

In-depth exploration of academic career enablers, barriers and aspirations of NMAHP clinicians in the North West



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1 Executive Summary

Introduction

This report presents the findings of a study into the career interests in, and experiences of, research, teaching and learning amongst nurses, midwives and allied health professionals (NMAHPs) in North West (NW) England, as well as the enablers and barriers to pursuing careers in these areas. The study was commissioned by Health Education England NW (now NHS England) on behalf of the NW Council of Deans of Health to inform the development of a regional strategy to better prepare, support and grow the NMAHP academic workforce. To this end, the findings of this study are used to recommend key strategic areas of focus.

This study aims to understand:

1. NW NMAHP qualifications, experience, knowledge and skills in research and teaching and learning;
2. career aspirations, preferred role descriptors and employment contracts in research and/or teaching and learning;
3. the enablers and barriers to pursuing a research and teaching and learning career;
4. how HEIs and NHS organisations can work more effectively together to address shared workforce challenges.

Method

The study followed a phased methodological approach beginning with a desktop literature review to identify and build understanding of relevant strategic milestones, concepts and studies that illuminate enablers and barriers to NMAHP academic and clinical academic careers. This process also incorporated a focus group with members of the NW Council of Deans of Health. Key themes included training and development opportunities, careers advice and guidance, challenges in academic roles, clinical academic posts and career pathways, organisational support and cross-sector partnership working. The findings from this stage were then used to inform the development of two surveys designed to capture data against the study objectives; one targeted at NMAHPs working in the North West and the other at healthcare leaders with a role in supporting NMAHP workforce development. Participants did not have to be involved in research and/or teaching and learning to take part. Demographic data was also collected to aid in understanding equality and diversity in this context. Survey respondents were invited to take part in an interview to explore some of the emerging themes in more depth. Survey data was collected over February-March 2023, with interviews taking place between June and August of the same year. 174 responses were received for the NMAHP survey and a further 16 submissions were made to the leaders' survey. In addition, 40 interviews were conducted with survey respondents.

Key Findings

Study objective 1: Qualifications, experience, knowledge and skills in research and teaching and learning

The study identified a pool of NW NMAHP clinicians who hold/undertaking higher degree (N=114). 14% of survey respondents hold or are undertaking a PhD. Over half of the respondents had teaching and learning in their job descriptions and nearly half had job descriptions that included research. Although the majority of respondents had spent time working in these areas over the last year, most spent less than 25% of their time on these activities. A high proportion of clinicians indicated experience of a range of research and teaching activities that are relevant and applicable to taking up academic/clinical academic positions. Nurses and midwives were more likely to have research-related job titles, have research in their job description and spend more time engaged in research activity compared to their AHP colleagues.

The highest number of respondents rated their knowledge and skills as "good" in research and teaching, with a slightly higher average rating in teaching and learning. Survey respondents most frequently indicated being "somewhat confident" in research and "confident" in teaching and learning. Nurses and midwives tended to rate their knowledge, skills and confidence in research higher than AHPs, reflecting differences in time spent engaged in research.

Study objective 2: Career aspirations, preferred role descriptors and employment contracts

The survey identified a pool of NMAHP clinicians interested/very interested in pursuing a career in research and/or teaching, with 75% of survey respondents expressing an interest in a research career and 65% in a teaching career.

The most popular role descriptor was a "combined clinical and research role", followed by a "clinical, research and teaching" role on full-time employment contracts. The third most popular position was "research only", with a part-time contract being preferable in this regard. Teaching only roles were of least interest in the survey responses, with a strong preference for a part-time teaching contract. There was some interest in fixed term, secondment and internship contracts across the different roles, with secondments of most interest overall.

The preference for combined clinical and research-focused roles and limited interest in teaching and learning was a dominant theme in the interviews, the latter of more interest as a part-time or more “informal” position. The dominant interest in research may be partly due to the distribution channels used to disseminate the survey, but also reflects the backgrounding of teaching and learning in the broader discourse around clinical academic careers in the literature. It is also important to note that fewer clinicians reported receiving careers advice in teaching compared to research and some reflected on limited exposure to and experience of HEI-based teaching. In addition, participants expressed concern with regards to teaching workload and protected research time in academic teaching positions.

There was a strong preference to retain a clinical component to any academic role as demonstrated in the preference for working in a healthcare organisation and/or holding a joint appointment with an HEI. Motivations for remaining clinical were identified as part of the study. There was some interest in practice-based combined roles including research delivery positions, advanced clinical practice and consultant positions, although it was generally recognised that these held limited opportunities for undertaking and leading their own research. A significant number of interviewees were interested in a combined clinical and research role that spanned the HEI and healthcare setting, with joint posts of particular interest.

Study objective 3: Enablers and barriers to pursuing research and/or teaching and learning careers

Lack of clinical academic posts

A more desirable range of employment contracts/posts was the second most commonly identified enabler in the survey, but the lack of such positions emerged as the number one barrier. A predominant theme in the interviews was the lack of clinical academic posts within the NHS or as a joint appointment with an HEI. The strong desire to integrate clinical and research and/or teaching activities is likely to have been a key contributory factor to “**not wanting to change employers**” and “**not wanting to reduce contact with patients**” emerging as the third and fifth most commonly selected barriers respectively. In addition, **retaining clinical competency** is also likely to have contributed to “more support/opportunities in research and/or teaching roles” being the third most frequently chosen enabler.

Unclear clinical academic career pathways

Limited opportunities for long-term career progression and a lack of a clear clinical academic career pathway were significant themes in the interviews as well as in the wider literature. 51% of the respondents indicated that research career pathways were “clear/very unclear”, with teaching and learning pathways rated slightly clearer overall. As a result, some participants queried the benefits of pursuing academic study and some described having to choose between pursuing their research ambitions in the HE sector or remaining in a clinical role. Interviewees described having to “carve” out these pathways for themselves, requiring significant perseverance and resilience.

Issues with teaching-focused academic roles

The lack of research roles for NMAHPs in the HE sector and a lack of protected time for research within teaching-focused contracts were cited as barriers to taking up employment within an HEI. In particular, concerns were raised with regards to a high teaching workload and issues of work/life balance leading to “burnout”. These concerns are also likely to have contributed to “more support/opportunities in research and/or teaching roles” being identified as a key enabler.

Financial support and incentives

Increasing financial support and incentives emerged as the most commonly chosen enabler in the survey, whilst concerns over the potential financial penalties was the second most frequently indicated barrier. In particular, participants flagged issues with lower **salaries** and less favourable **pensions** in HEIs, as well as the financial impact of undertaking academic study and limited opportunities for career progression in clinical academia. Fixed-term contracts and job security concerns were also an important barrier, particularly for those with dependents and caring commitments.

Support from host employer

Issues with a lack of embedded NMAHP-led **research cultures** within healthcare organisations and NMAHP professions were linked to a lack of understanding of the **value and benefit** of NMAHP-led research in relation to retaining and recruiting staff and improving patient care. In addition, academic work and development was not recognised as part of the NMAHP identity and career trajectory. Combined with issues of increasing clinical workload and staffing shortages, clinical work was felt to be prioritised over academic development resulting in difficulties with release to access training as well as a sense of guilt in taking time out of the clinic. Participants articulated a need for greater senior strategic leadership and commitment in this regard, however, **middle management** was most commonly cited as the major barrier. Relatedly, a lack of **protected time** to undertake research and/or teaching activities or access related development opportunities was highlighted. Limited support for **early career clinicians** to access training and development in research and/or teaching was also flagged as an important barrier.

A key theme in the interviews was the perception of **inequalities** within and between organisations, regions and/or professions in terms of the availability and/or accessibility of academic development and career opportunities, contributing

to a sense of “luck” in successfully pursuing a career in research and/or teaching. The demographic data collected in this study can be used to inform future enquiry into potential equality, diversity and inclusion barriers to progressing a career in research and/or teaching and learning.

Training and development opportunities

The availability of **funded** academic study was highlighted as a limiting factor with calls for more funded opportunities at a regional, local and organisational level. Self-funding and the associated financial impact were a disincentive from pursuing further academic study, particularly when combined with limited career progression. Overall, however, it was the **accessibility** of training and development that was the key issue. Major barriers included being released from clinical duties, navigating the available options and/or the need for more informal “**entry-level**” opportunities for those with limited prior experience, confidence and/or the necessary academic qualifications. Greater exposure to research and academic careers during **pre-registration programmes** was also flagged as an important enabler.

Careers advice, support and guidance

A key finding in the survey was that nearly half of respondents had received no careers advice in relation to research and/or teaching, with over half indicating that they did not know/were not sure where to go to in future. In particular, “limited knowledge/understanding” of existing opportunities was frequently indicated as a barrier, with comments pointing to the need for **clearer information, guidance and “signposting”** of the available options. People were an importance source of careers guidance and support as well as playing a key role in sparking interest in these careers. In particular, increasing **mentorship** opportunities and the visibility of **role models** were identified as important enablers, especially given the lack of clear career pathways. Mentoring as well as access to **peer support networks** were also valued in terms of helping clinicians build the resilience needed to persevere in the face of a myriad of challenges to pursuing an academic/clinical academic career.

Study objective 4: How HEIs and NHS organisations can work more effectively together

Participants pointed to the importance of senior leadership commitment across HEIs and NHS organisations to strengthen cross-sector partnerships and develop collaborative working to support clinical academic careers, particularly with regards to creating joint appointments and clearer career pathways. Emphasis was placed on articulating the mutual value and benefits of clinical academic roles to address the shared challenge of workforce recruitment and retention as well as recognising the distinct pressures and need of the two sectors. In terms of the latter, work is needed to “bridge” a perceived divide between HEIs and the NHS, especially in terms of tensions in existing relationships supporting student placements. Sharing resources, initiatives and expertise between NHS institutions and HEIs was viewed as a vital part of moving towards being part of “one workforce”.

Recommendations

“Growing” the NMAHP academic workforce.

