered Clinical Training Partnerships, similar to DTCs but for clinicians wishing to do PhDs.

AS have been instrumental in securing UK participation in the EU Joint Programme – Neurodegenerative Disease Research (JPND) calls and administering those calls, which are particularly important for applied dementia researchers.

Other funders

Between 1st June 2023 and 26th August 2024, Dementia Researcher listed 335 funding opportunities that may be of interest to researchers in the field of dementia (basic/biomedical and applied; https://www.dementiaresearcher.nihr.ac.uk/funding-calls/). In addition to the organisations mentioned above, organisations that have publicised funding or co-funding within England and that may be suitable for applied dementia research included:

Alzheimer's Research UK
Race Against Dementia
Marie Curie – *including partnering with AS to fund project grants targeting end of life care in dementia and those who care and support them.*
The Daphne Jackson Trust – *including partnering with AS to sponsor an annual opportunity for a three-year fellowship for dementia researchers wanting to return to research, as well as own grants for returning researchers.*
Arts and Humanities Research Council
The Dunhill Medical Trust
British Geriatrics Society
Engineering and Physical Sciences Research Council – *partner within the Network Plus call focused on the development and use of novel tools and technologies to enable people to live independently with dementia, including their carers.*
Leverhulme Trust
Manchester Academic Health Science Centre
Marie Skłodowska-Curie Actions
Medical Research Council
Nuffield Foundation (welfare)
UK Research and Innovation - *UKRI grants often need applicant to be tenured (senior). NIHR has grants for those on fixed term contracts (eg. RfPB).*
Motor Neurone Disease Association
Parkinson's UK
Royal Academy of Engineering
The British Academy
The Churchill Fellowship
The Lewy Body Society
Vinehill Trust
Wellcome Trust

The Dementia Research Funders Forum

The Dementia Research Funders Forum (DRFF) is a meeting of UK charity and public sector funders of dementia research. The purpose of the DRFF is to exchange information and coordinate activity in order to help shape the dementia funding environment at the national level. Membership of the DRFF comprises representatives from: Alzheimer's Research UK (Chair), Alzheimer's Society, AHRC, Department of Health, EPSRC, ESRC, MND Association, MRC, NIHR, Parkinson's UK, STFC, Stroke Association, Wellcome Trust.

Location of funding

Funders are conscious that successful applications to open call competitions often remain within the same well-established and research active HEI's and are working to address geographical imbalances/under-served regions.

NIHR

A review of NIHR academy awards (starting in the last five complete fiscal years; 2018/19-2022/223) in the research area of 'dementia' by region highlights a higher proportion of awards made within London, South Central and South West regions.

ESRC

- 2018 call showed a trend towards South East England and London, especially UCL.
- Latest Dementia Network Plus call emphasised a four nations approach for better geographical spread.

Dementia Researcher

10-15 'hotspots', including Worcester, Exeter, Bradford, increasingly, Liverpool.

Alzheimer's Society

Alzheimer's Society have recently carried out a review of the geographical spread of the host institutions of their awards and recognise that some areas have a higher proportion of award holders. As a region, London has received the highest number of AS funded projects, and this has increased from 22/23 to 23/24. Institutions in the East Midlands and West Midlands have not received any new AS funded projects across these two financial years. In 23/24, AS invested more in the South East, Yorkshire and North East compared to the previous year. This likely reflects the investment in the new Doctoral Training Centres, which were encouraged to include multiple institutions around the UK. In recognition of these findings, AS is actively considering how to encourage funding applications from across England, Northern Ireland, Scotland and Wales in future funding calls.

Three Schools' Dementia Research Programme

Awards are distributed nationally, with more award holders based in London and Newcastle.

Dem-Comm

The 60 fellows are quite evenly spread throughout all the ARCs, with between 3 and 6 fellows in each of the 15 ARCs.

Wider context
Are there any other investments or activities not covered by NIHR or partner activity? Is there obvious continued research investment in this area for the future?
With current progress in early identification and treatment of dementia, people are going to be living with dementia longer. There is, therefore, renewed importance of applied dementia care research. There is obvious current investment, but no clear dementia-specific future investment. There is concern about what will happen to the 60 Dem-Comm fellows when the funding finishes in March 2026. To retain the current fellows in the field, funding opportunities such as a senior Dem-Comm

fellowship scheme or other transitional support could be beneficial. For example, additional support with identifying the most appropriate next step for them and/or support with grant applications.

At the same time, a further Dem-Comm programme would ensure new researchers are also brought into the field to continue the pipeline and achieve sustained growth.

Engaged Funders

Are we and other funders actively engaged in furthering the field of interest?
Are there relevant research charities (is there active engagement with them and highlighting these areas as a priority) e.g. Dementia funders forum?

There has been increased investment in applied dementia research, particularly from NIHR. The question is not just whether there is increased investment, but how researchers navigate the system, how researchers find the funding opportunities, ensuring investment is going to the right research areas in the right locations. Funders need to ensure the opportunities are inclusive, and are supporting people to enter or continue in the field when they might otherwise not.

ECRs and MCRs need support and training at whatever point they are in their career. Funders' engagement and 'getting the word out' is important, which is where case studies are useful for raising awareness of diverse career pathways and training opportunities. Funders, supervisors, mentors all have a role to play in highlighting and explaining what opportunities exist for the researcher at the exact point in their research career. Dementia Researcher is well-positioned and plays a role in publicising case studies of applied dementia researchers and grant opportunities.

ESRC took onboard the panel feedback from the 2018 dementia awards, which suggested expanding the regional spread of expertise, bringing in more interdisciplinary areas, and ensuring those with lived experience were more included. Five years later, the Network Plus applications seemed to be more diverse, with a mix of universities and regions.

The Programme Manager for the NIHR Three Schools' Dementia Research Programme highlighted that it can sometimes feel like dedicated streams of funding for applied dementia research can be sporadic and unpredictable, which makes it difficult to match opportunities with scope and capacity.

More funding would be very welcome, but it is also important to avoid replication. Funders could also consider how successful existing projects are supported to the next step, and how riskier projects might be given an opportunity.

With Network Plus, those universities have the opportunity to fund riskier / different projects. Funders feel like we are moving forwards but shouldn't become complacent.

In terms of current investment, Dem-Comm Fellows and Three Schools Dementia Research Programme award holders[1] felt that the following worked well:

- Regular opportunities for funding through established programmes.
- Encouraging practitioners to go into research.
- The Dem-Comm and Three Schools Programme, including attracting researchers from different disciplines and the increase in ECR-targeted opportunities.
- The Dem-Comm and Three Schools Programme enabled research that may otherwise not have happened (eg. exploratory research).
- Collaborations.
- The inclusion of social care.

In terms of current investment, they felt that the following could be improved:

- Support to better find and understand funding opportunities.
- Access to the right information on funding, at the right time, in the right place.
- Filters or more specificity to help identify suitable opportunities.
- More transparency around on what basis funding application decisions are made.

---

[1] ECRs that provided information for this report included 63 award holders from the Dem-Comm and Three School's dementia programmes.

- Improved recognition of 'equivalent experience' or transferrable skills for applied dementia researchers (not just academic papers).
- Allow researchers on fixed term contracts to apply for more funding opportunities.
- More diversity in funding panels, including having more applied dementia researchers on panels (not just basic/biomedical researchers).
- Reduce the perception that funding committees tend to prioritise 'biomedical' rather than social / applied research.
- More opportunities for ECRs with longer duration fellowships.
- Protected funded time for papers, next grant writing.

The PPIE group agreed that applied dementia research was equally as important as basic / biomedical research.
"It is about our everyday life".
"It is about making our lives at home better".

When discussing the location of applied dementia research across the UK, the PPIE group said that rather than focussing on the location of research, it was equally important that any research project was carried out in more than one location to ensure the findings were applicable in more than one area. The PPIE group were aware of geographical variability in services, and therefore felt that doing research in only one location might mean that it was not applicable to other areas.
"Support is haphazard. You need to take the findings elsewhere and see if it's the same."

When discussing investment in applied dementia research, the PPIE group emphasised the importance of the research having impact.
"Does anything come of it? That's the important question."
"Does anyone take notice?"

The Landscape - Summary and Recommendations

Context
- Whilst historically there has been underinvestment in applied dementia research, investment from multiple funders has increased in recent years.
- The Dem-Comm and Three Schools' Dementia Research Programmes and Dementia Network Plus initiatives have provided significant opportunities for applied dementia researchers.
- Combined funding calls, in which different funders produce calls together, have increased the emphasis on capacity building amongst ECRs.
- Combined funding calls have the potential to reach a wider audience of prospective applicants.
- The Dem-Comm programme has facilitated an England-wide network of applied dementia researchers, whilst Network Plus initiatives have created multi-site networks.

