

## **Spotlight on the academic multidisciplinary team: proposals from the 3rd NIHR Newcastle BRC Academic Geriatric Medicine Workshop**

### **Abstract**

High-quality care for older people is best delivered by multidisciplinary teams involving a range of professions. Similarly, if research evidence is to effectively inform practice, it needs to be designed and executed by teams that are both multidisciplinary and multiprofessional. Here, we summarise the discussions from a one-day workshop convened by the National Institute for Health and Care Research (NIHR) Newcastle Biomedical Research Centre in Spring 2021 that focused on multidisciplinary academic teams. Barriers to success include small numbers of clinical academic researchers across all professions focussing on older people, and lack of career pathways, role models and support for non-medical clinical researchers. The workshop identified strengths in the tradition of multidisciplinary working in the care of older people, research questions that lend themselves naturally to multidisciplinary working, increasing interest from funders in multidisciplinary research, and untapped opportunities for greater commercial engagement. Initiatives to improve engagement of students and trainees, mentorship, career pathways, networking across research centres, and possibly developing a national School of Older People's Care Research are all ways that we can ensure the growth of multidisciplinary research to best serve older people's health and social care in the future.

**Key Words:** Multidisciplinary; Multiprofessional; Ageing; Research

**Key Points:**

- Care for older people is multiprofessional and multidisciplinary, and research for older people needs to be similarly multiprofessional and multidisciplinary.
- Barriers to academic multidisciplinary working include under-developed career pathways for non-medical clinical researchers.
- Solutions include improving mentorship, networking, early student engagement, and developing career pathways for non-medical clinical researchers.
- A national School of Older People's Care Research could catalyse progress in growing multidisciplinary research for older people.

## Background to the workshop

Effective care for older people is multifaceted and complex, and best delivered by multiprofessional, multidisciplinary teams (typically incorporating medical, nursing, pharmacy, allied health professionals, social care professionals and others).<sup>1-3</sup> The same is true for research that meets older people's needs. Research needs to integrate multiple perspectives including those of older people themselves,<sup>4</sup> address multiple domains of biopsychosocial function, take into account many different conditions and varying contexts, and deliver evidence relevant to many different professional and non-professional groups as well as the public. Effective research therefore needs to combine perspectives from different research disciplines and professions. Key examples of disciplines include, but are not limited to epidemiology, data science, clinical trials, social science and laboratory medicine, utilising techniques from molecular biology through to qualitative enquiry.

The complexity of care for older people – an example of a “wicked problem”,<sup>5</sup> means that traditional siloed approaches to research design and delivery are unlikely to yield either the intellectual breakthroughs or the multi-perspective evidence necessary to advance the care of older people. Until recently, clinical research has been dominated by the medical profession working largely within a quantitative, biomedical set of disciplines, but this professionally narrow model is unlikely to be fit for purpose and needs to change. How then do we move from the current model of research towards research that is multidisciplinary?

In 2021, a one-day workshop was convened by the National Institute for Health and Care Research (NIHR) Newcastle Biomedical Research Centre to consider multidisciplinary research for older people in the UK, and to propose ways to improve capacity and effectiveness. The workshop heard from leading researchers within the medical, nursing, physiotherapy and social work professions who were involved in research with older people. Seventy participants spanning these professions contributed via small group discussions, an online whiteboard platform, and live online chat during presentations.

### **Challenges identified by the workshop**

Compared to the medical profession, non-medical professionals had less capacity to deliver research, less visibility, tradition and culture of research from undergraduate level onwards, and lacked the career pathways and institutional support for research that exists within the medical profession.

The small research footprint and limited numbers of research staff compared to the volume of clinical activity taking place across health and social care were common themes that emerged across all professions. The postdoctoral stage of career progression was consistently highlighted as a pinch-point, particularly for non-medical professions, and the lack of posts enabling clinical work or professional practice to continue alongside research and teaching work for many professions was also a notable disincentive in making the transition to academia from clinical work or practice. For some professions such as social work and social care, the large grants that are traditionally attractive to universities are scarce and further hinder development of research capacity and culture. Finally, professions other than medicine have much smaller networks of researchers, limiting access to research collaborators, role models, mentors or champions. These issues accord with those highlighted by qualitative research.<sup>6,7</sup>

### **Opportunities identified by the workshop**

There are however reasons for optimism. The workshop identified significant opportunities and drivers which could be leveraged to increase multidisciplinary academic working for older people. Working in multidisciplinary teams is already a natural mode of activity for health and social care professionals working with older people, giving an advantage in building successful research teams. Ageing is a broad topic providing a wide choice of areas in which different professions and disciplines can work together creatively. Interdisciplinary working can drive new collaborations with cross-fertilisation of research ideas, techniques, and cultures, and the research results generated by multidisciplinary research are more likely to be accepted and implemented by multiprofessional

teams. Multidisciplinary research teams may be better equipped to identify the right research questions, offer role modelling from other disciplines, and enable pooling of intimate, practice-based knowledge from different professions.