- The HE sector needs to create more sustainable opportunities for NMAHP clinicians to integrate clinical and academic work through collaboration with NHS organisations to set up joint clinical academic posts (see below on partnership working). Increasing the number of clinical academic posts is recognised as an important enabler to supporting education expansion and reform in the recently published NHS Long Term Workforce Plan.
- Adopting and adapting medical clinical academic practices and the Follett principles as well as sourcing model contracts and job templates is likely to aid the process of setting up joint posts.
- It is recommended that NHS organisations and HEIs develop joint long-term funding models to support these posts.
- Creating sustainable part-time research and/or teaching posts within the HE sector may also be attractive to NMAHP clinicians who wish to retain a clinical role.
- Working together to develop a clear clinical academic career pathway that tracks the ICA development trajectory will help to identify posts at early-, mid- and later career stages supported by joint workforce planning.
- In particular, senior level posts are required that enable clinicians to maintain and apply research skills acquired during doctorate and post-doctorate training.
- More “flexible” career pathways are also needed to allow clinicians to transition from practice-based roles such as research delivery practitioner, ACP and consultant roles into more academic career trajectories.
- Part-time HE contracts and joint appointments will need to find ways of addressing concerns regarding pension portability and the current incommensurability of salaries between NHS organisations and HEIs. Establishing a joint clinical academic pay scale is also recommended.
- Creating roles that combine clinical, research and teaching activity and/or ensuring more protected time for research within HEI-based teaching positions is likely to be an incentive to taking up teaching responsibilities. For example, ‘academic internships’ could be made available to educators working in the HE setting to develop their research expertise by joining existing research teams and/or becoming involved in other research-related activities such as research ethics committees. These opportunities would not need to exactly match the clinicians’ profession/specialism, reflecting the increasingly multi-disciplinary approach to clinical practice and research.

- Widening the eligibility requirements for academic positions to accept master's qualifications without a PhD would increase the pool of potentially eligible applicants.

“Preparing” the NMAHP academic workforce

- HEIs and NHS organisations need to work together to identify ways to increase the availability of funded training and development opportunities at a regional, local and organisational level.
- Identify ways for NMAHPs in the academic workforce to undertake a higher qualification.
- Enhancing the research content and exposure to research and/or teaching careers during pre-registration programmes is recommended. Capitalising on clinicians' interest in teaching about research may be helpful in this regard as well as building on existing NIHR initiatives.
- Introductory workshops and initiatives to promote and encourage NMAHP clinicians who had not previously considered a career in research/teaching.
- Developing more flexible and “informal” opportunities for NMAHPs to engage in training and development opportunities such as one-off workshops, stand-alone modules and experience of research delivery settings.
- Further work to unpick gaps in research and teaching knowledge, skills and confidence to inform the development of targeted interventions, such as research skills training in presenting and publishing research
- Clearer information, signposting and guidance to support clinicians to navigate development and career opportunities.
- Increasing mentorship availability and accessibility, including academic and career mentorship.
- Matching research and/or teaching interests of NMAHP clinicians with those of academics working in the North West.
- Enhancing access to peer support networks.
- Targeted support to help NMAHP clinicians build networks and develop their resilience to persevere in research and/or teaching.
- Increasing the visibility of clinical academic and academic role models particularly with regards to mapping out potential development and career pathways.
- More visible promotion of HEI teaching careers, enhanced careers advice and guidance and informal opportunities to engage in HE-based teaching and learning activities may help to increase interest in teaching careers.
- More work is needed to understand specific career progression barriers for under-represented groups including those related to protected characteristics building on the demographic data collected in this study and existing datasets.

“Supporting” the NMAHP academic workforce

- Closer partnership working between HEIs and the NHS is required to develop joint posts, build a clinical academic career pathway and more closely align academic and clinical career trajectories.
- Interventions are needed to help build strategic, cross-sector, senior-level support for clinical academic careers, with a focus on identifying and articulating the mutual benefits of clinical academic roles in relation to shared recruitment and retention challenges. Developing shared strategies aligned to the current national, regional and organisational research, education and workforce strategic landscape will be an important part of this process.
- Support for HEIs and NHS organisations to identify common goals and challenges and nurture collaborative relationships with the goal of moving towards a sense of being “one workforce”.
- Work to address existing tensions and differences between the culture and infrastructure of the two sectors, particularly in the context of student placements and connectivity to academic research projects.
- Identify potential opportunities for HEIs and NHS organisations to share resources and expertise.
- Connect into and share learning from existing centres and networks focused on building NMAHP clinical academic workforce such as the Manchester Clinical Academic Centre (MCAC) and The Healthcare Professionals Clinical Academic Roles and Career Pathways Implementation Network (CARIN).
- HEI and NHS organisations in the region need to come together to address inequalities in opportunities dependent upon where a clinician works and/or their professional background.
- Opening up research delivery positions to a wider array of professions may help to address some of the real and perceived inequalities between nurses and AHPs, building on work by the NIHR in this area.
- Working with healthcare organisations to create protected time within job plans for NMAHP clinicians to engage in research and/or teaching activities and related CPD opportunities. In particular, further work is needed to identify barriers to undertaking research and/or education in ACP and consultant roles.
- Developing mechanisms for protecting work/life balance for clinicians working across HEI and NHS. In particular, real and perceived issues regarding high teaching workloads and “burnout” within HEI-based teaching positions needs to be addressed.
- Support to complete academic qualifications whilst working within the university and/or additional training and development to support the transition into academia is likely to increase the appeal of HEI-teaching roles.
- Initiatives to support healthcare middle managers to recognise the value and benefit of supporting NMAHP clinical academic and academic careers, increase their knowledge of available opportunities and ways to enable release from clinical duties.
- Support for early career clinicians to access training and development opportunities in research and/or teaching.

2 Introduction

The education of nurses, midwives and allied health professionals (NMAHPs) working in healthcare organisations and the research that provides the evidence base for high quality care depends upon a sustainable ‘academic’ workforce; NMAHPs working in research and teaching and learning¹. Its sustainability depends upon meeting increasing demands for clinicians to take up these roles in the context of recent education expansion and reform plans within the NHS (1). In addition, there is a growing strategic focus on building research capacity and capabilities in the healthcare system (2), particularly within the NMAHP professions (3-6). There are therefore concerns regarding the capacity of the academic workforce to meet current and future demands (7), with succession planning, recruitment and retention of NMAHP academics and “clinical academics” identified as a key issue (8). Academics are defined here as those working in research and/or teaching roles within universities, whereas clinical academics tend to work across clinical and higher education settings. This distinction, however, is open to wide variations in interpretation as is reflected in this study.

Within the North West (NW), the NW Council of Deans of Health and NHS England are committed to addressing this challenge by developing a detailed regional strategy to better prepare, support and grow the NMAHP academic workforce. It is recognised that an effective strategy will be underpinned by a rigorous understanding of NW NMAHP career interests in, and experiences of, research and teaching, together with enablers and barriers to pursuing a career in these areas. To this end, Health Education England NW (now NHS England) commissioned NHS R&D NW on behalf of the NW Council of Deans of Health to undertake this study.

This report sets out the methodology, findings and recommendations, beginning with a brief discussion of some key definitions and a desktop literature review of relevant policy, initiatives and research in this field. The study questions and phased methodological approach is then presented, followed by the findings from each stage of data collection and analysis. The report concludes with a summary of the key findings and a set of recommendations to inform future strategic work aimed at building a sustainable NMAHP academic workforce in the region.

3 Desktop literature review

A desktop literature review was undertaken to identify and build understanding of relevant strategic milestones, concepts and studies that shine light on enablers and barriers to NMAHP clinicians pursuing research and/or teaching-related careers. It is organised into key themes from literature inclusive of and published since the seminal ‘Finch report’ in 2007 (9); a report which is understood to have marked a “new drive and interest in the development of NMAHP research capability and capacity” (10, p.5).

3.1 Definition of terms

The difference between academics, clinical academics and clinicians working in research and educator roles is an important, but often slippery distinction that is not always immediately evident in reports, research and individual descriptions. In the context of this study, academics refer to individuals with a clinical background working in a teaching and/or research role within a higher education institution (HEI). Clinicians might also work in research or education within a clinical setting, for example, within research delivery or as a clinical practice educator, but these do not generally constitute “academic” positions. The Council of Deans of Health distinguishes “clinically active health researchers” working within healthcare from clinical academics as follows:

Clinically active health researchers work in health and social care as clinicians to improve, maintain or recover health while also researching ways of improving outcomes for patients whose care they are planning, coordinating, managing, commissioning and quality assuring in leading clinical roles. Whilst there are funding opportunities for NMAHP clinicians to take time out for research or undertake specific time-limited research projects (for example ad hoc charitable grants or as part of small-scale research projects), these often do not constitute a sustainable clinical academic role (8, p.3)

In addition, the term “clinical academic” refers to a clinician that work across the HEI and clinical settings, with the emphasis on combining clinical practice and academic research (8; see also 10-12). For some, having a “joint appointment” between the HEI and the healthcare institution is a key part of defining a clinical academic position (10, 12). Across all these definitions, teaching responsibilities are either completely omitted or only lightly referenced. An exception to this is the recently published NHS Long Term Workforce Plan which defines clinical academic posts as follows:

Clinical academics – within medicine, nursing, midwifery and other professional groups – work across healthcare providers and academic institutions, combining clinical work in the NHS with research and/or teaching activities

¹ “Teaching and learning” is the preferred terminology of the North West Council of Deans of Health to encompass the breadth of activities undertaken within education, but for the purposes of succinctness this is often shortened to “teaching” in this report.

[...] Clinical academics are crucial to training future generations of healthcare professionals, by leading on research and delivering much of the teaching of students (1, p.88-89).

Yet, there remains no agreed role definition within or across professions, organisations and the published literature (13-14). Indeed, in an NHS-based study of healthcare managers and research-active, non-medical health professionals the definition of a clinical academic commonly referred to combining clinical practice, research and education (13). Furthermore, these definitions often included those that might count as “clinically-active health researchers” (8) as well as those involved in practice-based education. This paper notes that the inclusion of education in these definitions is not sufficiently reflected in the emphasis on research in definitions of clinical academia in the literature. The authors conclude that, in many ways, ‘clinical academic’ is a “title that doesn’t fit” (13, p.3).

These observations were borne out in undertaking this study, both in terms of the desktop literature review and in the empirical research. As a result, the majority of the literature presented in the next section focuses on clinical academic roles primarily through the lens of research, with the distinction between ‘clinical academic’ and ‘clinically-active health researchers’ not always clear. Furthermore, the dominant focus in the literature is on clinical academic rather than purely academic careers. A footnote had been added, where appropriate, to detail how the authors refer to clinical academics within their work.

3.2 Training and development opportunities

A key recommendation from the Finch report was the creation of a clinical academic training pathway offering masters and doctoral awards through to post-doctoral and senior-level fellowships (9)². The clinical academic training (CAT) programme was commissioned in 2008 in response to this recommendation, with the government underlining its support for this intervention in the ensuing years (15-16). In addition, a national internship programme and post-doctoral transitional support awards were proposed to help improve access to and transition along the training pathway (16). In 2015, the NIHR CAT programme re-launched as the HEE/NIHR Integrated Clinical Academic (ICA) programme inclusive of an internship offer (17) and followed by the introduction of a series of bridging schemes to support the development of doctoral and post-doctoral award applications (10)³.