Challenges
- Capacity building has focused more on PhD and ECR than MCR and SCR, and more on attracting applied dementia researchers than on keeping them.
- Dem-Comm fellows may feel uncertain about where they will find next opportunities. Dementia-specific funding can be sporadic and unpredictable.
- There are fewer funding opportunities that enable applicants to build on and expand and extend existing projects (rather than start new projects) and this limits opportunities to move to full evaluation or implementation.
- Since combining basic/biomedical and applied funding calls, AS has noted fewer successful applied dementia applications. Unsuccessful applications from applied researchers have often lacked clarity on what is feasible or lacked sufficient knowledge mobilisation plans.
- Successful applications to open call competitions from both the NIHR and Alzheimer's Society are often concentrated in a limited number of well-established HEIs, with awards made less frequently to individuals in institutions in Northern England as compared to Southern England.

Recommendations

- Invest at the MCR and SCR stages, as well as continuing to invest at PhD and ECR, to support career pipeline.
- Ensure funding cycles are predictable and not sporadic, well-publicised, and ECRs can find opportunities and identify those suitable for them.
- Consider focussed funding to transition existing small scale and/or feasibility or pilot projects into full scale evaluations and/or implementation studies.
- Recognise the benefits of combined funding calls, enabling specific emphasis on capacity building and increasing the reach of opportunities. Other funders should be invited to join combined funding calls.
- Utilise NIHR infrastructure (e.g. ARCs) to facilitate geographical spread of applied dementia research.

2. People and Skills

Attractive Career Pathways

Are the community aware of NIHR and other funders in this area?
Are we communicating effectively with key audiences about our opportunities?
Is the area attractive to potential ECRs?

There is an existing difficulty in attracting and retaining SCPs, HCPs, AHPs, particularly SCPs to research.

Challenges include:

- Issues reaching people / lack of awareness of opportunities (a signposting gap)
- Workforce issues / inability to buy time out (an opportunity gap)
- Organisational culture that does not value research (a culture/desirability gap)
- Uncertainty of how to combine practice and research (a knowledge gap)

Issues reaching people / lack of awareness of opportunities (a signposting gap)

The NIHR Research Design Service and the NIHR Research Support Service advisors can act as navigators, helping to signpost researchers to opportunities.

The usual avenues of communicating opportunities results in many of the same applicants. (e.g., many of the same names at 'hot spots' applied for DTCs and Network Plus grants).
However, 'big names' on applications can provide funders with reassurance of expertise and this is one reason that applications are not anonymised.

Future plans

Funders believe that joint funding calls between UK funders and charities reach more people. Dementia Researcher (DR) tries to find and promote all job and funding opportunities, across the whole spectrum of dementia research. It brings all listings into one place and then amplifies it through channels including a weekly newsletter (mailing list approx. 4000); website 170,000 hits last year. This is particularly important to publicise less commonly known or less dementia-specific funders.

DR believes more work is needed to identify and promote the work of ECRs. AS is looking at how they can identify up-coming applied dementia researchers. DR features existing researchers in blogs and podcasts to discuss opportunities, challenges, tips etc.

Workforce issues / inability to buy time out (an opportunity gap)

These groups have a high workload. It can be harder to buy time out and/or not practical for them to take time out, with issues backfilling applicant's time and/or issues balancing clinical and research work.

Managers can be less keen to promote or support research as they don't want to lose workforce.

There are issues with recruiting clinicians to clinical research positions. AS has experienced poor uptake for some grants aimed at clinicians stepping into research for the first time. For example, they had a call in this area that received one applicant. AS has considered making some grants career-specific rather than HCP in general, with the view this might encourage more applicants by making it a more obvious step in their career.
AHPs recently pulled out of the Dementia Translational Research Centre at UCL due to clinical workload. SCPs are in a similar position. It is getting harder for them, especially since the Covid-19 pandemic.

There is a concern amongst care managers that SCPs will move to academia for better terms of work, better pay etc. Managers may be less keen to promote opportunities as they don't want to lose workforce.

The NIHR's local authority fellowship programme has received many applications working closely with local authorities to ensure clear messaging and support for Senior Managers (e.g Summary for Managers – see below).

Future plans

Funders could forge better connections with health and care organisations to overcome these issues. Funders could explore forging connection with senior colleagues/executives in large care organisations to ensure research is promoted and supported 'from the top'.

Funders should emphasise the aim is to support practitioner academics (not move people from practice to academia). Funders should communicate advantages of this – better services, quality of care, retention of staff etc, for example with guides for managers on the benefits of workforce entering research and explaining that funding is not trying to remove the person from the workforce. For applicants to the NIHR Local Authority Academic Fellowship Programme, the NIHR Academy has produced a 'Summary for Managers' as an additional resource for local authority applicants to draw on; including what are the benefits to an organisation. A summary is available for each career stage (e.g Pre-doctoral Local Authority Fellowship Summary for Managers').

Uncertainty of how to combine practice and research (a knowledge gap)

Building networks between practitioner academics and showcasing existing projects, and their impact, is important for AHPs and SCPs to see how others combine practice and research.
NIHR feel there might be a need to target these groups earlier.

Organisational culture that does not value research (a culture/desirability gap)

There is less of a research culture within social care compared to health care.
There has also historically been a language issue, with funders using healthcare language, not social care-friendly language. Similarly, language has not been local authority-friendly.

Future plans

Funders should work to increase awareness of the value of research.
Funders should ensure language used is SCP-friendly / LA-friendly. NIHR has been working on this. More networking and showcasing could promote how others combine practice and research, and the impact that research has. NIHR has developed a small number of Local Authority Academic Fellowship award holder case studies at different career levels to highlight the benefit of the award to the individual and organisation, as well as showcasing a 'practitioner-academic career'.

Is a research career in this area a recognised career pathway?
Is the area attractive to potential ECRs?
What tailored pathways and opportunities exist, what general pathways could also apply?
Is there progression across NIHR programmes as a whole?
Are there visible examples of senior figures in the field?

In social care research there are gaps at the point of entering research *and* moving from MCR to SCR. Often researchers focus on dementia research *plus* another area (e.g. dementia plus care economics). An advantage is that applied dementia researchers have a wide variety of skills that are often transferable. Currently, people switch in and out of dementia research at ECR level. No obvious, sustained, career pathway.

 "It wouldn't be obvious to people to say you can come in and you'll sustain your career in this area".

This isn't necessarily negative – it allows flexibility. But researchers need more visible case studies as to how it can be done. It is currently difficult to identify 'key or leading applied dementia researchers'. This is a future priority for the NIHR. The Dem-Comm programme has provided example of career trajectories of SCRs in the field. These were well received by Dem-Comm fellows who found them useful but were aware how diverse and unique the career path could be.

Because there is no specific career background for applied dementia researchers, with researchers coming from academic or clinical positions, researchers tend to come to it later in life, for example,

after establishing a clinical career. This variety of backgrounds is quite unique to applied dementia research.

Dem-Comm had an application process that encouraged diversity in backgrounds. It also avoided competition with basic / biomedical science. Two years of funding was attractive in terms of stability. It attracted people from other areas into dementia (e.g. epidemiology, frailty, ageing, end of life).

A diverse workforce coming from other fields is not an issue if there is a pipeline of funding in order to retain them in the field of applied dementia research. Existing dementia-specific funding maybe focuses too much on attracting people to applied dementia research, and not on retaining and progressing them. Without an entire pipeline of funding, the academic pyramid would be narrowed further.

ESRC and NIHR have non-dementia specific funding across the whole spectrum of career levels.

There are currently very few permanent academic jobs in 'dementia' compared to e.g. child health, cancer. But if you create funded posts in dementia, people will come – Dem-Comm is an example of this.

"…fund it and they will come."

There is an issue with not being able to apply for grants without having a permanent contract, so ECRs end up with short-term contracts on other people's projects. Our PPIE contributor highlighted that short-term contracts have a knock-on effect for many aspects of the researchers' lives, including mortgages.

There is also an issue if positions are not spread across the country. As people become older or hold more senior positions, they are not able to move around as much. If there is no position near them, they might shift to a different field.

"There may be a career path available, just not where they live"

How to make it more attractive

Funders could promote more visible examples of what a career in applied dementia research looks like. They could demonstrate importance through publicising of case studies of research having real impact, for example changing guidelines etc. In social care research this includes creating more of a culture around the value of research.