Research is core business for UK health services<sup>8</sup> and the Chief Nursing Officer for England has reinforced the importance of engaging in research for the nursing workforce.<sup>9</sup> Funders are realising that good research requires a multidisciplinary approach and more funding calls now ask for an interdisciplinary approach to tackle key global problems.<sup>10</sup> The funding landscape for supporting research for older people is now more favourable than it has been although aspiration to fund needs to be matched by delivery. There is underexploited potential for commercial engagement and funding as well; care home research and the use of big data in acute care delivery are two areas where multidisciplinary research for older people is a natural fit with commercial interests, but the levers required to support non-NHS providers to engage with research are not currently in place.<sup>11</sup>

### **Proposals on how to move forward**

How can the academic community advance the cause of multidisciplinary research for older people? Themes suggested by the workshop are summarised in [Figure 1](#) along with example solutions. Firstly, there is a need to engage trainees or students across multiple professions in research at an early point in their careers. This means embedding ageing research into undergraduate, postgraduate and professional curricula and highlighting the importance of research as a core component of practice across all professions. Providing suitable entry points to research careers, such as 'research tasters', opportunities to play a part in larger projects, and dedicated time for pre-doctoral and Masters-level research are also necessary. Examples include six-month part-time research internship attachments to established research teams offered by NIHR Applied Research Collaborations and NIHR Biomedical Research Centres.

Secondly, we need to provide and highlight role models and good examples of multidisciplinary research to enable others to learn from best practice but also to ensure that people are trained within a multidisciplinary culture. In England, the NIHR Academy provides an example of such an environment that could meet these needs; recent initiatives to fund multidisciplinary research and training networks for ageing research provide another example.<sup>12,13</sup> Thirdly, academics from all professions active in research for older people need to join funding panels to ensure that good intentions around multidisciplinary research translate into funding decisions that support this model of research.

Finally, we need to break down the geographical boundaries that have limited opportunities to date. Creating virtual institutes, mentorship networks, providing lists of role models in geographically diverse areas or delivering training events that can be accessed from anywhere in the world can all break down barriers of opportunity that have so far confined multidisciplinary academic working to a relatively small number of centres. Such initiatives can also help to bring together the widest possible range of disciplines, including not just clinical professions, but others such as research methodologists, informaticians, laboratory and social scientists, engineers, architects and commercial partners. National or international leadership will be necessary to fully realise this vision; one possibility would be to create a national School of Older People's Care Research. Such initiatives have shown clear benefit in other disciplines including primary care research.<sup>14</sup>

There is a role here too for leadership from existing infrastructure and institutions. In England this can be provided by components of the NIHR infrastructure such as speciality Schools and Incubators,<sup>15</sup> leveraging existing strengths particularly in Biomedical Research Centres and the Applied Research Collaborations in partnership with the NIHR Academy. However other components of the existing infrastructure all have their part to play; funders need to reward researchers who pursue

multidisciplinary research. Innovative models of employment, and a recognition by employers that research active departments are associated with better care outcomes,<sup>16</sup> are needed to enable nursing and therapy staff to engage in research. Researchers from within the medical profession need to act as champions, advocates and supporters of non-medical research colleagues' involvement in research. This will help to redress the current imbalance in professional power and numbers that currently exists and enable the development of a critical mass of non-medical clinical academics.

Wherever older people require health or care, the challenge is the same. Optimal approaches to research must be multidisciplinary to effectively comprehend and contemplate the complexity of health and ill-health in later life, as well as the complex systems which provide care. The challenges and opportunities that define training and development of a multidisciplinary, multiprofessional workforce in the UK are also seen elsewhere. An additional layer of complexity comes when considering the similarities and differences between populations and systems in different part of the world. With these issues in mind, a start made here in the UK, along the lines described in this article, could help foster international collaborative initiatives in multidisciplinary research for older people.

## **Conclusion**

Effective, efficient, compassionate care for older people is complex and needs to be underpinned by the very best research which addresses the needs of multiple stakeholders. Meeting this challenge means making the best use of multidisciplinary research talent across the whole multiprofessional team. Whilst there remains much to do, the results of this workshop give grounds for optimism as we build on the progress made to date to deliver the multidisciplinary culture that research for older people requires.

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**Figure 1. Solutions: themes and examples**