Certainly, acquiring experience and skills through training or participating in research is recognised as an important enabler to supporting research-related academic and clinical academic careers (18), inclusive of “access to high quality national training programmes” (12, p.18)⁴. For example, NMAHPs awarded an ICA fellowship are more likely to be research-active and lead their own research team compared to those who were unsuccessful, with post-doctoral awardees more likely to have taken up a “research leadership position”⁵ (18, p.79). Relatedly, the ICA pathway is considered to have been “transformational” in supporting NMAHP research across HEIs and the NHS (19). National, regional and local internship programmes have been linked to improved professional development and career progression, as well as to wider benefits for patients and healthcare organisations including embedding organisational research cultures (20; see below for more on local training opportunities).

However, NMAHP progression from masters to doctoral level has been described as “disappointing” on the ICA programme (21). Numbers of nursing and midwifery applications for post-doctoral awards are reportedly low, with nurses having a lower success rate overall compared to AHPs (21). In response to these challenges, the ICA masters was replaced with a 2-year pre-doctoral clinical academic fellowship (PCAF) providing additional support with doctoral fellowship applications (17). In addition, the NIHR Nursing and Midwifery Incubator was introduced to identify and support clinicians from those professions develop high quality funding applications (10). Yet, there are still reports of disparities between the professions, with physiotherapy described as “powering ahead” in terms of the numbers and quality of fellowship applications (19, p.196). Other research has also documented how the application process for NIHR awards is beset by “rejections and setbacks”, requiring significant time investment with little assurance of success (22, p.1054). There is also uncertainty over how to sustain an academic career outside of this pathway (22).

More widely, there is understood to be a range of national clinical academic research opportunities, although navigating the various options is reportedly challenging (20, p.3). In addition, applicants are often expected to have substantial research knowledge and experience (20)⁶.

In addition to national programmes, local clinical academic training schemes have been recognised as an important mechanism for growing the clinical academic workforce, often involving partnerships between NHS organisations and HEIs

² This report simply refers to clinical academics as “combining clinical and academic work” (9, p.6)

³ This is now referred to as the HEE-NIHR Integrated Clinical and Practitioner Academic Programme

⁴ This study refers to the Finch report to define a clinical academic (18)

⁵ Defined in this research as a “Reader/Professor (clinical or non-clinical)” (18)

⁶ The authors describe “two main types of clinical academics” - clinically active academics who primarily work in universities and clinically active health researchers who primarily work in health and social care organisations” (20, p.2)

(16)⁷. In 2022, Olive et al. report that clinical academic training programmes are “becoming increasingly established at national, regional and local levels” but note that “there is clearly a long way to go” (20, p.2). Similarly, Henshall et al. (23) conclude that there remains a lack of training and development opportunities contributing to a “limited pool of suitably qualified” clinical academics and associated challenges with recruiting to these positions (p. 1514). Additional issues include a lack of “sustained or cohesive implementation” between development initiatives (23, p. 1514), limited impact evaluation (23), and disparities in the type and availability of internships due to differences in regional research capacity and capability building funding streams and infrastructure (20) (see also 3.6.2.1).

Other studies point to the need for more accessible, “adaptable and inclusive” clinical academic training pathways including a “more flexible model between research delivery and academic development opportunity” (23, p.1514). Indeed, nurses and midwives often gain their first research experience in research delivery (18). Recently, there has been increasing strategic emphasis on addressing the “development needs of people from multiple specialisms, geographies and backgrounds” (3, p.24).

More broadly, the provision of relevant education, training and career opportunities has been identified as an important part of integrated care systems (ICSs) responsibilities to develop a research workforce and culture within health and care (2). The NHS Long-Term Workforce Plan also includes ambitions to upskill the healthcare workforce “in research and education” (1, p. 104).

3.2.1 Funding and financial implications

The Finch report highlighted the limited financial support available for postgraduate study, with PhDs often being completed part-time and on a self-funded basis whilst remaining in full-time employment (9). Although the ICA programme has partially addressed this issue, a lack of “mainstream, sustained funding mechanisms” and “limited access to funding and support, especially beyond PhD” is still considered to be a barrier (12, p. 18; 18). Accordingly, sustained support and funding for training programmes and individual awards, small grants, training fees and conference bursaries have been identified as key enablers for supporting NMAHP clinical academic careers (12, 18).

Outside the ICA programme, the potential negative financial implications of undertaking doctoral study have also been highlighted in terms of limited stipends and “the prospect of having no job to return to, taking pay cuts or reduced hours” (24, p.8). A lack of organisational support for clinicians to access training and development is covered in section 3.4.

3.2.2 Pre-registration training and development

In 2007, limited exposure to research during registration programmes was identified as a barrier to nurses pursuing academic and clinical academic careers, with high achieving students “not purposefully nurtured to become the researchers and teachers of tomorrow” (9; p.17). More recently, there is considered to be “increasing readiness” to include research training at undergraduate level (10, p.5). Approaches to include research in the curriculum include evidence-based practice modules, research projects, research-informed teaching and research practice placements (25). However, there is still significant variation across pre-registration programmes and universities (25). For example, there are disparities in the proportion of students conducting research projects with differences in the number of research-focused learning outcomes across the professions. Another study reported that AHPs are more likely to gain their first research experience during undergraduate training compared to nurses and midwives (18). Lack of time, competing curricula demands, a shortage of resource and/or opportunities to engage in research have all been cited as barriers to integrating research into pre-registration curricula, with students expressing a desire for more ‘hands-on’ research experience and access to research environments (25).

Accordingly, there is a need for HEIs and NHS organisations to work together to support students to undertake research projects as well as introducing them to the possibility of pursuing a career in research or clinical academia (25). Similarly, Jones and Keenan (19) argue for increasing “exposure to academic opportunity at a much earlier stage for all the NMAHPs professions [...] ideally, at an undergraduate level”, with intercalated degrees identified as a major driver for early engagement in academic activity amongst dental and medical students (p.197). Exposing students to clinical academic careers and role models is therefore a key enabler to building interest in these kinds of careers (12-18; see also 3.3.1), with HEIs playing a key role in this regard (12, 24). Positive early experiences of research and the availability of research training from undergraduate level upwards is considered a vital part of “normalising” research within NMAHPs career pathways (26). As clinical academic training awards are currently only available following the completion of preceptorship, it has also been argued that the potential of NMAHPs is “stymied, with a resultant delay to benefits emanating from their research” (26, p.8)

More recently, profession-specific research strategies (3-5) have detailed plans to increase opportunities for pre-registration students to access research placements and internships (4) and “experience the variety of research-related

⁷ A clinical academic is defined here as an NMAHP who “engages concurrently in clinical practice and research [...] Clinical academic posts are often joint appointments between a healthcare provider and higher education institution” (16, p. 3)

roles available to them” (3, p.8) with the long-term aim of building research capacity and capability and developing future research leaders.

3.3 Careers advice, support and mentoring

Careers advice is a key part of identifying, encouraging and supporting NMAHP clinical academics including advertising opportunities and resources (12) and “clearer and more accessible information on career pathways and opportunities” (18, p.62). The most common sources of advice have been identified as senior clinical academics, mentors and fellowship award holders, however, there is dissatisfaction with the availability, accessibility and clarity of the available guidance (18).

Mentoring is frequently flagged as important enabler in this regard (12, 16, 18, 21, 23-24, 27), with plans for a yet-unrealised “national mentorship programme” to support access to and transition along the training pathway set out in 2012 (16, p. 5). In 2016, national and local mentoring as well as support networks and communities of practice continue to be highlighted (12). Early career mentorship is regarded as particularly important to support clinicians to navigate the myriad barriers, persevere and simply understand “where to begin” (28, p.2) as well as providing practical support with funding applications (12). Mentors with specific specialty knowledge and/or understanding of the clinical academic role are especially valued (18). Mentoring is also a key theme in recent frameworks to create and embed research cultures and capacity within healthcare organisations and the NMAHP professions (29) and is recognised as an important part of supporting the transition of practitioners into academia within the HE setting (31).

However, the lack of careers guidance and mentoring identified by Finch in 2007 (9) is an ongoing issue (32-34). Within healthcare organisations there is reportedly a lack of academic mentorship and supervision (9, 32, 34), requiring more effective partnerships with HEIs particularly in regards to supporting early post-doctoral clinicians (34) (see also 3.6.4).

3.3.1 Visibility of clinical academic careers

Increasing the profile of clinical academic careers and the visibility of role models is understood to be an important enabler in supporting NMAHPs to pursue a clinical academic career (12-18). For example, access to those currently on the ICA pathway is a way of making these careers feel possible, whilst exposure to those working in research can help spark interest in this area (19). However, the “lack of existing national capacity and capability” is a key issue in this regard (12, p.18; 32) particularly in terms of clinical academics in senior positions. The importance of strengthening the profile of the clinical academic and academic workforce is recognised in the recent research nursing research strategy (3).

3.4 Research infrastructure, culture and support

Organisational support is an important enabler to those seeking to pursue a clinical academic career (18), but a lack of support from clinicians’ employing organisations is often cited as a key barrier (18, 21-22). This is a particularly acute issue for early career researchers (22), with nearly half of doctoral participants reportedly receiving inadequate support from their organisation (18; see also 34 with regards to post-doctoral support on returning to practice). Issues have also been raised with regards to insufficient “cascading” of relevant development opportunities (34; see also 35). In particular, the lack of capacity within the NHS to release people to take up opportunities is a key challenge (19). With regards to ICA fellowships, there are reportedly few mechanisms in place to arrange backfill (22) and no option of resigning to gain access given that award recipients must be in NHS employment (19).

A critical contributory factor to these issues is the high clinical workload within healthcare organisations (9), increasingly exacerbated by staffing shortages and rising clinical demands (12, 20). These challenges contribute to a “perceived conflict” between supporting clinical academic careers and meeting service delivery demands (12, p. 19). Relatedly, studies have highlighted feelings of “guilt” amongst staff for prioritising research over clinical work, with research viewed as a “luxurious pursuit reserved for those who work outside of busy clinical roles” (32, p.2)

3.4.1 Protected time

A key theme in the context of limited organisational support is the lack of protected time for research and development within clinical settings, often precluding clinicians from accessing available training and development opportunities (9). For example, early post-doctoral clinicians are afforded little research time to work towards further awards and disseminate their findings (34). More generally, there is limited time for clinicians to support learners and/or develop knowledge and skills in teaching and learning (7). With a lack of protected time, research-active NMAHPs often provide informal research support to other clinicians in their own time (13).

Protected time to engage in research, develop grant and fellowship applications and undertake study or write up publications is thus a key enabler in supporting clinical academic career pathways (23). Allocated time for research is also an important part of research culture and capacity-building frameworks (29-30). More recently, “protected training time” and “dedicated time for research” have been recognised as playing a key role in improving healthcare staff retention (1-2).