As above, funders could work with managers of AHPs, HCPs and SCPs to explain the value of research, and of their workforce doing research; provide some guidance for managers that HCPs/SCPs can take to their managers. For applicants to the NIHR Local Authority Academic Fellowship Programme, the NIHR Academy has produced a 'Summary for Managers' as an additional resource for local authority applicants to draw on; including what are the benefits to an organisation. A summary is available for each career stage (e.g Pre-doctoral Local Authority Fellowship Summary for Managers').

Applied dementia researchers are attracted by the stability of a research contract (the longer, the better) with competitive salary.

Provide opportunities, especially ones that are not in competition with basic/biomedical dementia research; that have a longer duration; that consider 'equivalent experience'.

Ensure researchers are aware of next possible steps / that they have career support.
Ensure any funded programme includes allocated time to find next source of funding within the contract. *(GBHI programme or programmes from Alzheimer's Association and others in Europe.)*

To improve equality, diversity and inclusion in the workforce, funders should put opportunities in geographic areas where ethnic minorities and other underrepresented groups are.

DR suggested doing a special event during carers week aimed at undergraduates to try and encourage them to think about dementia research as a career.

Dem-Comm Fellows and Three Schools' Dementia Research Programme award holders identified the career pathway as attractive in the following areas:

- Opportunities to work with people affected by dementia and to make a real-world difference.
- Strong connections with local communities.
- A stimulating environment to work in and a dynamic, evolving field of research.
- Diversity and success of networks and collaborations / the multi-disciplinary approach.
- A good level of autonomy.

They identified improvements to make the career pathway more attractive in the following areas:

- Improved salary and longer contracts, offering more stability.
- Improved work/life balance.
- Support to navigate the career pathway, which is seen as unclear.
- More visible role models.
- More rapid translation of research into practice.
- More effort to promote the profile / importance of applied dementia research (compared to basic/biomedical dementia research). Also to promote the benefits of multi-disciplinary working.
- Increased funding opportunities.
- Ensure non-clinical researchers feel they have the same opportunities as clinical researchers / health and care professionals.

We asked Dem-Comm fellows if they considered themselves to be an applied dementia researcher prior to their Dem-Comm fellowship. We then asked them if they considered themselves to be an applied dementia researcher now. We also asked Dem-Comm fellows whether they would like to continue a career in applied dementia research, if opportunities were available.

Figure 1: Percentage of Dem-Comm fellows that considered themselves an applied dementia researcher before their fellowship and now.
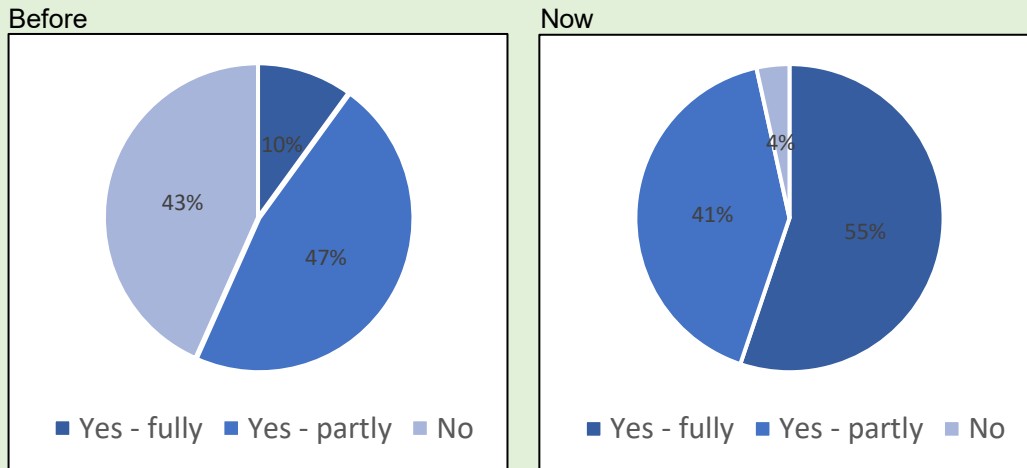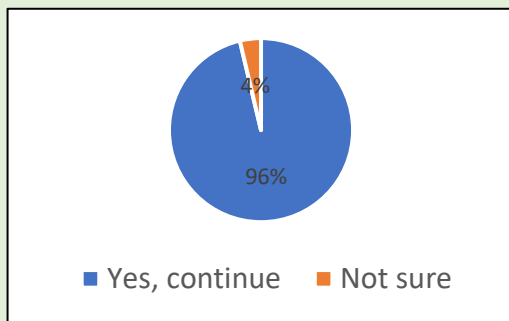
Before

Now

Figure 2: Percentage of Dem-Comm fellows that would like to continue a career in applied dementia research.

96%

4%

- Yes, continue   - Not sure

.

The PPIE group could understand why nurses and care workers were too busy to be involved in research, but did think they had a good perspective and wide experience to bring to research.

The PPIE group were not surprised that there were more women than men in applied dementia research because "women often take on the caring role".

The PPIE group were less worried about who was doing the research than what the researchers were researching. They felt that areas including the impact of behavioural changes, the earlier stages of dementia and community-based issues were areas that were of importance to them, and they thought it was less important who the researcher was (career level, gender, clinical practitioner or not) and more important that they worked closely with communities.

Supervision and Expertise

Are supervisors / research supporters experienced in applying for and undertaking funded applied dementia research?
Do ECRs get adequate support from their supervisors / research supporters?
Are supervisors / supporters enabled to supervise well?

Supervision and culture around supervision can be very variable and is highly dependent on the local host organisation's culture or individual supervisor. Lots of different approaches by different people. Pockets of good practice and less good practice, which might be due to other work pressures (time available for supervising).

This was one of the reasons funders were keen to introduce a doctoral training centre (DTC) model – to try to ensure more consistency. But DTCs only covers PhDs; it is more difficult for funders to have influence on, or monitor, supervision with ECRs.

Funders are unsure if supervisors receive any support on how to be good supervisors. For example, whether PIs receive training on how to supervise and develop ECRs. This could potentially be something funders should focus on more. Funders could also support the next generation to become skilled supervisors before they become supervising MCRs; train MCRs to be good supervisors now to create quality senior leaders in the future. Funders haven't really focussed on this area previously, but potentially could.

Within applied dementia research, there tends to be more supervisors who aren't dementia specialists (but the research project has a dementia aspect to it). That might be due to the increase in opportunities at PhD/ECR level outstripping the number of SCR applied dementia specialists. By increasing dementia capacity at ECR level, you are increasing the bottom part of the pyramid and maybe not enough supervisors available at the top end of the pyramid.

This could also be a positive as SCRs from other fields are bringing their expertise to the field of dementia. There are applied dementia specialists, but they are probably overloaded already. Capacity at the top level is limited. There are benefits to having supervisors with different areas expertise on an application. During a recent PhD call, the Three Schools' Dementia Research Programme funded 15 applications across a range of topics with a wider range of supervisors than expected, bringing in new areas of knowledge (e.g. falls prevention, economics, methods etc).

Within NIHR career development awards, training and development is at the front and centre of fellowship applications; with individuals able to include a fully costed bespoke training and development plan that is tailored to the needs of the applicant and the project within their award.
A review of the supervisory team on NIHR Academy fellowship applications is part of the standard application review the NIHR Funding Committee undertake; in particular at doctoral level Funding Committees will be assessing the suitability and experience of the applicant's supervisory team; that that they have the right expertise (both within the area of research and the methodology they intend to use). The Committee will be looking to see that supervisors have enough time to give applicants and that the applicant's primary supervisor has successfully supported a number of PhD students to completion

Future plans

Funders could set up a system to encourage MCRs to be second supervisors for PhD supervisors, to 'fast track' more MCRs into supervision.

AS believes there is an opportunity to get more MCRs being co-supervisors (once they are ready). It's also good for their own career record. For example, maybe writing it in to grants for SCRs that developing MCRs into supervisors is positive.

There are ad-hoc examples of PhD studentships that have 3 supervisors - 2 experienced supervisors and a 3rd who is learning to supervise on the job. Funders could provide strategic encouragement for this kind of activity (e.g. ensuring that third supervisor is funded).

Creating programmes through structures like the ARCs can ease this issue by creating small support networks rather than just researcher – supervisor relationships.

Are there groups/sources of expertise to call on (e.g. on selection committees)?

Funders agree there is a small pool of applied dementia research specialists to call upon.

Larger scale grants can be challenging as the 'experts' within the small pool are applicants on the grants.
"The bigger the grant, the more you feel the strain".

For the DTC programme, AS had to go internationally to find experts to review some applications. That results in a lot more refusals for assistance, as UK-based funders don't have established relationships with international researchers. There is also more work involved in trying to match reviewers to applicants when you don't have an existing relationship. It is also tricky with regards the differences in healthcare systems and academic systems between the UK and other countries. However, AS are looking to grow these international networks.

