WORK FORCE

# The rise and rise of NMAHPs in UK clinical research

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ABSTRACT

**Over the past decade, the role of nurses, midwives and allied health professionals (NMAHPs) have been transformed within the UK research community. Assisted by new funding opportunities and a recognition of their role in interdisciplinary working, NMAHPs are driving innovative patient care. Challenges still remain to maximise the potential of NHAMPs in clinical research; signposting opportunities to become involved in research, promoting clear career pathways and developing innovative roles with the NHS to attract and retain this community are critical.**

**KEYWORDS:** research capacity development, nurses, midwives, allied health professionals, healthcare scientists

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## Background

The landscape for health and social care has undergone a quiet revolution over the last 20 years. Two aspects of this are the evolution of the multiprofessional approach to health and social care delivery and the 'normalisation' of research as part of clinical care. The advent of the National Institute for Health Research (NIHR) has played a major contribution in both of these areas. Health and care outcomes are better in settings where there is an active research and development programme.[1] It is unclear if such benefits are the direct result of early adoption into practice of research-driven innovation, or a wider impact on organisational culture which constantly question accepted wisdom and to improve how we do things. Whatever the key drivers are, as a non-clinical academic colleague once said, 'What motivates clinical academics is the anguish that they feel in their inability to treat their patients.' This is completely correct and, when extrapolated to the wider research community, a real insight into potential drivers. The effective co-working of different professional groups with unique and complementary skill sets is essential in a world where complex interventions (frequently now not pharmaceutical or traditionally surgical) are needed in ever-more complex patients over longer periods of time. With this change in the needs of patients, and how we approach meeting those needs, has become both challenge and opportunity. The traditional model of medicine (a discrete, single event in an otherwise well patient (think appendicitis and appendicectomy) 'cured' by a doctor) becomes ever more irrelevant to the health needs of our communities. New challenges need new thinking.

Within this changing landscape, a new powerhouse within clinical research across the UK has emerged: the NMAHPs (nurses, midwives and allied health professionals (and we also include pharmacists and healthcare scientists)) community. Facilitated by new funding opportunities and supported by innovative pathways to support research across the NHS and higher education (HE) sector, the UK has emerged as global leaders in the development of NMAHPs as critical in developing and delivering world class, patient focused research.

NMAHPs are well positioned to be at the leading edge of innovation, discovery and research implementation, and essential in addressing the increasing demand on NHS and social care by the ever ageing, multi-morbid population. NMAHPs are also emerging as critical contributors to innovation and emergent opportunities, including health technologies, digital capabilities and ideally placed to address the substantial health inequalities that we face within the UK.

The emergence of the NMAHPs community as *drivers* of innovative patient care as clinical academics should hardly come as a surprise; their role within the NHS and social care, often as a first point of contact, ensures a patient-focused approach to research, which offers direct benefits to patient care.[2] NMAHPs as clinical academics are older and have been in their clinical roles for longer periods compared with medical clinical academics, providing an excellent basis for research questions driven by clinical need.[3]

Research nurses have long been key in *delivering* high-quality and strategic research; their role combines the responsibilities of research patient care with research protocols, governance and management.[4] This under-celebrated community provides the backbone to the Clinical Research Network and instrumental in the success that is has underpinned the UK's emergence as world leaders in the COVID-19 and vaccine trials. Research nurses are critical in not only delivering on nationally prioritised, strategic research, but also on developing local research capabilities and embedding research within organisations. They have a critical role in not only recruiting patients, but also being an advocate for patients at the front line of clinical research. Research delivery roles are now being expanded to include the wider NMAHPs

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community. Currently, there are more than 4,000 research nurses supporting studies across England, supporting patient care and innovation in research across the NIHR Clinical Research Network alone.

The question remains how best can we capitalise on this growing community?

## Making the difference: funding opportunities

While there have been NMAHPs who have been actively involved in research for decades, much of this activity has relied on self-motivation and research embedded with the HE sector.[5] The development of targeted funding opportunities for NMAHPs, such as the NIHR Integrated Clinical Academic (ICA) pathway, has been transformational in supporting NMAHP research across the NHS, social care and HE communities. Between 2008 and 2020, the ICA pathway and the all professions NIHR fellowships have funded 488 fellowships, including 319 AHPs, 34 midwives and 135 nurses.

## Making the difference: supportive and inclusive communities

NMAHPs success as clinical academics have also been strongly linked to strategically aligned and collaborative partnerships and creating a culture and community where NMAHPs as valued interdisciplinary team members is critical.[6] Support and inclusion of NMAHPs as clinical academics across NIHR infrastructure (including biomedical research centres, schools and applied research collaborations), Wellcome doctoral training platforms and the Medical Research Council fellowships is essential in the long-term development of the community.

## Making a difference: innovative roles and pathways

NMAHPs in themselves represent a diverse group of professions, with a range of research readiness. It is clear that NMAHPS are motivated to undertake research and that this is driven by a need to improve services for the benefit of patients, but also for personal development and fellowships are key in enabling clinical and academic careers.[5,7] In order to facilitate this, there remains a need to have inspirational role models, structured opportunities and additional investment embedded in a culture that maximises new opportunities for NMAHPs.[3]

Much of the success for NMAHPs has occurred when they clearly articulate and support a research strategy across organisations, develop innovative roles and job descriptions, and provide signposting and support for the community.[8,9] This is particularly valued when organisations acknowledge that research is an essential element in improving patient care, and also retaining high-quality staff.[7,8] Research-active NMAHPs also report benefits such as increased job satisfaction, enhanced skills and a greater sense of personal achievement.[5]

## The challenges ahead

Immense progress has been made in a relatively short period of time in terms of the research NMAHPs community. Important challenges remain, however, which need to be addressed. The NIHR and professions themselves have 'uncorked' the potential, generating substantial levels of interest in early career professionals. We must not, however, set them up to fail. If their potential is to be realised (and that potential is enormous) then the next steps that the healthcare and academic sectors will be profoundly important.