3.4.2 Managerial support

In this context, a lack of middle management support is a key barrier (10,18, 35-36), closely linked to the issue of increasing staffing pressures and clinical workload (10, 26, 35) and the “perceived push-pull on time and resources between care and research” (36, p.10). Even when there is strategic support for NMAHP clinical academic careers, there often remains a “disconnect” with “what managers actually allow and value”, with clinical work taking priority (37). Relatedly, there is understood to be limited managerial recognition of the benefits of research and clinical academic roles (10,12, 18). Low levels of research confidence and knowledge (30, 34, 36) mean that managers are often “ill-equipped to support staff research development or signpost to experienced clinical academics” (30, p.2).

Initiatives and support to “engage and encourage middle managers to promote, enthuse and support healthcare professionals to be research-trained and research-active” is thus a key enabler (10, p.5; see also 18, 35-36). Relatedly, there has been strategic emphasis on increasing the knowledge and skills of “maternity leaders” regarding opportunities for staff to engage in research (5). In the wider context of the NHS Long-Term Workforce Plan, there is also an increasing expectation for line managers to hold conversations that focus on learning and development opportunities and career progression (1).

3.4.3 Culture

A lack of organisational support for NMAHP clinical academic careers can be linked to a lack of embedded research cultures within healthcare organisations and NMAHP professions (9, 17, 38). For example, the Finch report identified an “anti-academic culture” within the nursing profession (9, p.17) and the NIHR 70@70 Senior Nurse and Midwife Research Leader programme was set up to “demystify” and help promote and embed research active cultures within these professions (33). More recently, the importance of nurturing organisational and professional research cultures has taken centre stage in the latest wave of profession-specific research strategies (3-5), with the AHP strategy aiming to embed research into AHP identities, cultures and roles to empower staff to engage in research (4). The focus on creating and embedding research cultures and capacity within healthcare organisations and NMAHP professions is also reflected in the recent research literature (29). Although not specific to the NMAHP professions, there is a corresponding emphasis on building a “pro-research culture” within integrated health and care systems (2).

3.4.4 Strategic support

Growing a research culture that supports NMAHP-led research and clinical academic roles will require strong strategic and senior leadership (32). For example, dedicated senior leads for NMAHP research and leadership engagement have been highlighted as key success factors in facilitating the wider appreciation and value of NMAHP-led research (10; see also 35). Embedding NMAHP research into wider organisational strategies is also an important enabler (12, 19, 22, 32), with organisational commitment facilitated by national and local directives and policies that articulate the drivers, incentives and benefits of prioritising NMAHP-led research and clinical academic careers (12). Indeed, greater strategic support might help to ameliorate a lack of expectation of academic achievement within the AHP professions and address feelings of guilt for engaging in research (32).

An important part of building this commitment will be the development of policies and organisational structures that support and value evidence-based practice and demonstrate the link between clinical academic roles and improved health and research outcomes (12). Certainly, the importance of organisations understanding the value and benefits of NMAHP-led research and clinical academic careers have been at the heart of strategic developments in this area. For example, the Willis report argued that:

“Employers need to recognise that there is powerful evidence regarding the benefits and return on investment of registered nurse leaders who successfully combine practical clinical and academic work. (38, p.57)

More recently, plans include supporting healthcare organisations to understand the benefits of giving nursing staff time to engage with research (3). The link between research engagement, improved patient outcomes, staff retention and recruitment is also foregrounded in the broader strategic healthcare landscape (1-2).

Within the research literature, there is increasing evidence of the impact of NMAHP clinical academic roles at both individual and organisational levels ranging from self-fulfilment and enhanced patient care to improved staff recruitment and retention (39⁸ see also 30; 40). In particular, NMAHP clinicians have reported joining healthcare teams “because of the recognised research culture” (40, p.12). Individual motivations for engaging in research and/or pursuing a clinical academic career are in line with many of the documented impacts such as improving job satisfaction, skills development and impacting clinical practice (30; see also 22, 32, 36), although achieving the goal of career advancement may be less likely (see 3.6).

Accordingly, there is a call for healthcare organisations, leaders and managers to better understand and value the impacts and benefits of NMAHP research engagement and clinical academic careers (13, 19, 20). Indeed, the positive impact on

⁸ Clinical academia is simply defined here as the involvement of a clinician in research (39).

retention and recruitment can help to “overcome challenges based on staffing concerns” (20, p.7), with staff retention issues likely to be exacerbated by restricting opportunities to develop research careers (19). Springett et al. add:

We need to consider what can be gained from clinical academic posts – research to improve patient care and patient experiences, funding, implementation of evidence – rather than what is lost, such as less time in clinical practice” (37, ~ para 33).

3.5 Recruitment and retention issues within the HE sector

Recruitment and retention issues are a key challenge within the HE sector, exacerbated by an ageing workforce (7-9). In particular, there are difficulties with recruiting to lecturer, senior lecturer and specialist positions, with a small recruitment pool adding to the challenge especially within rural areas (8). Relatedly, concerns have been raised as to the capacity of the educator workforce to meet current and increasing demands (7), with a previous midwifery strategy highlighting the need for:

...sufficient educationalists to be able to sustain resourcing programmes to the required academic level, maintain practice credibility, and engage in personal and professional development and research (27, p.35).

3.5.1 Career structures, pay scales and pensions

A key issue is competition with clinical career structures in the NHS (and other universities), with limited opportunities for career progression (8, 9; see also 3.6). In relation to midwifery, Albaran and Rosser noted that this situation is exacerbated by the introduction of new and “more fulfilling” clinical roles in the NHS to develop and apply specialist skills (41). More widely, there is considered to be a lack of clear career pathways for educators in HEIs as well as in healthcare organisations (7). Unclear career pathways and limited career progression is also a key barrier in terms of following a clinical academic trajectory (see section 3.6).

Differences in pay scales and pensions schemes between HEIs and NHS is another major barrier, with higher salaries for commensurable positions and more attractive pensions available within the NHS (8-9, 18). Furthermore, compared to the job security of clinical roles, part-time and fixed term employment contracts within HEIs have been identified as a deterrent to pursuing an academic career within the university setting (8; see also 41 in relation to midwifery). However, it is important to recognise that short term contracts are a feature of research more generally including within the healthcare sector (9). Pay scales, pensions and job security concerns are also barriers to pursuing clinical academic careers (18, 24, 33), although sessional contracts have been flagged as a potential enabler in this context (9; see also 12 on lack of support for sessional contracts).

3.5.2 Eligibility requirements, development and support

The requirement for higher degree qualifications, especially a PhD, has previously been suggested as a barrier to recruiting nursing and midwifery academics (41, 42), with expectations to complete a teaching qualification also identified as a potential barrier to recruiting midwife educators (41). Recently, the Council of Deans academic staffing census flagged a mismatch between HE job requirements and applicant qualifications, skills and/or experience (8). More generally, a lack of development opportunities for the educator workforce across HEIs and the NHS has been highlighted (7), with a need for more time and opportunities for AHP educators to engage in research and scholarship (4).

Furthermore, the experience of moving from a clinical role into a faculty position can be very challenging, characterised by fear of losing credibility as a clinician, unanticipated additional responsibilities ranging from administration to research and a lack of “supportive and structured transition” (43, p.1.; see also 42). Relatedly, a lack of clarity over role expectations and pressure to undertake research and submit work to the REF have been flagged as potential barriers to recruiting midwifery educators (41).

3.5.3 Isolation, workload and burnout

Pressures on the academic workforce is likely to intensify giving growing demands (7), with a highly pressurised environment understood to have already negatively impacted academic staff satisfaction, career progression and retention (8). Issues regarding the resilience and sustainability of the healthcare education workforce have arguably become even more acute since the pandemic, with feelings of isolation cited as a major factor particularly in the wake of moving to more online delivery models (44). These authors report that “more than half of all academics cite[ing] emotional burnout as a driver for their intent to leave the sector” (44, p.1). Other problems include poor health and wellbeing linked to increased workload and a poor work-life balance, inconsistent and changing central messages, remodelling courses, increased sedentarism, the volume of emails from students, and the need to provide more online support (44). A high teaching workload has also been raised as a potential barrier to recruiting midwife educators, with the demands of the education role leaving little room for scholarship and research (41; see also 4 in relation to AHPs). Accordingly, there is a call for increased pastoral support, an improved work-life balance and a more sustainable workload (44).

Similarly, the issue of work-life balance is a problem for NMAHPs pursuing a clinical academic career (13, 18, 21), with a need to better recognise the difficulties and competing demands of this role (18; see 32 in relation to work/life balance as a potential barrier to research engagement).

3.5.4 Support for clinical academic careers

In 2007, Finch noted limited opportunities for academics to engage with clinical practice and undertake patient-focused research (9), with concerns raised regarding the “clinical credibility” of the midwifery educator workforce in 2010 (27). Although there has been progress in terms of developing clinical academic careers, there is reportedly still a “lack of understanding of the importance of clinical experience in faculty members” and a “lack of flexibility and clinical opportunities” in HEI-based contracts (12, p.19). Similarly, another paper describes a lack of organisational commitment to and support for clinical academic careers within HEIs (19). For those individuals wanting to combine clinical and academic work, a lack of commitment from the HE sector in supporting clinical academic careers is likely to constitute an additional recruitment barrier.

3.6 Clinical academic posts and career pathways

3.6.1 Strategic focus on clinical academic career pathways (2007-2016)

One of the key findings from the Finch report were the limited opportunities and pathways available for nurses to combine clinical practice and research and/or teaching work as a “clinical academic” or “as part of a broader based nursing career portfolio” (9, p.17). Career progression was reportedly “serendipitous and unclear” (9, p.17). To address this gap, the authors recommended the creation of a “planned, integrated and flexible career pathway” that would allow “horizontal and vertical” progression (9, p.24), and would require ways of linking employment between HEIs and the NHS (see 3.6.3-3.6.4).

Soon after, midwifery called for the introduction of clinical academic roles and flexible career pathways as an “important feature of the future career structure for midwives” and a way of supporting academic staff to maintain their “clinical credibility”, underpinned by greater partnership working between the NHS and HEIs (27, p.40). The same year, the Prime Minister’s Commission on the Future of Nursing and Midwifery in England described the need for “urgent steps” to:

strengthen the integration of nursing and midwifery practice, education and research; develop and sustain the educational workforce [and] facilitate sustainable clinical academic career pathways (15, p7.)

This was followed by a commitment to publicising and encouraging the “mainstreaming” of clinical academic posts citing a model of clinical academic career and training progression developed by the AUKUH non-medical clinical academic careers group (16)⁹. This group was established in 2011 to influence the creation of NMAHP clinical academic career pathways and posts as part of wider workforce planning.