ESRC experienced similar issues with the Network Plus commissioning, with many of the potential reviewers having a conflict of interest. The ECRs involved in the review process had insightful comments and inputs to offer. It may be that ECRs want the opportunity to review more than those who are already established SCRs.

Future plans

ESRC have a system where previous and current grant holders are added to a 'peer review college'. ESRC welcomes anyone with knowledge and expertise in economic and social research subjects regardless of their research organisation or seniority to join the peer review college (Being a college member – ESRC – UKRI).

Similarly to supervision, it may be possible to bring ECRs into peer reviewing earlier. The NIHR have a Reviewer Development Scheme for ECRs who are new to reviewing and want to develop their skills further. They will have the opportunity to gain experience of peer reviewing for NIHR programmes. ECRs are given guidance on how to complete a review task. ECRs receive constructive feedback on their reviews to help hone their reviewing skills.

The University of York have a system where experienced senior-level reviewers mentor ECRs to do reviews. The Three Schools Dementia Research Programme would like to do this more.
AS have also done something similar and now have MCRs who sit as established members of our Grants Advisory Board (the board that makes the funding recommendations).

ARC North East and North Cumbria has an arrangement with the local Research Support Service, in which fellows in the field of social care are part-funded by the ARC and the RSS. This allows them to receive RSS reviewer training and show panels, enabling fellows to develop their reviewing skills and experience and for the RSS to build capacity in the field of social care.

DHSC are considering how to maximise PPIE reviewers in the process; for example, having only PPIE review before interviews.

Our PPIE contributor added that she has experience of peer reviewing and emphasises how important support / training and allowing additional / adequate time are for PPIE reviewers.

Training and Mentorship

Is there relevant training available for applied dementia researchers? (eg. Public contribution, grant writing, academic writing, entrepreneurship?)
Is support available through NETS/RDN/RSS?
What happens locally vs what funders might provide?

All NIHR Academy personal awards/fellowships include dedicated and bespoke funded training and development programmes, along with a range of broader academic career development opportunities, events and networking. All final year PhD and postdoctoral award holders are able to apply to the NIHR Academy Mentoring Programme. The NIHR Future Focussed Leadership Programme is also available to NIHR Academy postdoctoral members. NIHR Academy members are also able to attend the annual 2-day residential NIHR Academy Member conference and a range of other events. NIHR Academy members based within NIHR Infrastructure and NIHR Schools are also able to attend an annual 3-day residential Doctoral Research Training camp (aimed at 2nd/3rd year PhD students) and 1 day post-doctoral event. There is nothing dementia-specific.

The NIHR host the 'Associate Principal Investigator Scheme'; which is a 6 month in-work training opportunity, providing practical experience for health and care professionals to work on and deliver an NIHR portfolio trial under the mentorship of a local PI.

AS hold an annual early career researcher retreat with various workshops over 2 days. (For example, grant writing; communicating your research etc.) The event is free for award holders and has reduced cost to other dementia researchers. AS also provide grant application development support, with anyone able to have their application read by a PPIE contributor to receive feedback.
AS offer training on communicating your research, which is quite general as it covers basic/biomedical and applied dementia research.
Other training needs for applied dementia researchers throughout the year are expected to be provided by host organisations. However, all AS ECR grant types (including MCR) have the potential for researchers to write in budget specifically to be used for career development and training.

DTPs and DTCs have a strong focus on training. Host centres have the autonomy to design the training programme. DTC applications have just closed, and training offered by host centres seems to be excellent - better than AS could offer PhDs previously. The key here is also the cohorts, as before DTCs AS were funding isolated PhD projects, so training and supervision could be very variable from PhD to PhD and AS had very little control as a funder.
This has led AS to consider how such good training opportunities can be offered to award holders at other career levels (ECRs, MCRs).

The Three Schools' Dementia Research Programme expect and encourage support through host organisations. The Programme focuses more on networking (formal and informal), and knowledge exchange than training. They have had a few requests for training, but most award holders felt they were getting this adequately from host organisations. Researchers embedded within host institutions with a critical mass of dementia, healthcare and/or social care researchers benefit from established infrastructure to support their careers with access to training opportunities. It can be different for

researchers who are working in smaller groups or where there isn't an established group of relevant researchers who may need to be posted or linked to universities.

Within the Dem-Comm programme, Fellows have requested training on ethics and consenting / how to include people with dementia, especially those lacking capacity and/or who are non-verbal. Confidence-building is also key and should be a part of training.
The Dem-Comm programme has also focussed on areas such as confidence-building, which has been valued by ARCs and fellows.

AS also gets asked by award holders about how best to do public involvement and engagement but feels they are able to provide this support as needed. They have a dedicated research involvement team who support researchers with PPIE activity and access to our lived experience group (Research Network Volunteers).
AS has identified underdeveloped implementation / knowledge mobilisation plans as a key issue amongst applied dementia research applications. AS therefore wondered if more training on how to create an implementation / knowledge mobilisation plan is needed for researchers.

UK Dementia Research Institute does cohort-based training to identify needs along the career pathway. AS has been thinking more about how to do this.

DR notes that an advantage of an applied dementia research programme rather than individual awards is that there can be a more structured training programme for award holders that it is tailored to dementia research and the needs of their career level. Dementia Research lists events, including training, on its website and newsletter. With self-driven training, award holders need to be aware of the opportunities and have the resources to attend (if required).

Are there relevant mentorship programmes for applied dementia researchers?

Similarly to supervisors, there may not be enough MCRs to provide applied dementia-specific mentorship to PhDs/ECRs.

All applicants to NIHR Academy career development awards are required to have mentors as part of their overall research support/supervisory team. The NIHR Academy has a Mentoring Programme for final year PhD and post-doctoral NIHR Academy members (who hold one of the NIHR Academy awards). The Mentoring Programme is not dementia specific - it supports inter-disciplinary collaboration, as mentors do not need to be discipline specific, and can be from an associated or complementary professional background.

Additionally, the NIHR Research Support Service can also provide advice on applications in addition to that provided by mentors and supervisors.

ESRC and AS do not provide a mentoring scheme – this is provided by host organisations.

AS did have a mentoring scheme in the past, in partnership with the Academy of Medical Sciences, but one reason it ended was because a lot of the institutions were running their own scheme already, so it was really difficult to find available mentors. AS provide public mentoring (by public contributors).

Dem-Comm have tried to encourage their fellows to have a mentor as research shows that having a mentor can make a big difference in career development. A Dem-Comm progress survey asked fellows if they had a mentor - approx. 60% of Dem-Comm fellows have a mentor. Dem-Comm does not offer a formal mentoring scheme, although peer-support is built in. Instead, it sign-posts fellows to the NIHR mentoring scheme and host organisation schemes.

DR worked with ARUK's Research Network to set up a mentoring scheme, which was very successful. This was primarily for basic/biomedical researchers, but there was a lot of demand. People were very interested in having dementia-specific mentors/mentees.

DR emphasised that mentors don't need to be professors – only need to be one or two steps ahead on the career pathway. For example, Dem-Comm fellows could be, and perhaps are, mentors to PhD students.

Mentoring is a key part of DTCs.

Dem-Comm Fellows and Three Schools' Dementia Research Programme award holders felt that in the area of training and mentorship, the following were working well:

- Being able to access ARC and host organisation training and support.
- Prompts and support for personal career development.
- The expectation that everyone has a mentor.
- Access to the NIHR mentoring scheme.

They felt that in the area of training and mentorship, the following could be improved:

- More structured training opportunities.
- More shared learning between researchers who are health and social care professionals and those who are not, including more chances to network; more appreciation of each other's roles; spaces to co-generate new ideas (allowing for research methodology expertise and practical expertise); working together to ensure the output is acceptable to all stakeholders.
- More training on being a PI.
- Consistent clarity on steps needed to progress to next career stage.
- More consistency in mentoring.
- Less difficulty in finding a mentor.
- Clearer expectations and training for both mentors and mentees.

People and Skills – Summary and Recommendations

2.1 Attractiveness of Career Pathway

Context
- There are increased opportunities for health and care professionals in applied dementia research.
- The unique recruitment process to the Dem-Comm programme attracted a diverse group of researchers, many from other fields. It also avoided competition with basic/biomedical applications.
- The diversity of research backgrounds of applied dementia researchers can bring different skills, knowledge, interests to the field.