### Under-appreciation of NMAHP clinical academics within the NHS and higher education institutions

Perceptions of the value of academic NMAHPs in clinical and academic organisations have not developed as fast as the professions themselves. There is often a confusion as to where they 'sit' with higher education institutions and NHS organisations, often seeing them as the responsibility of the other. It is interesting that, whereas the role of the medical clinical academic is well established with joint contracting between organisations, the same model is only now beginning to emerge for NMAHPs, and then in only a small number of centres. The issue of NHS capacity also arises repeatedly. Although there are numerous opportunities for NMAHPs to apply for personal and structural awards to support their research training, there can be a reluctance to 'release' people from NHS duties. Even the option of resigning from an NHS role (itself a huge step in terms of financial risk) is often not a plausible one because of the need for a joint contract for many of the personal awards. Whereas NHS staffing pressures are an important issue that is an understandable factor for managers, the ultimate challenge for the NHS is in terms of staff retention. A culture of restricting career development opportunity for individuals can only exacerbate this issue.

### Long-term career opportunity

This is a further aspect of the issue of who values academic NMAHPs and who, in simple terms, will give them a job when they are fully fledged independent investigators. Although funders such as the NIHR have an important role to play, there is a real need for the development of an established clinical academic career structure. In the past, all too many academic leaders with an NMAHP background have ended up having to give up any clinical role because there is no relevant clinical academic career model. Ultimately, this is counter-productive, with the NHS losing out on clinical experience (ironically given the issue about releasing more junior NMAHPs to do a fellowship because of NHS staff shortages) and, equally importantly, the loss of exposure of the early career NMAHPs to inspirational clinical academic role models. There needs to be a clear commitment to address this issue with a stable long-term joint funding model. Without this, the sentiment ('I would love to go down the academic route but it is just too high risk for me and my family') we hear all too often will become the ultimate barrier to NMAHPs in academia.

### Asymmetry between professions

We have, herein so far, talked about NMAHPs in generic terms. The NMAHPs community, however, consists of numerous different professions with their own cultures and challenges when developing academic pathways. One trend that has been very clear over the last few years is the powering ahead of some professions, most notably physiotherapy in terms of the numbers and quality of applicants for fellowships. This reflects the academic strength in the fields and the immense contribution made by early and enlightened pioneers advocating academic

career opportunity. A significant challenge is how to broaden the base of academic development. What can other professions learn from the highly successful ones and how can they implement their own, profession-relevant approach? This needs leaders and it needs for those leaders to be empowered.

### Awareness and entry into the career path

One factor in NMAHPs academic career development in general, in some of the areas where numbers are low in particular, is a lack of awareness of the opportunities that are there. All too often we hear the sentiment 'Why did no one tell me about all this before?' Within academic development structures, there can be a danger that we over-estimate the level of awareness of the opportunities that are there. Some of the work on recruitment and retention of people on the academic path supported by the NIHR and other funders has highlighted the fact that funders, who are naturally very familiar with the structures, talk about nuanced differences in fellowship type and detail of costing models, while their target audience of potential applicants is asking 'What is a fellowship?'[10] We feel that there is a real need to increase exposure to academic opportunity at a much earlier stage for all the NMAHPs professions. This would be, ideally, at an undergraduate level. We also feel that there is a need to increase the opportunities to participate in research. Options could include research inclusion in formal curricula, vacation studentships and even intercalation (a major driver for early engagement in academic activity among medical and dental students). Our experience is that the internship model within the NHS has been highly effective (and certainly cost-effective) at introducing early career NMAHPs to research and there are plenty of examples of this changing the course of people's careers. There is real potential to expand this and follow-on pre-doctoral opportunities as part of an integrated career pathway. We need to be aware, however, that early exposure to research can also mean early exposure to some of the challenges and negativities. This can run the risk of ending interest just as it was starting. We also need to recognise the potential value of a much more flexible model between research delivery and academic development opportunity. Whereas many, if not most, NMAHPs working in research delivery wish to continue down that career track (and there is a need for a better-defined career track there as well), there is an important group who wish to develop their own ideas for research. There needs to be a flexible border between research delivery and academic development to facilitate this mobility.

### Career development opportunities for the research delivery workforce

We need to increase the awareness and profile of the critical role of NMAHPs in delivering world-class research. While there is a body of literature on the role of NMAHP clinical academics, there has been little published on understanding the barriers and enablers to a research delivery career. Furthermore, while critical to the acknowledged success of the UK as a leader in clinical research, there are no clear career pathways for NMAHPs within the clinical delivery team. Given the priority of embedding the research within routine clinical NHS, this requires urgent attention.

### Resource

Ultimately, resource is critical. People will only embark on a career route if they perceive it as plausible for them (to have a reasonable chance of 'making it'). As outlined earlier, perception of career risk is a major negative factor in academic career decision making. Currently, the NMAHPs academic career development pathways are funded at a significantly lower level than those for doctors and dentists. This is for historical reasons but is an increasingly hard to justify anomaly.

## Conclusion

The UK has an enviable resource in an emerging community of NMAHP researchers who will be key in addressing the workforce needs of an NHS where research is embedded into clinical care. Increasing the profile of this community and identifying new NHS roles not only maximise the capabilities and impact of NMAHP clinical academics but retaining this group within the NHS is critical. Identifying pathways and supporting development of these roles with appropriate resourcing is essential in making the most of this growing community. ■

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