A few years later, the Willis report (38) recommended developing and increasing the number of clinical academic roles, noting that there are currently “inadequate numbers” of nursing professors. To this end, they called for “nationally coordinated investment” and support led by HEE in collaboration with partners such as AUKUH and The Shelford Group, with local organisation also cited as playing a critical role in developing these posts (38, p.58). Importantly, this report detailed the ambition for “significant NMAHP posts to be clinical-academic (that is, requiring research training or being actively engaged in research training) across the UK by 2020” (p.57). In response, HEE set out a commitment to developing a strategy for clinical academic careers and a “framework for career progression that can bring coherence to the often-fragmented pathways and multiplicity of roles” inclusive of research and educator opportunities (33, p.8)

In 2016, the AUKUH Clinical Academic Roles Development Group produced a practical guide for organisations to develop NMAHP clinical academic roles and specified a target for 1% of the NMAHP workforce to be clinical academics by 2030 (12). In this guide, the authors argue that the “principles and processes” for developing and integrating clinical academic roles into medical career pathways are “relevant and transferable to NMAHPs” (12, p.125). “Access to a coherent career pathway with embedded roles at different levels” was identified as a key enabler, with a lack of clearly defined post-qualification career pathways or benchmarks cited as an important barrier (12, p.18). The following year, the Clinical Academic Roles Implementation Network (CARIN) was established to guide and support organisations to develop NMAHP clinical academic role. CARIN includes at least 4 member organisations from the North West (Lancashire Teaching Hospitals NHS Foundation Trust, Liverpool Women’s NHS Foundation Trust, Manchester University NHS Foundation Trust and the University of Central Lancashire) (45).

3.6.2 Research into clinical academic career pathways

The “first national survey to consider clinical academic career progression in NMAHPs” was undertaken in 2017 as part of a study looking at the experiences of doctoral and post-doctoral ICA fellowship applicants (28, p.9; 18). The post-doctoral career stage was found to be particularly challenging with insufficient clinical academic posts resulting in the majority of

⁹ Their definition of a clinical describes a combined clinical and research role that also includes a focus on building research capacity and capability (16)

doctoral respondents moving onto an academic position or clinical post “with no formal sessions for research” (18, p. 80; see also 19). Barriers to career progression were variously highlighted including issues with securing a research-related post that reflected their chosen area of focus, a post at “an appropriate clinical level”, a position reflective of their research knowledge and skills and/or where they could “sustain some research activity” (18, p.81). In addition, this study reported that over half of those pursuing a clinical academic career indicated they had been affected financially, primarily due to slower progression through the salary bands. A significant number returned to their previous clinical position. A key recommendation from this study was the development of clearer career paths to inform the development of roles for early, mid- and senior stages of clinical academic careers, enabling progression and increasing the desirability and viability of these careers (18). Variation in opportunities dependent upon profession and/or location were also noted. In a recent academic staffing census approximately 6% of respondents from the academic workforce reported worked as clinical academics, with the highest proportion in AHP professions (8). Less than 1% of those working in Northern HEI institutions identified as a clinical academic (8).

In 2019, another study of NMAHP clinical academic career progression similarly concluded that there remains a need for more clinical academic roles and a “coherent career pathway” supported by cross-sector partnership working (24, p. 8; see also 14, 24, 26, 32, 35-36, 40, section 3.6.4). In addition, roles are reportedly ill-defined and include a range of “honorary contract nomenclature” reflecting a tendency for these positions to be “created for specific individuals rather than as accessible career pathways” (40; see also 4). Furthermore, clinical academic positions become scarcer and more competitive in relation to seniority (26).

Thus, despite the introduction of training and development opportunities having “catalysed change” for clinical academics, there remain limited long term career opportunities (21) and an ongoing need to establish a clear clinical academic career structure (19). This divergence perhaps reflects the fact that career pathways are “more complex and subjective” than training pathways, requiring “role clarity, objectives and agreed transition points that are embedded into national and local policy, as well as organisation awareness, and acceptance and value of the role itself” (10, p. 6)

More recently, there has been a resurgence in strategies calling for an increase in NMHAP clinical academic, research and/or teaching posts and clearer career pathways (3-4), recognising that clinical academics often have to “carve out a role for themselves and encounter significant challenges doing so” (3, p.24) More widely, increasing numbers of clinical academic posts is recognised as an important part of supporting education expansion and reform by delivering teaching and leading on research (1). With a focus on education, there have also been calls for clearer educator career pathways in HEIs and the NHS (7). Potential career pathways for AHP educators within and across organisations have recently been published as part of an “Educator Career Framework” (47). Equitability issues have also been brought to the fore, with the midwifery research strategy focusing on building “fair, equitable research career pipeline” inclusive of diverse and under-represented groups (5). Similarly, the nursing research strategy points to the importance of understanding “barriers to career progression arising from characteristics such as race or sex” (3, p. 23- 24), whilst equitable access to support, infrastructures and investment is a key part of the AHP research strategy (4).

3.6.3 Flexible employment models and joint contracts

“Flexible employment models and opportunities” are a key enabler to supporting NMAHPs to pursue a clinical academic career, particularly with regards to setting up joint posts between HEIs and the NHS (12, p.18). The literature identifies a number of different employment models to support a more “integrated and flexible” career pathway as an academic including secondments (9, p.17; 8), career breaks/sabbaticals and rotational posts (27), “sessional” contracts (9, 12) and joint appointments (2, 4, 8-9, 16, 27). In particular, secondments and joint posts have been proposed as a way of improving the sustainability of the NMAHP academic workforce (8).

In 2007, there were reportedly very few joint appointments available within the nursing workforce (9). Today, NMAHP joint contracts are “only now beginning to emerge” (19, p.196). A barrier to setting up these contracts has been identified as a lack of job profile templates (12) and “model clinical academic contracts” with guidance on pay and conditions (18, p.81). Adapting medical clinical academic processes, practices and Follet principles and setting up “joint job profiles linked to appraisal and revalidation” have been highlighted as important enablers (12, p.18).

Other difficulties in setting up joint posts include pay scale disparities between HEIs and the NHS (9, 18, 27) and the absence of a clinical academic pay scale “whereby clinical and academic skills are valued equally by NHS and HEI organisations” (24, p.8; see also 12). Issues with transferring pension schemes is also a potential barrier (9, 12, 18, 27).

To enable these contracts, NHS organisation and HEIs need to work together to establish principles, expectations and accountability for awards, roles and progression (19). Yet, a “lack of realistic expectations between NHS/HEI partners of joint posts” is understood to be a barrier (18; p.19). There is a need for a “stable long-term joint funding model” (19, p.196) and joint workforce planning (8, 15) to help establish a clinical academic career structure with clear, long-term career opportunities underpinned by collaborative partnerships between HEIs and the NHS (19; see also 8, 14, 16, 24, 26-27, 38).

3.6.4 Cross-sector partnership working

The lack of integration between HEIs and NHS organisations has been raised as a barrier to supporting NMAHP clinical academic careers (18), with calls for developing “more joined up thinking” and strengthening cross-sector relationships and collaboration (18, p.63; see also 8, 16, 23, 37). Effective partnerships between healthcare organisations have also been recognised as a key element to building NMAHP research capability and capacity more widely (5, 16, 32) including setting up training initiatives (20) and mentorship (32).

These cross-sector partnerships are understood to require a “new understanding” between NHS and HEIs that address incompatibilities between their respective cultures and infrastructure (9, p.24; 18, 27, 37). For example, different sector values and demands such as the emphasis on service efficiency within the NHS and the importance of grants, publications and diversifying income within HEIs has been highlighted as a potential barrier to collaboration (37). In this regard, a “shared research culture and environment” is recognised as key enabler to supporting clinical academic careers (12, p.18). Moreover, Cowley et al. argue that:

Individuals, funders, and organisations may need to relinquish previous identities to establish collaborative initiatives to meet the 2030 clinical academic workforce targets (14, p.8).

There is therefore a need for effective clinical and academic leadership to help build strategic alliances and alignment (23, 26, 46) and inform the development of a shared clinical academic strategy with a “vision for success” embedded in and aligned to other organisational strategies, “enabling consistent messaging about the purpose and function of clinical academic career pathways” (23, p. 1513; see also 46, 12 on the importance of organisational clinical academic career leads). Other factors found to underpin successful joint clinical academic career pathways include streamlined management and governance, measurable outcomes, transparent communication, “flexible sharing” of resources, and “transparent and realistic financial commitment” to sustain and foster mutual responsibility and investment (23, p. 1513, 46).

In this way, partnerships must be established on “mutual benefit” (12), for example, increasing research capacity, generating grant income, increasing healthcare efficiency and improving recruitment and retention (39; see also 4). In addition, these partnerships are likely to support “practice-relevant research aligned to NHS priorities” and enable the “translation of findings into practice” (46, p.350). “Focusing research on enhancing areas of local research strength” is also identified as a key enabler to supporting clinical academic careers (12, p.18). More widely, clinical academic roles are valued as a means of enabling the cross-sector working needed to drive the UK forward as a “scientific powerhouse” (1, p.88). Moreover, the recent introduction of ICs provides the opportunity for organisations to build clinical academic roles and “boost the educator and research workforce” (1, p. 104) as well as undertake research that will “span organisational boundaries” through:

“...participation in collaborative research to address national priorities, joint staff posts, honorary contracts, and administratively easier movement of researchers between health and care organisations and other sector partners, including higher education.” (2, para 3.7)

4 Methodology

4.1 Study objectives

An effective regional strategy for building a sustainable NMAHP academic workforce requires a rigorous understanding of NW NMAHP career interests in, and experiences of, research and teaching, as well as the enablers and barriers to pursuing a career in these areas. This is in line with recommendations to scope NMAHP research and teaching activity and demographics, identify potential candidates in the workforce and understand local enablers and barrier (real and perceived) to progress the development of NMAHP clinical academic careers (12).

To this end, this study aimed to understand NW NMAHP clinicians':

1. qualifications, experience, knowledge and skills in research and/or teaching and learning;
2. career aspirations, preferred role descriptors and employment contracts in research and/or teaching and learning;
3. enablers and barriers to pursuing a research and/or teaching-related career;
4. how HEIs and NHS organisations can work more effectively together to address shared workforce challenges

The findings from the study will help to gauge interest in clinical academic and/or academic careers amongst NMAHP clinicians in the North West and identify how best to prepare, support and build this workforce. The results of this study will be used to inform the development of a strategy to sustain the future NW NMAHP academic workforce.

4.2 Method

The study was conducted in three phases using a mixed-methods approach, each phase informing the next stage of the research.

4.2.1 Phase 1 – desktop literature review and focus group

A desktop literature review and focus group with 7 members of the NW Council of Deans of Health was undertaken to develop a 'working theory' of the potential enablers and barriers to recruiting NMAHPs into academic careers, and to consolidate the study objectives. The literature review is presented in section 3, with a summary of the focus group discussion provided in Appendix 1.