Challenges
- There are difficulties in attracting and retaining health and care professionals to applied dementia research, particularly social care professional (SCPs), due to:
  - Issues reaching people / lack of awareness of opportunities
  - Workforce issues / inability to buy time out
  - Organisational culture that does not value research
  - Uncertainty of how to combine practice and research
- There is no clear career pathway – people switch in and out of applied dementia research at the ECR level in order to sustain employment on fixed term contracts.
- ECRs feel they are not fully aware of opportunities and are often unsure how to find opportunities and/or identify those suitable for them.
- The diversity of backgrounds of applied dementia researchers can also be challenging as it doesn't encourage 'specialisation'. It is less easy to identify experts in the field of applied dementia researchers.
- There are currently few permanent academic jobs in applied dementia research.

Recommendations
- Continue to promote research opportunities for health and care professionals through:
  - Highlighting 'case studies' of successful applied dementia researchers
  - Improved communication with health and care providers on the practicalities and benefits of employees being involved in research

- Recognise that opportunities made through targeted programmes (e.g. Dem-Comm, Three Schools' Dementia Research Programme) can attract researchers to applied dementia research from other fields of research.
- Recognise that longer funding periods/contracts provide more stability and increase attractiveness.
- Be clear on the suitability of opportunities for different career stages and levels of experience.
- Build in time allocated to support ECR/MCRs to work towards and secure the next source of funding into programmes. Consider highlighting appropriate 'next step' opportunities.

2.2 Supervision and Expertise

Context
- The quality and quantity of supervision is variable.
- With more applied dementia ECRs than SCRs, many supervisors are coming from a different field.
- There is a relatively small pool of applied dementia experts, which has led funders to find alternatives for reviewing funding applications. This includes calling upon MCRs, public contributors and international experts.

Challenges
- The doctoral training centre (DTC) model aims to provide more consistency in quality and quantity of supervision. However, this only covers PhD candidates.
- Supervisors coming from a different field will bring their own skills and knowledge but may not have the expert dementia-specific knowledge.
- MCRs and public contributors may need additional support to review grant and fellowship applications. International experts may not be as familiar with UK health and care systems or PhD programmes.

Recommendations
- Support the current generation of MCRs in applied dementia research to become skilled supervisors through training and supported opportunities.
- Encourage a variety of supervisors on fellowship applications, including combining specialists in dementia with specialists in other areas, and SCRs with MCRs.
- MCRs should receive support, development and opportunities to enable them to review applications, including being paired with SCRs.
- Funders should consider the most effective way to record contact details and track career progression of former award holders and MCRs, to create an expanded bank of 'experts'.

2.3 Training and Mentorship

Context
- Doctoral training programmes (DTPs) and DTCs have a strong emphasis on training and allow host organisations to provide more rounded high quality training opportunities compared with those in receipt of individual doctoral funding not connected to a DTP or DTC.
- NIHR Academy offer a mentoring programme, leadership training, events and networking opportunities (non-dementia-specific). The NIHR career development award includes a bespoke and fully costed training and development plan tailored to the applicant and project.
- AS offer an annual ECR 2-day retreat.
- Researchers in the Three Schools' Dementia Research Programme are linked to higher education institutions (HEIs) to enable access to training.
- Dem-Comm and Three Schools' Dementia Research Programme provide networking and peer learning, as well as training webinars.
- UK Dementia Research Institute does cohort-based training to identify needs along the career pathway.
- Funders are aware of the importance of mentoring and encourage all award holders to have a mentor.

Challenges
- Host organisations' training and development opportunities can be variable. Some more isolated researchers with fewer connections in their host organisation require more support.

- AS has identified that applications for applied dementia research can have poor understandings of how feasible the project is or have inadequate knowledge mobilisation plans.
- ECRs would like more communication and peer learning between researchers who are health and care professionals and those with a different background.
- ECRs would like more leadership and Principal Investigator (PI) training.
- The lack of SCRs leads to difficulty in finding mentors.
- Many ECRs are without a mentor.
- Some ECRs feel mentors and mentees need training to make the process more useful.

Recommendations
- Consider how training and development opportunities made available through DTCs or DTPs could be adapted for ECRs and MCRs.
- Identify applied dementia-specific training requirements (e.g. informed consent processes and other ethical issues) and ensure these are offered to award holders.
- Funders would like greater clarity on the feasibility of projects and improved knowledge mobilisation plans within applications in applied dementia research, which indicate possible areas for training.
- Consider how researchers who are health and care professionals and those who are not can better share knowledge and learning.
- Identify common needs along the career pathway, including leadership and PI development, and provide cohort training where possible.
- MCRs should have support to become mentors to increase the available pool.
- ECRs should include mentorship within their career development plan. There should be training and clear expectations for mentors and mentees.

3. Research Opportunities

Range of Programmes Accessible to ECRs

Are there 'starter' or smaller programme grants that ECRs can apply for (e.g. RfPB,RPSC) encouraging ECRs as PIs?

NIHR has eleven research funding programmes, which fund research across the full spectrum of health and care - clinical evaluation and translation, technology evaluation, health service delivery, public health and social care. Most NIHR programmes fund patient-based research that is later rather than earlier in the research pathway, and none fund basic research. NIHR issue commissioned calls for research that addresses specific topic areas, whereas researcher-led calls allow researchers to directly propose questions.

Both the NIHR Research for Patient Benefit Programme (RfPB) and Research Programme for Social Care (RPSC) welcomes and encourage ECRs to lead on research applications, whilst being supported by a senior colleague who would be fulfilling the role of mentor and Joint Lead Applicant. NIHR expect that the ECR is embedded within a supportive environment and also expect to see justification within the application for the ECRs choice of mentor, along with a summary of the mentors relevant expertise and track record in the area of research detailed in the programme.

The NIHR has the Associate PI scheme, which is a six month in-work training opportunity, providing practical experience for health and care professionals on what it means to work on and deliver an NIHR portfolio trial under the mentorship of an enthusiastic Local PI. Associate Principal Investigators receive formal recognition of engagement in NIHR Portfolio research studies through the certification of Associate PI status, endorsed by the NIHR and Royal Colleges.

ESRC does not have any dementia-specific programme grants for ECRs to apply for as individuals. There are general ones, for example future leaders; first grant schemes, which are extremely competitive.

In the recent Network Plus calls, there was more specific wording related to development of ECRs. Network Plus give funds to core organisations who then conduct smaller funding calls themselves. The guidelines stated that this provided an opportunity for ECRs to lead on some projects. The planning and the structure for this was considered by the panel. The successful applications had considered and included plans for this. ESRC had previously mentioned ECR development in funding calls, but in a more 'light touch' way. The Network Plus model was a great opportunity to have more emphasis on this and ESRC are keen to see how it works out.

AS doesn't have specific opportunities for ECRs who would like to be PI for the first time. However, it does have 'career development grants' for ECRs, which cover 18 months of funding. Applicants need to demonstrate how the grant will allow them to fulfil certain career path. It was rolled out two years ago, with 3 successful applications to date but none in applied dementia research yet.
AS has starter grants for AHPs and HCPs, project-based grants.
AS considers 'equivalent experience' outside of research in applications. For more experienced MCRs, AS has the Dementia Research Leader Fellowship, which covers 5 years (longer than a regular senior fellowship). Award holders are encouraged to supervise a PhD student as part of it.

Three Schools' Dementia Research Programme has regular career development awards, which are suitable for any level, but get predominantly ECRs as applicants.
The research project calls actively encourage new and emerging PIs. The panel stage ensures that they have enough support, mentorship and identifies areas in which they may need upskilling.

The main aim of the Dem-Comm programme is to equip fellows to become a CI and lead on a fundable bid.

Other possible grants for ECRs include: Foundation for sociology and health and illness – three small grants annually; Wellcome Trust have an early career award, including one for BAME communities; AHRC.

Future plans

DHSC asked if it is possible to have a PI model where you have a senior investigator paired with a more mid-career researcher, as part of the funding bid.
Three Schools' Dementia Research Programme have done this informally, but there were questions at panel about how much each of the investigators would actually be involved if they are only contributing small percentages of their time to a project. Specifying a joint co-PI model with specific time allocations may be an option.

Are there programmes encouraging or funding policy making?

There are two new NIHR Policy Research Units (PRUs) in Dementia and Neurodegeneration; one at Queen Mary University of London and one at the University of Exeter. These are funded for an initial 3-year period, with review in mid-2025.

The Dementia and Neurodegeneration Policy Research Unit – Exeter (DeNPRU Exeter) currently hosts 6 researchers, one MCR and 5 ECRs. All were previously applied dementia researchers who had limited experience of other neurodegenerative conditions and are new to policy research. Practical experience in these areas has been gained by taking responsibility for project workstreams and drafting outputs. In addition, DeNPRU Exeter provides opportunities for students to experience and get involved in research early in their training through placements and project opportunities, and for Dem-Comm Fellows to gain an understanding of policy research.