4.2.2 Phase 2 – surveys

Findings from phase 1 informed the development of two surveys designed to test the emerging theory and build upon previous research in the field. The first survey (the 'NMAHP survey') was designed to capture clinicians' knowledge, skills and experiences of research and/or teaching, access to careers guidance and pathways, career aspirations including interest in specific roles and contracts, and key enablers and barriers to pursuing a career in these areas. It also captured demographic data including details of current employment and relevant qualifications. The second survey ('the NMAHP leads survey') focused on NMAHP leads' perceptions of the enablers and barriers to effectively supporting NMAHP careers in research and/or teaching as well as capturing experiences, knowledge, skills and interest in supporting career development in these areas. In addition, the second survey looked at perceptions of relevant organisational support and resources as well as capturing key demographic data.

The survey content and design was tested by NMAHPs and NMAHP leads working within HEIs, the NHS and the NIHR and was amended based on their feedback. Surveys were set up using Survey Monkey and skip logic was included wherever possible to reduce the complexity and length of the survey.

Survey participants were based on a convenience sample of NHS R&D NW and NW Council of Deans of Health contacts. The survey was circulated by email and on social media (Twitter, WhatsApp) reaching over 2000 potential respondents. NHS R&D NW also made targeted requests to key collaborating organisations (HEE NW, NIHR CRNs and CAPHR) and individual research champions working within the healthcare system to circulate the survey within their networks. The survey was open from February-March 2023 (4-5 weeks) and was promoted intermittently through email and social media reminders.

The email service platform reported that the initial email was opened by 544 people and the initial Tweet advertising the survey had over 2000 impressions and 50 engagements. However, as overall circulation figures are unavailable, it is not possible to calculate a survey response rate.

All nurses, midwives and AHPs listed on the NHS England website¹⁰ as well as Chiropractors, Hearing Aid Dispensers, Practitioner Psychologists, Clinical/Biomedical scientists, and Clinical Research Practitioners were asked to participate, but other non-medical health professional respondents were not discounted.

4.2.2.1 Survey participants

245 people began the NMAHP survey with a completion rate of 72% resulting in **174** completed submissions following removal of evident duplicates. 36 people began the NMAHP leads survey with a completion rate of 44% resulting in **16** completed submissions.

Descriptive analysis of the quantitative data was conducted and frequencies and percentages are presented. Percentage statistics of the NMAHP leads data are not included as $N < 50$. Marked differences between nurses and midwives and AHPs based on frequencies and percentages are reported, but no statistical analysis was undertaken to determine if these differences are statistically significant. Open text responses were analysed using thematic analysis.

Only completed submissions were included in the analysis, although it is important to note that not all questions were answered by every participant so that percentages are based on the number of responses to each question.

102 NMAHPs and 9 leads supporting NMAHP career development left contact details to be contacted for a follow-up interview.

4.2.3 Phase 3 – semi-structured interviews

Findings from phase 2 informed the development of semi-structured interviews to explore some of the key themes regarding enablers and barriers identified in the survey in more depth.

A sample of 40 of the 111 respondents who had left their contact details was initially contacted for interview, with the aim of capturing variation in profession and geography. However, following limited initial uptake, invites were sent out to all those who had shared their contact details.

40 interviews were conducted from June-Aug 2023. Interviews were recorded and transcribed using MS Teams. Transcripts were analysed using thematic analysis by coding the data using Taguette and identifying main themes.

4.3 Ethics

A participant information sheet was provided for each survey and respondents were asked for their consent to participate at the beginning of the survey. A participant information sheet and consent form were also provided to interviewees.

4.4 Study limitations

The results of this study must take into account several study limitations. Respondents to the survey only represent a small proportion of NMAHPs working in healthcare/HEIs within the North West and data from specific professional groups only involves small numbers. In addition, not all AHP professions are represented in the survey respondents (see 5.1.1), although responses are broadly proportionate to the relative number of AHPs (36). Some sectors also have minimal/no representation.

The survey was primarily based on a convenience sample of NMAHPs contactable through NHS R&D NW. As a result, the sample of respondents is likely to be biased towards those interested in and/or actively engaged in research. Although all NMAHPs were encouraged to take part regardless of whether or not they are/were involved in research and/or teaching and learning, most respondents are likely to be already interested in/or involved in some capacity in these areas. There is therefore likely to be significant self-selection bias in the responses. Variation in response rates across geography/organisations is also likely to reflect variation in research-related 'hotspots' in these regions and difference in workforce numbers that may also have affected the degree to which the survey was further disseminated and promoted.

In addition, it is important to note that the survey length may have been a potential disincentive, particularly given pressures in the healthcare system (e.g., NHS strikes, workforce shortages and clinical demands) although this was broadly in line with other published surveys (e.g. 19, 31).

¹⁰ <https://www.england.nhs.uk/ahp/role/> [accessed Sept 2023]

5 Survey findings

This chapter presents the findings from the surveys undertaken in Phase 2 of the study beginning with the 'NMAHP survey' results. It first looks at the demographic data, qualifications, experience, knowledge, skills and confidence in research and teaching and learning. The perceived clarity of career pathways and access to careers advice is then explored, followed by indication of interest in academic and clinical careers, roles and contracts. The motivators, enablers and barriers to pursuing a career in research and/or teaching are then presented. The chapter concludes with results of the 'NMAHP leads survey'.

5.1 NMAHP survey

In total, 174 clinicians in the North West completed the 'NMAHP' survey although not all questions were answered by every participant. Graphical representations of the data are included in the main body of the report.

5.1.1 Demographics

Demographic data was collected on participants including profession, pay band, years qualified, age, ethnicity, gender, sexual orientation and disabilities. This data was collected to aid in understanding equality and diversity within the context of academic careers and has been designed to build NHS workforce demographics¹¹ and other relevant datasets (18, 36). Some of the data collected is referred to directly in the report and some information is to inform future enquiry into potential equality, diversity and inclusion barriers to progressing a career in research and/or teaching and learning and develop appropriately targeted actions.

5.1.1.1 Profession

A breakdown of the professional backgrounds of the survey respondents is shown in Fig 1.

The highest proportion of respondents identify as a nurse (selecting one or more of the following categories: Nurse, Adult Nurse, Children's Nurse, Mental Health Nurse and Learning Disability Nurse), (n=68; 39%), followed by physiotherapists (n=35; 20%), midwives (n=18; 10%), occupational therapists (n=15; 9%) and speech and language therapists (n=8; 5%).

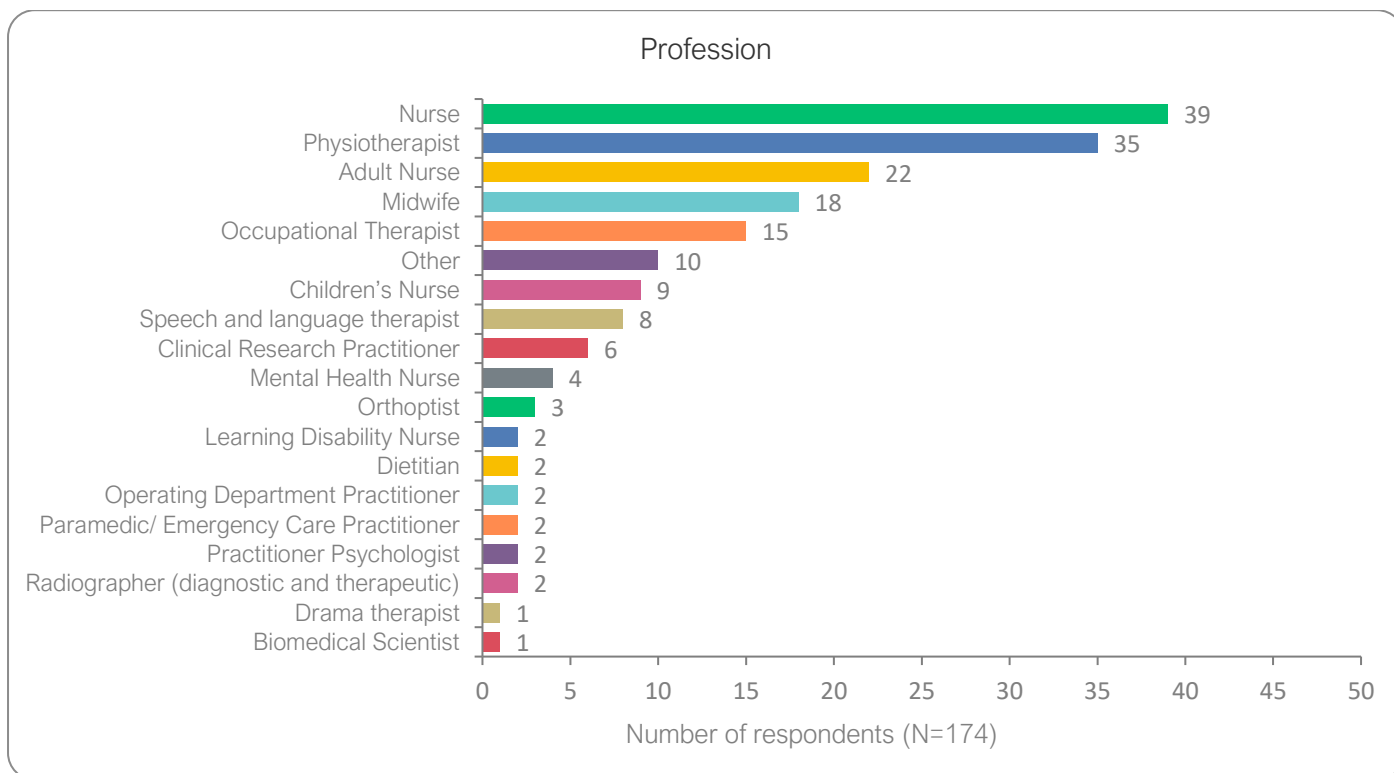


Figure 1

¹¹ <https://digital.nhs.uk/about-nhs-digital/corporate-information-and-documents/annual-inclusion-reports/annual-inclusion-report-2023>

Overall, approximately equal proportions of nurses and midwives (49%) and AHPs (45%) responded to the survey, with 6% selecting 'other' (n=10) (see Fig. 2).