DeNPRU Exeter supports researchers via formal training programs, mentoring and networking opportunities, assigning management and project leadership roles, and lead author opportunities on outputs where possible, as well as supporting the development of fellowship and grant applications. All members are encouraged to make use of host organisation and NIHR Academy courses and training. The collaborative nature of the programme allows support and input from the team, with cross-institute and cross disciplinary knowledge exchange and networking. Researchers within the unit have the opportunity to work directly with SCRs in other institutions on individual projects in a way that would not otherwise happen, allowing them to gain exposure to diverse expertise and ways of working. Researchers are encouraged and mentored to prepare their own funding applications where relevant; for example, one post-doctoral researcher has recently been awarded a Three Schools Career Development Fellowship.

DeNPRU Exeter liaises closely with DHSC liaison colleagues and wider policy teams to research planned and responsive projects. They also have oversight meetings with NHS England Clinical Leads, charities and senior clinicians to further develop their work programme. This ensures projects are timely and relevant to policy teams at DHSC and other stakeholder groups.

DeNPRU-Exeter employs a PPIE lead who works closely with their PPIE group, the FRIEND Network. Resources developed including a video series and guide, which have been co-produced with members of the Network. These provides a template for PPIE best practice for researchers working across multiple conditions, and also provided our FRIEND group with an insight into research and how to shape involvement to best support their needs.

During its first year the Dementia and Neurodegeneration Policy Research Unit – Queen Mary University of London (DeNPRU-QM) has supported about 11 researchers in its first year, the majority being ECRs, with 2 medical students. The researchers all had experience in applied dementia research, but all were new to policy research.
DeNPRU-QM supports capacity building through training, research experience, facilitated networking and line manager support.
Post-doc Research Fellows are supported to take on greater responsibility for projects, to develop knowledge and connections in their field and in applying for their own Fellowships
reflecting DeNPRU-QM's core themes or other opportunities. For example, one post-doctoral researcher is currently on a year's secondment to the DHSC for one day per week.
ECRs and MCRs who are external to DeNPRU-QM's core team have opportunities to gain leadership and management experience as co-theme leads or co-project leads by working alongside a senior member of DeNPRU-QM, with opportunities to take on senior author roles on outputs.

Three Public Advisor Researchers are employed by DeNPRU-QM for one day per week. These are people with lived experience of caring for a relative with dementia or a neurodegenerative condition. They are supported to develop research skills and to deploy these on projects, for example, conducting interviews, helping to interpret data and dissemination.

NIHR has a Policy Research Programme (PRP), funds policy research to enable evidence informed policy making in health and social care. PRP commission policy research to support the Secretary of State for Health and Social Care, Ministers, and Senior Officials in the DHSC and its Arm's Length Bodies (ALBs). There is nothing dementia-specific at the moment but could potentially be in the future.

ESRC do policy fellowships with parliament, some focussed on health, but none have been dementia-specific.

AS doesn't currently have programmes encouraging or funding policy making, but the policy team are looking to commission some research. AS could consider whether they could do more to integrate this into existing grants.

This question has been discussed by Three Schools' Dementia Research Programme. Their research is supposed to be practice-focussed, not policy. However, sometimes you have to influence policy to have an impact on practice. They are linking up with the PRUs, including the 2 new dementia ones.

Dem-Comm is similar to the Three Schools. Research is aimed at practice, but it is important that ECRs see that policy impacts practice and to be aware of policy units in their host organisations.

The Royal Society enables policy networking, has a pairing scheme and provides information on how to influence policy but doesn't fund research.

DR notes that the issue with policy-based research is that unless the DHSC or other body specifically want the research done, it can be difficult to have impact. Current increased focus on implementation / knowledge mobilisation is successfully making researchers think about how their research will make a difference (in policy or in practice). Funders also have a role to play in ensuring research has maximum impact and affects policy when appropriate.

Should there be more programmes encouraging or funding policy making?

Three Schools suggested it may be useful to bring together existing work in this area and highlighting it initially alongside funding more research, like with the mental health incubator.

Research Support Functions

Is there relevant methodological support?

The NIHR Research Support Service (delivered by 8 hubs) provides support to researchers to develop applications to national, peer-reviewed research programmes. This covers all NIHR programmes and UK Research Councils, as well as national health and care charities. There are also Specialist centres for Public Health and Social Care, which provide context-specific expertise. All hubs can support researchers with finding funding sources, refining research questions, developing appropriate methodological approaches etc.

There is plenty of methodological support available. Only possible improvements could be made to sign-posting where to find it and ensuring award holders have the funds to attend.

The development of methods was explicitly stated within the Network Plus call. This could include methodological theory, leadership skills. The call was looking for forward thinking methods, new methods, ensuring they were justified.

AS has noticed that unrealistic feasibility assessments and underdeveloped implementation/knowledge mobilisation plans are main concerns on applied dementia applications. This may indicate that more support is needed in these areas, including training that is tailored to

the unique implementation questions and challenges applied researchers face when considering the impact of their work.

Public Involvement and Engagement

Are there recognised and utilised practices for embedding public involvement throughout applied dementia research, at funders' organisations and in general?
Do funders collect evidence of the public involvement making a demonstrable impact on research?
Are there challenges in promoting and supporting public involvement in applied dementia research?

NIHR has PPIE contributors on Funding Committees. NIHR have developed a range of resources and guides to support applicants with the design of their PPIE. They don't have any specific dementia guidance.

ESRC points their award holders towards NIHR Involve guidance. PPIE was key part of Network Plus and PPIE were encouraged to be included as applicants; 'involving lived experience throughout'.
The challenge is how to encourage people to be involved and how they are costed. This includes how to pay for their time during grant development.

AS has a well-developed PPIE programme with 300-400 Research Network volunteers, of which 20-30 are living with dementia. For every award holder, the project gets allocated PPIE contributors (currently called 'monitors') who are like critical friends. They meet with the researcher every 6-12 months. AS also encourage PPIE involvement at the grant development stage. Some professional relationships between award holders and public contributors continue after the award has finished, which can really enhance the development of researcher. AS provides guidance on working with the public, as well as directing awards holders to NIHR Involve.

A major challenge in PPIE in this area is reaching people with dementia and not just carers.

Contributors to this report have identified particular challenges in relation to carrying out PPIE with those with lived experience of dementia:
- Dementia is a progressive terminal condition, which can affect the process. PPIE contributors can be very keen at the beginning but might not be able to continue later.
- PPIE contributors with dementia may not always be representative of the wider group as those with more progressed or more quickly progressing dementia may find it more challenging to contribute.
- There are also so many demands on ECRs within their careers, including publishing, impact. Funders need to be careful it doesn't just become a tick box exercise; it needs to be meaningful.
- Without funding, it can be challenging to stay in touch with public contributors between grants / projects.

Funders generally agree PPIE is well-developed in the area of applied dementia research. PPIE contributors are regularly involved throughout, including being co-applicants and co-authors. Researchers are good at acknowledging the involvement of PPIE contributors.

DR noted that when funding calls successfully attract people from other areas into applied dementia research, these researchers may not have the experience of doing PPIE with people with cognitive impairment and may need some support.

NIHR, AS, ARUK and Alzheimer Scotland have set up Join Dementia Research, which aims to connect people with lived experience of dementia to researchers.
https://www.joindementiaresearch.nihr.ac.uk/

Dem-Comm Fellows and Three Schools' Dementia Research Programme award holders felt that in the area of PPIE, the following worked well:

- PPIE is well recognised and well carried out in applied dementia research.
- ARCs have strong PPIE leads.

They felt that in the area of PPIE, the following could be improved:

- Recognition that PPIE with people with cognitive impairment requires more consideration and more resources.
- EDI in PPIE, including more diversity / quality of engagement with minority communities.
- Clearer understanding of PPIE resources and support available within host organisations and infrastructure (eg. within the ARCs).
- Less variability in the availability of PPIE funding, including funding for PPIE pre-application and between grants.
- Simplification of payment systems for contributors through university systems.

The PPIE group felt that PPIE with people with lived experience of dementia was vital to make sure researchers are asking the right questions. They enjoyed being involved. They emphasised it was important that researchers told them what the impact of their involvement was and what the results and impact of the research were at the end. They felt more and more people would want to become involved as "everyone's life will be touched by dementia at some point".

Team Science

Is there reward and recognition/acknowledgement of the entire group?
Is there suitable training and signposting to relevant competencies - e.g. negotiation, resilience?
Is there support not just for independent researchers, but those contributing to the research as well?

There are many researchers from many different backgrounds in applied dementia research. This can bring challenges, but also many benefits in the area of Team Science. As previously discussed, many projects include at least one non-dementia specialist.

NIHR have a Team Science Programme; an annual initiative, to bring together researchers to form new teams to address a research challenge from different disciplinary perspectives. There is a different theme each year (Rd 1 -Multiple Long-term Conditions, Rd 2 - Applied Health and Care Methodology, Rd 3 – To be confirmed). Provides funding and support for the team to collaborate on a future application to other research programmes.

Network Plus calls aim to promote inter-regional/HEI collaborations. Networks in general enable multi-disciplinary working. There are local, regional and inter-regional dementia research networks.

Applied dementia research is strong in the area of working with third sector organisations, and for recognising that contribution. Many dementia research teams have strong relationships with local, small as well as large, national third sector organisations. ARCs play a role in building and maintaining these local connections.

Our PPIE contributor added that she had always felt well supported to do PPIE and feels recognised.

Research Opportunities – Summary and Recommendations

3.1 Range of Programmes Accessible to ECRs

Context
- Many NIHR Programme grants also have opportunities for ECRs to apply as PI (e.g RPSC, RfPB).
- Combined funding calls (e.g. Network Plus) have increased emphasis on encouraging ECRs to be first-time PIs.
- The Three Schools' Dementia Research Programme has actively encouraged ECRs to be PI.
- A key aim of Dem-Comm is to equip ECRs to be Chief Investigator (CI).

- There is an increasing willingness amongst funders to consider 'equivalent experience' in applications.
- There are 2 NIHR Policy Research Units for Dementia and Neurodegeneration (DeNPRU), focussed on policy-related research to inform policy-related decision making.

Challenges
- ECRs find it difficult to identify which grants are open to ECRs where they can have the opportunity to act as a PI for the first time.
- ECRs cannot apply for some grants without a permanent contract.
- Researchers can find the route to applying practice-based research findings to broader policy-making unclear and challenging.

Recommendations
- Funders should make clear which awards are suitable for ECRs to lead or co-lead (including suitability for those without permanent contracts).
- Where research proposals are practice-based, researchers should still be supported by units at host organisations that specialise in bringing about policy impact from research.

3.2 Public Involvement and Engagement

Context
- Patient and public involvement and engagement (PPIE) is well-developed in the field of applied dementia research, and public contributors and community groups are recognised for their contributions.
- Funding calls encourage public contributors to be included as applicants, involving those with lived experience throughout the research.

Challenges
- Supporting people with lived experience to be involved in PPIE can be more challenging:
  o Involving people with cognitive impairment in research
  o Involving carers who are experiencing high care responsibilities
- There are taboos around dementia within certain communities, which can inhibit the diversity of public contributors.
- PPIE can take longer with those with cognitive impairment.
- Maintaining contact with public contributors between grants and projects, and resourcing PPIE during bid development can be challenging.

Recommendations
- Recognise that meaningful PPIE with this population is resource intensive compared to many other research areas.
- Ensure ECRs are aware of additional sources of funding or support for PPIE activities (through HEIs or funder).
- Consider how to fund PPIE during grant development and between grants.

4. The Environment

Are there supportive environments for dementia-focussed applied health and care research? e.g. is there an NIHR School, or relevant NIHR Infrastructure?

NIHR Infrastructure, such as Three Schools' Dementia Research Programme and ARCs, were reported to be very supportive environments.

ARCs are an outstanding resource for ECRs and doctoral students and this is a real strength where an ARC has a dementia theme. For example, ARC South-West Peninsula (PenARC) has run innovative doctoral training programmes, provided great opportunities for ECRs who are working on specific dementia-related projects, and hosted Dem-Comm fellows, offering access to PPIE contributors, local and regional health and social care services, a whole range of local organisations, an extensive range of methodological expertise (e.g. via regular methodology 'clinics' covering various types of work) including statistics, health economics, qualitative research, implementation and knowledge mobilisation, and guidance from SCRs with dementia expertise and with expertise in other areas. This is a very supportive environment for career development.

Health Determinant Research Collaborations also offer supportive environments to local authorities.

The 'Concordat to Support the Career Development of Researchers' is an agreement between universities, research institutes and funders to support the career development of researchers in the UK. Many funders highlight that training and support should be in line with the principles and best practice set out within the [Researcher Development Concordat.](#)

'Place/Environment' where applicants are proposing to undertake their NIHR career development award is a critical part of the assessment criteria. A 'Host Statement of Support' is a requirement of the application; where the committee will be looking to see that your host organisation is committed and invested in your career development. The funding committee are very good at picking up on generic host support statements. Excellent statements of support are from those Heads of Departments who clearly know the applicant, their research and background, their individual training needs and that they are going to support the applicant's academic career and are invested in them.

NIHR views the Head of Department supporting statement as very much part of the assessment criteria. If it identifies a weakness in host support, NIHR will put a condition in to put measures in place. Academy members have access to additional support through the NIHR Academy.

ESRC are increasingly thinking about the host environment in calls. The supportive host culture was incorporated into DTP and Network Plus calls, but only in a broad way at the moment.

AS did a scoping exercise on this. DTCs seem to create very supportive host environments, especially for PhDs/ECRs. They create a cohort of researchers. AS has an annual event ECR retreat, which is for basic/biomedical and applied researchers. There are currently more basic / biomedical researchers. AS could consider whether to do an event for applied dementia researchers only.

Within the Three Schools Dementia Research Programme, some applied dementia researchers work within a cohort of other applied dementia researchers, whilst others do not have this at their host university. Three Schools tries to link up the more individual, siloed researchers with others. Connecting across universities can also provide a wider perspective. However, the individual needs a lot of initiative to make and maintain the connections, and they miss the ad hoc conversations and support. It takes more effort for the individual researcher, and those working in established groups already have full schedules and networks. There is an advantage for ECRs working in an environment with other dementia researchers. They can access more advice, support, sign-posting. It may help them be more competitive on applications by accessing constructive advice from peers and line managers.

There have often been many lone dementia researchers, which is a key reason why DR was set up.

Events and conferences play an important role in connecting people in the same area. ARCs are often driving these events, and it is positive that ARC events are often open to everyone. ARC East of England and ARC Kent, Surrey and Sussex have led some of these. Some of these events are online, some in person. Online is more accessible but they don't bring people together so well. DR website lists all the events.

Future plans

Funders could consider how to specify what a supportive host environment looks like / require evidence on application.

Equality, diversity and inclusion

Are there initiatives to champion equality, diversity and inclusion?

NIHR doesn't have specific schemes targeted at EDI but does have an EDI research inclusion strategy. It is focussed on improving and investing in underrepresented health and social care professions. For the NIHR Research Professorship scheme host organisations are able to nominate up to 3 individuals to the programme provided at least 1 applicant is from an ethnic minority group. This is in addition to the requirement of ensuring that at least 1 applicant is female if more than 1 nomination is made. The Pre-Application Support Fund is aimed at those with caring responsibilities – salary and training support to help researchers put in a competitive application. NIHR uses positive action statements to promote funded programmes to diverse groups. NIHR recognises EDI is not just for applicants, also selection committee panels, which need to represent range of disciplines, professional backgrounds, regions etc. NIHR Incubators address strategic need and build capacity. There isn't a dementia-specific incubator, but there is a new one for Race, Equity and Diversity and Careers.

AS has been considering EDI recently but recognise they could do more. AS are currently developing funding initiatives targeted to specific communities to support their EDI research strategy. They provide maternity/family leave pay for PhD students as well as fellows. AS also try to ensure our Grant Advisory Board and other funding boards are as diverse as possible, representing different disciplines, genders, backgrounds, career stages and locations of host institution.

Rather than having special schemes, Three Schools' Dementia Research Programme emphasises that calls are open to all and reviews EDI considerations as part of its commissioning process.

HEIs might have specific schemes, but not dementia-specific.

DR highlighted the importance of ensuring opportunities were offered in places where underrepresented groups are geographically located. Participants are more likely to take part if a researcher looks like them and/or they can relate to researcher.

DR highlighted gender as an issue. There are many more women in applied dementia research than men. This can present barriers in terms of returning to work – childcare costs / the cost of living. PhD students don't qualify for the same help with childcare costs as employees. Some research areas has a better gender balance (e.g. brain health). Australia seems to have a better gender mix in applied dementia research.

MCRs are often more settled than ECRs and it can be harder for them to move to take up another position. They are more likely to switch to another area of research rather than move.