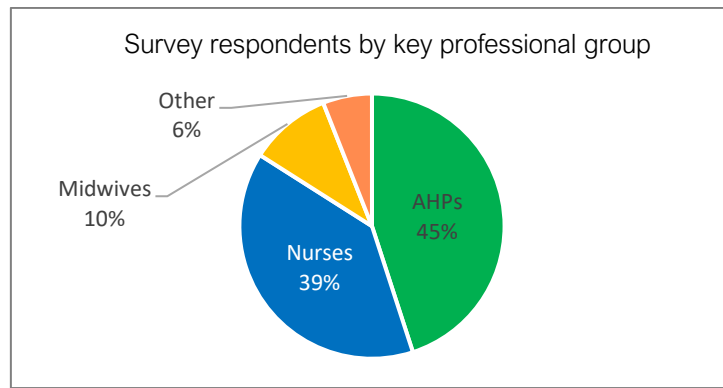


Figure 2

Those respondents selecting 'other' identified as follows:

- Optometrist (n=3)
- Health service nurse researcher
- Social worker/family worker
- Assistant Practitioner
- Pharmacy technician
- Psychodynamic therapist
- ACP
- Dual

The following professions were not represented in the survey sample:

- Community Public Health Nurse
- Nursing Associate
- Art therapist
- Hearing Aid dispenser
- Music therapist
- Osteopath
- Podiatrist/Chiropodist
- Prosthetist/orthotist
- Clinical scientist

Job titles

97% (n=169) of survey respondents detailed their job title across varying levels of seniority, with some providing more than one title resulting in 176 job titles overall. 65% of these titles described a clinical practice only role (n=115), the most common among these being "physiotherapist". 26% reported research-related (n=45) job titles, most commonly a research nurse followed by a research midwife. 9% (n=16) referred to some kind of education/practice development and improvement focus (see Fig. 3)

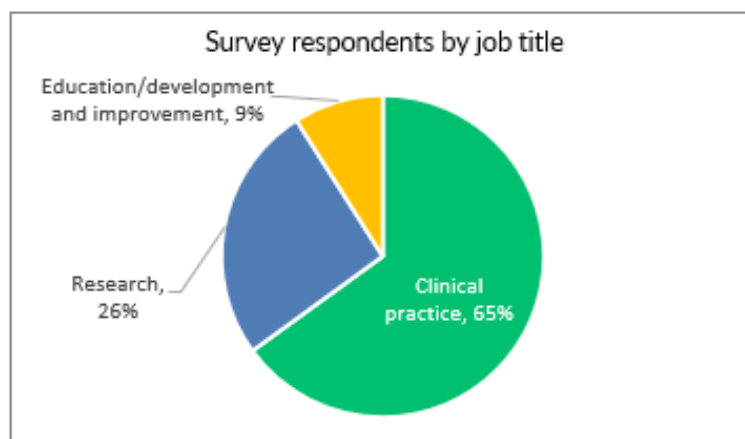


Figure 3

A higher proportion of nurses and midwives (36%) provided research-related job titles compared to the proportion of AHPs (15%), with nurses having the highest number of education/development and improvement-related job titles (n=10).

5.1.1.2 Pay Band

The majority of respondents are working at Band 6/7 (61%; n=105), with the next most common pay band at 8a (19%) (see Fig. 4).

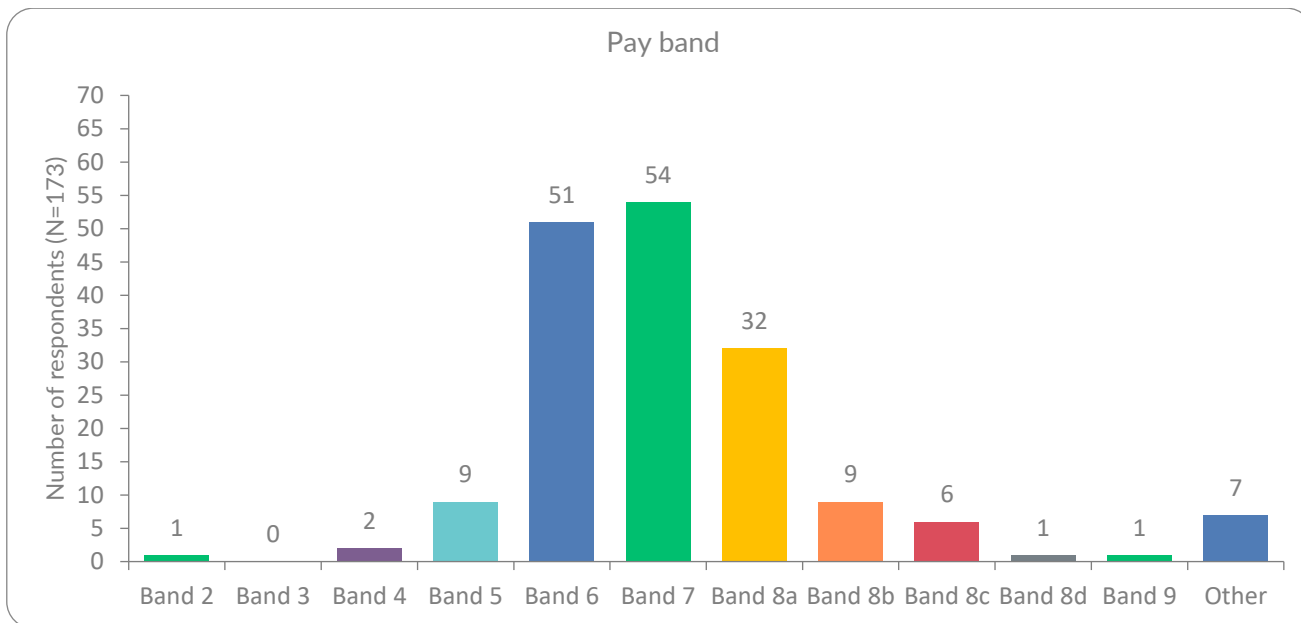


Figure 4

The highest proportion of AHPs are working at Band 7, whereas the highest proportion of nurses and midwives are working at Band 6.

7 respondents reported working at a non-NHS pay band/other, with 3 describing 'university' banding (one specifying pay band 7) and others specifying 'reader' pay, "clinical academic" and "honorary contract". One participant reported working at a VSM (very senior manager) NHS pay band.

5.1.1.3 Years qualified

The highest proportion of respondents report being qualified for more than 20 years (40%; n=70); 42% of whom were AHPs and 38% were nurses or midwives. 37% (n=65) of the respondents have been qualified between 11 and 20 years (see Fig 5).

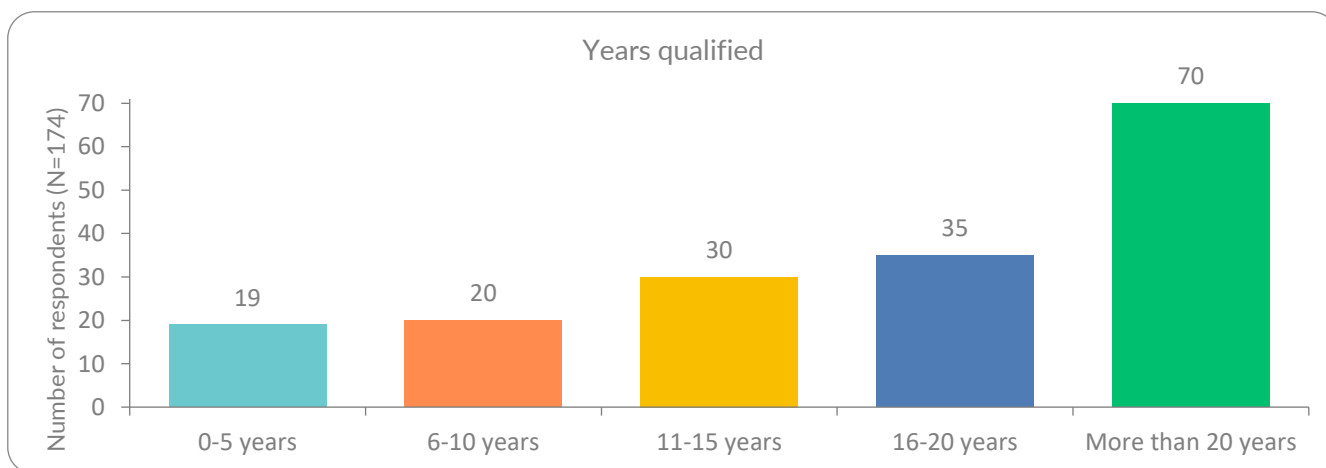


Figure 5

5.1.1.4 Age

The highest proportion of respondents are aged between 40-49 (42%; n=69) (see Fig 6). 28% of nurses and midwives were 50+ compared to 12% of AHPs.

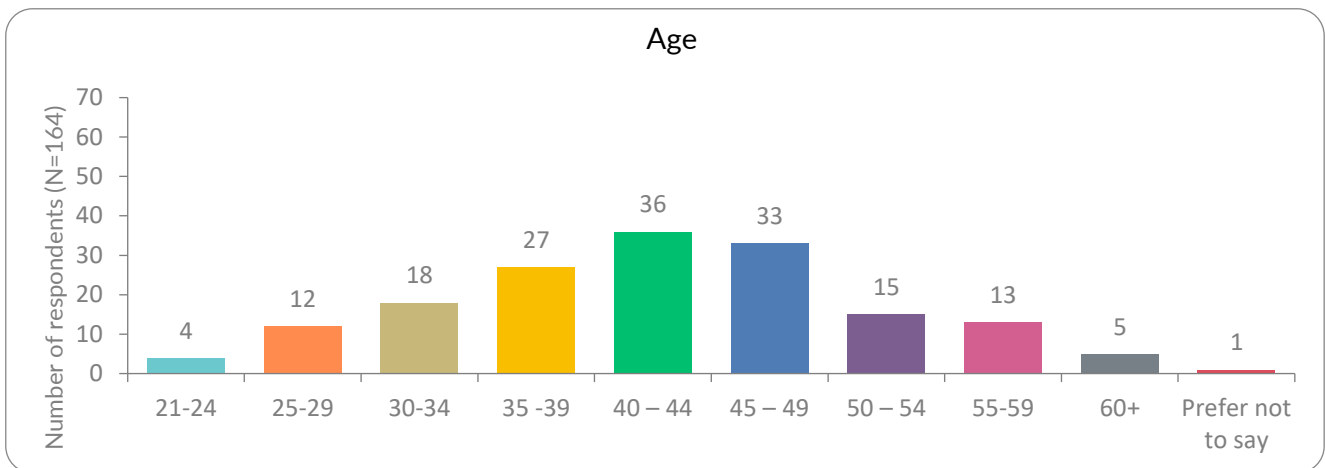


Figure 6

5.1.1.5 Ethnicity

80% (n=136) of the respondents to this question identify as “White- English, Welsh, Scottish, Northern Irish or British”, followed by 7% (n=11) identifying as Asian or Asian British – Indian and 4% (n=7) selecting “Other White Background” (see Fig. 7)