AS has partnered with Daphne Jackson to provide grants to researchers after a career break.

Dem-Comm Fellows and Three Schools' Dementia Research Programme award holders felt that in the area of EDI, the following worked well:

- Flexibility, especially for clinical researchers.
- EDI within applied conferences.
- More diversity in Dem-Comm cohort compared to other networks.

- Diverse range of interests – reflected in the many Special Interest Groups.
- Awareness of cultural issues.

They felt that in the area of EDI, the following could be improved:

- Non-clinical researchers felt there was a slight bias towards clinical researchers / researchers with a health or care background.
- Less diversity in combined basic/biomedical/applied dementia conferences.
- Accessibility to events could be improved.
- Better provision for people who have caring responsibilities.
- Senior leadership needs more EDI.
- Increased diversity in the socioeconomic background of researchers.

The PPIE group highlighted that issues with EDI also exist within local and national dementia support groups. They were aware that these groups also need to make their membership more diverse and inclusive. If researchers work with these groups, they should be aware that these groups are not always representative of the population.

Networks

Are there relevant networks that trainees and researchers can join?
Is there a relevant or related ARC national priority lead, RDN Specialty lead, or an NIHR Incubator?
Is there a coordination group that has oversight (such as NIHR coordination groups in public health and social care)?
Is there good awareness and good membership of these networks?

NIHR Academy members benefit from mentoring and a 2-day event. NIHR has recently started an online forum for people in local authorities who have an NIHR award or are interested in applying for one, to provide networking and support.
There isn't an incubator for dementia at the moment. There is a mental health / social care incubator, which may include some dementia. However, it is an open competition – someone could apply and put that case forwards. National specialty lead for dementia is Professor John O'Brien. There are only two NIHR co-ordination groups - public health and social care, so no dementia.

The RDN Speciality Lead works within the RDN to build capacity and capability in dementia research. The current RDN Speciality Lead also sits on other boards such as the DHSC Dementia Research Oversight Group, DeNPRU and Join Dementia Research boards to share information and communication.

Three Schools' Dementia Research Programme believes that sign-posting ECRs towards useful, relevant networks is a vital role of supervisors and mentors. There's a lot of choice, so supervisors and mentors can help to advise which may be the most relevant. This could be an issue when the supervisor or mentor is not a dementia specialist.

The Enabling Research in Care Homes programme (Enrich) supports some dementia research, and they have a new app to bring people together.

The ARC national priority lead for Ageing and Dementia is ARC Wessex.

The Dem-Comm programme has successfully created local and national networks. For example, at the local ARC level. where projects may have sat in themes related to Long-Term Conditions or Social Care Research, it has brought researchers in applied dementia research together. It has also enabled the development of dedicated PPIE groups and researcher groups.

DR highlights that there are lots of networks that cover a niche area or small geographical area in applied dementia research. Having an online directory of these networks would be really helpful, but the tricky part is maintaining it, constantly updating it.
ISTAART is the international community.

Our PPIE contributor suggested it would be helpful if there was a resource for applied dementia researchers in general with sign-posting to everything we have been discussing.

Dem-Comm Fellows and Three Schools' Dementia Research Programme award holders felt that networks worked well in the following areas:

- Dem-Comm networks.
- In-person conferences.
- The creation of the research platform, RESIDE.
- Lots of other networks (eg.Inter Dem, ISTART, Dementia Researcher, DEM-CAN, Dem Qual).
- Connections with community groups are strong.
- Special interest groups.

They felt that networks could be improved in the following areas:

- Supervisors and PIs should promote relevant networks more among junior members of the team.
- Networks should expand the accepted forms of communication (eg. to include social media, WhatsApp).

The Environment – Summary and Recommendations

4.1 Supportive Host Environment

Context
- Support provided by host environment is increasingly important to funders when assessing funding applications.
- Some researchers work within a cohort of applied dementia researchers, whilst others are more isolated.
- DTCs enable a supportive cohort of applied dementia researchers.

Challenges
- More isolated researchers can join networks, but this requires time and effort, and they miss out on informal everyday interactions with peers.

Recommendations
- Methods of supporting isolated individual researchers should be identified and implemented.
- Funders should continue to assess the support provided by host institution in funding applications, including evidence of support and how any gaps may be filled.
- Ensure host organisations have signed up to the Researcher Development Concordat.

4.2 Equality, Diversity and Inclusion

Context
- There are more women in applied dementia research than men, and more professionals join applied dementia research later in their career.
- Dem-Comm attracted a diverse group of researchers.
- Funders have equality, diversity and inclusion (EDI) strategies, which include the use of positive action statements.
- Funders tend not to have specific schemes to encourage EDI, although the NIHR Research Professorship scheme has criteria to promote applications from females and ethnic minority groups (not dementia-specific).
- New NIHR Incubator for Race, Equity and Diversity in Careers (not dementia-specific).

Challenges
- Women may have more career breaks and caring responsibilities, impacting on career pathways and progression.
- Older researchers might be less likely to move location to pursue opportunities.
- Some ECRs report that researchers who are not health or care professionals by background might be losing out due to the increased number of funding calls aimed at those who are health or care professionals.

- ECRs felt more could be done to encourage those from less favourable socioeconomic backgrounds.

Recommendations
- Funders should consider the specific challenges in a workforce that is predominantly female and on average older than in other areas. This includes consideration of:
  - How to accommodate and support people who might require periods of parental leave, a career breaks or have caring responsibilities.
  - How to attract underrepresented groups including males; those from ethnic minorities, and from more diverse socioeconomic backgrounds
- Funders should ensure opportunities are available across England to help to promote EDI.
- Funding calls should be available to researchers who are health or care professionals and to those who are not.

4.3 Networks

Context
- There are many national, international and local networks for researchers of all levels, and special interest group networks.
- Dem-Comm has provided a successful, nationwide network for ECRs.
- NIHR ARC Wessex is the ARC national priority lead for Ageing and Dementia.
- There is currently no NIHR Incubator or NIHR co-ordination group for dementia.
- Dementia Researcher provides information on funding and career opportunities, events and training, and other information, including interviews and podcasts with applied dementia researchers.

Challenges
- It can be difficult for ECRs to identify the most useful networks, especially if their supervisor is not a dementia specialist.
- There is uncertainty around how the Dem-Comm network will be maintained once the current programme finishes.

Recommendations
- An online directory of networks would be useful, but only if there is a clear way of maintaining and updating it.
- Recognise network building as a success of the Dem-Comm programme and consider how this network can be maintained after the current programme finishes.

How capacity building in applied dementia research differs

How is the situation for applied dementia research different to other fields of research?

Funders are aware that many of the challenges highlighted in this report are also applicable to other areas of research. However, there are certain aspects that are more specific to applied dementia research, including:

- The ability of the field to attract researchers from other areas (for example, through the Dem-Comm programme). This has created a diverse workforce, which brings benefits in terms of a variety of skills and expertise, and challenges in terms of a lack of applied dementia specialists at senior levels. The ECRs who have joined the field have the option of returning to their previous field if dementia-specific funding ends.

- This can make the career pathway feel 'messy' for researchers who would benefit from more support navigating a career in the field. A relative shortage of SCRs in the field can create a shortage of supervisors and mentors, exacerbating the need for applied dementia-specific support.

- Recent investment has focussed a lot on capacity building at the PhD and ECR levels. Thought now needs to be given to how to retain and progress these researchers, whilst also attracting new PhD and ECRs to the field. The rapid increase in PhD and ECR level researchers has also contributed to the relative shortage of MCRs and SCRs.

- There are issues with attracting and retaining health and social care professionals from an over-stretched field.

- AS has identified potential weaknesses with the feasibility of projects, and underdeveloped implementation / knowledge mobilisation plans in applied dementia funding applications.

- The research workforce is predominantly female and has joined the field later in life. This raises questions on how to support a workforce that may take career breaks, and is older at more early career levels; how to attract more males to the area to improve the gender balance.

Dem-Comm Fellows and Three Schools' Dementia Research Programme award holders highlighted differences in the following areas:

- PPIE involvement of people with cognitive impairment requires more consideration and more resources. It can involve intense work.
- There are taboos around dementia in certain communities.
- Including people with cognitive impairment in research requires specialist approaches.
- Ethics can be complex.
- Research can be discouraged because patients are considered too vulnerable.
- Dementia has more than medical approaches and involves biopsychosocial influences that need to account for cultural diversity and approaches.
- Applied dementia research is less valued than cure-focussed research.

The PPIE group emphasised the differences between living with / caring for someone with cognitive impairment, and those with physical medical conditions. They identified that this would affect the types of questions researchers might investigate and how researchers could involve people in the research.