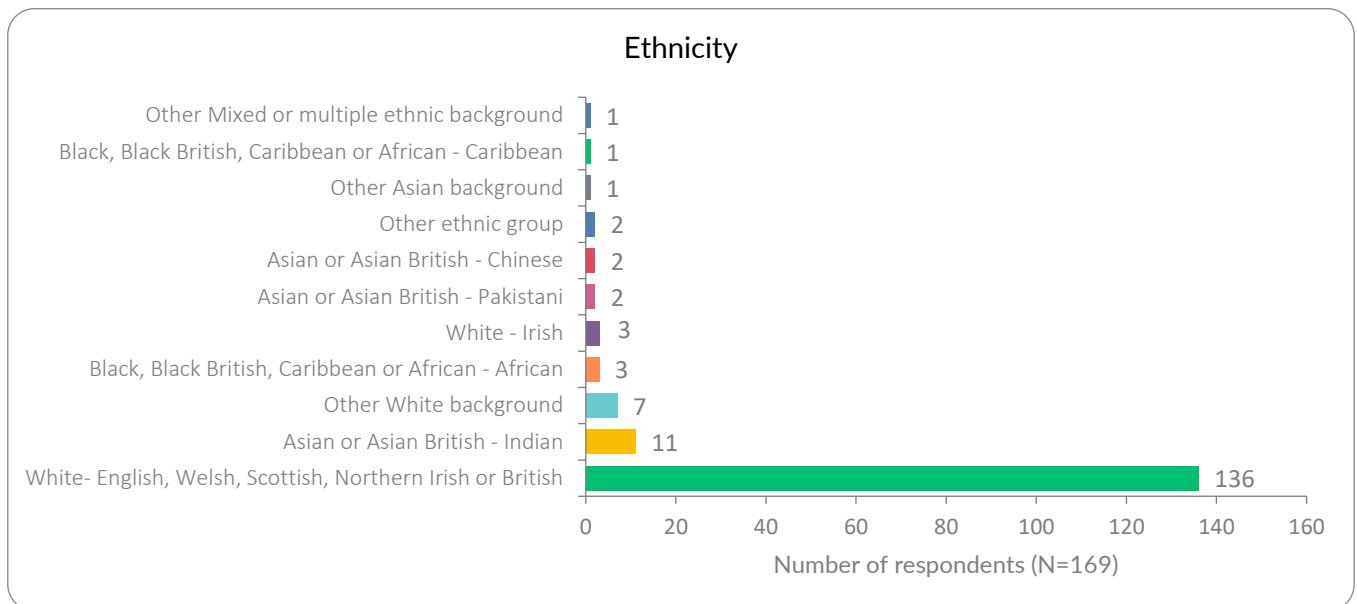


Figure 7

5.1.1.6 Gender

87% (n=148) of the respondents identify as female (see Fig. 8)

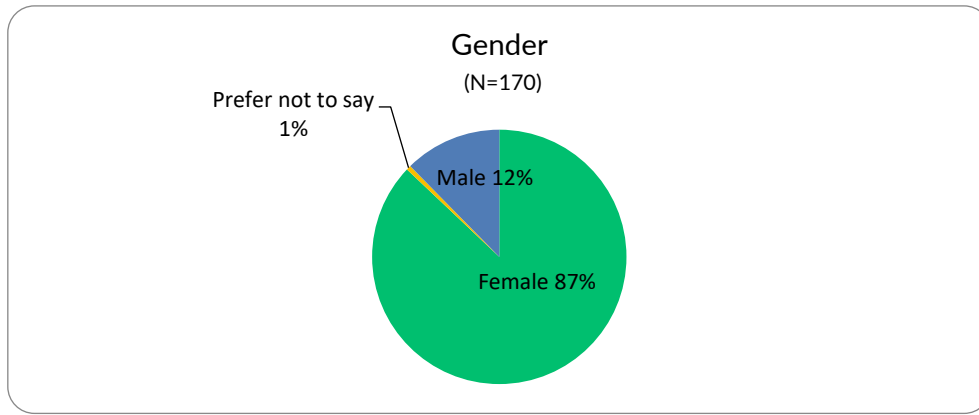


Figure 8

5.1.1.7 Sexual Orientation

89% (n=148) of the respondents to this question identify as straight or heterosexual (see Fig. 9).

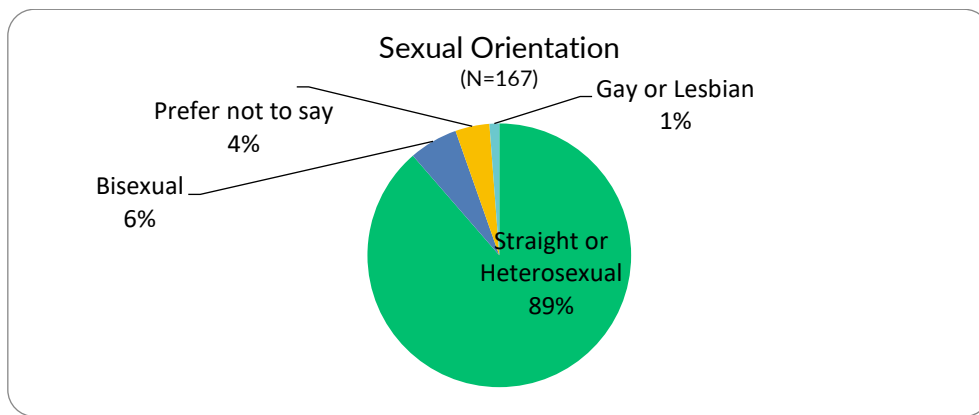


Figure 9

5.1.1.8 Disabilities

86% (n=144) of respondents reported no disabilities (see Fig. 10). 4% (n=6) indicated hidden disabilities, with 4 participants reporting a learning disability and 6 specifying a physical disability. In the 'other' category, sensory disability, dyslexia, physical and learning difficulties, mental health and endometriosis were noted.

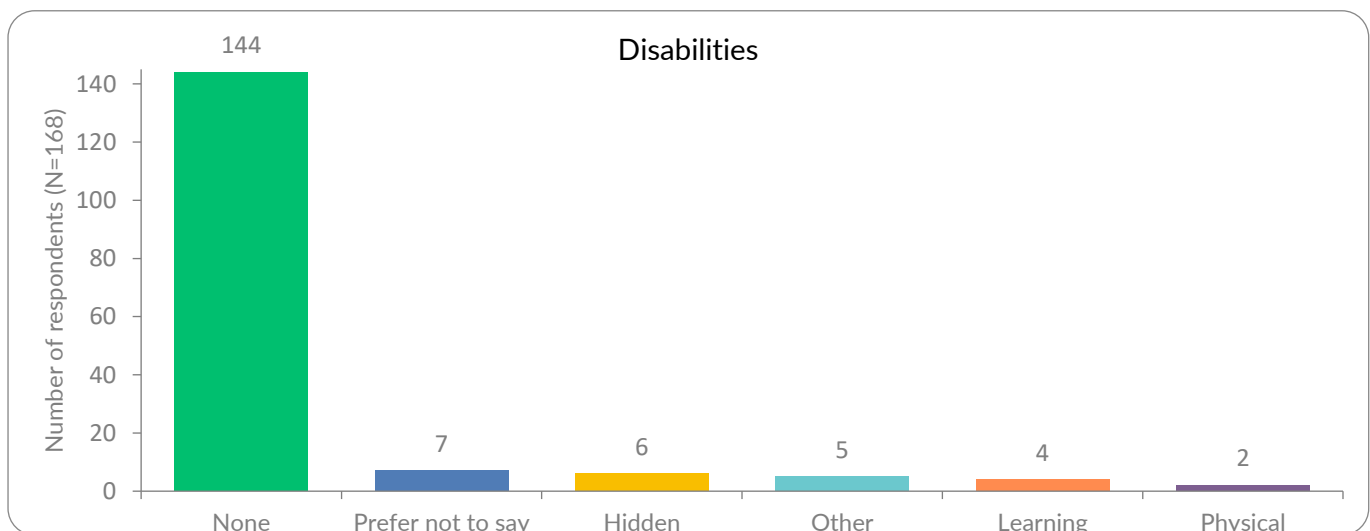


Figure 10

5.1.1.9 Region

Fig 11 shows the number of respondents from each of the regions in the North West.

Nearly half of the survey respondents work in Greater Manchester (n=85; 49%), followed by 36% (n=62) in Cheshire and Merseyside and 14% (n=25) in Lancashire and South Cumbria. One respondent reported working in a team that operates across the NW, and another noted that they in an organisation that lies on the boundary between Lancashire and South Cumbria and Greater Manchester.

Over half (62%) of the nurses and midwives work in Greater Manchester compared to 32% of the AHPs, the highest proportion of whom work in Cheshire and Merseyside (41%)

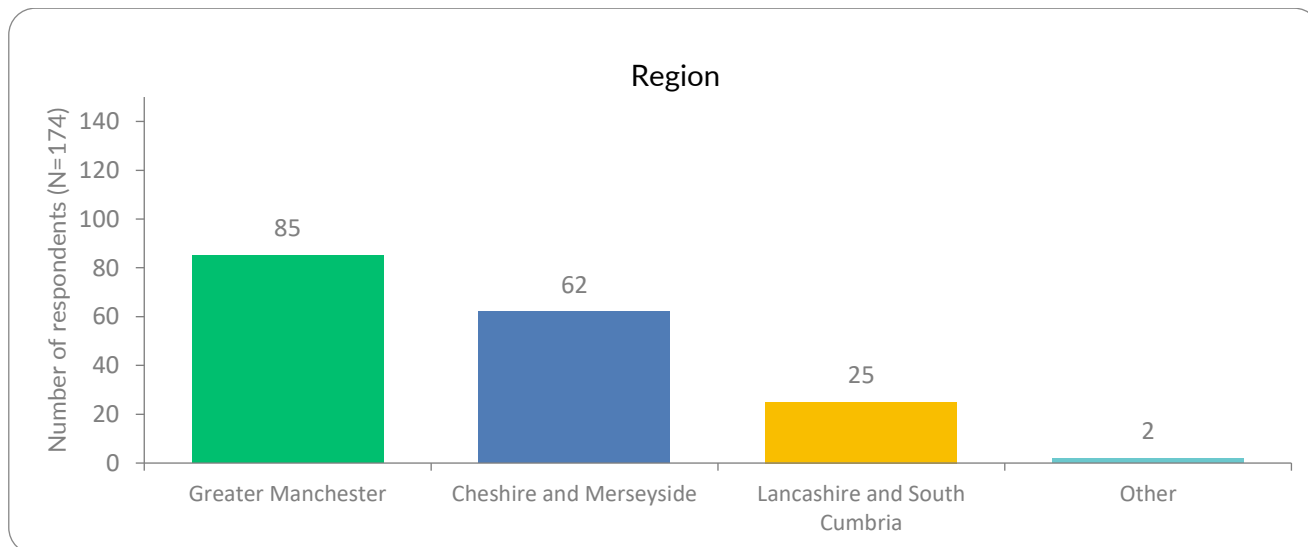


Figure 11

5.1.1.10 Type of Organisation

Approximately three quarters of the survey respondents work within an NHS Acute Trust (75%; N=131), with 10 respondents selecting more than one organisation (see Fig. 12).

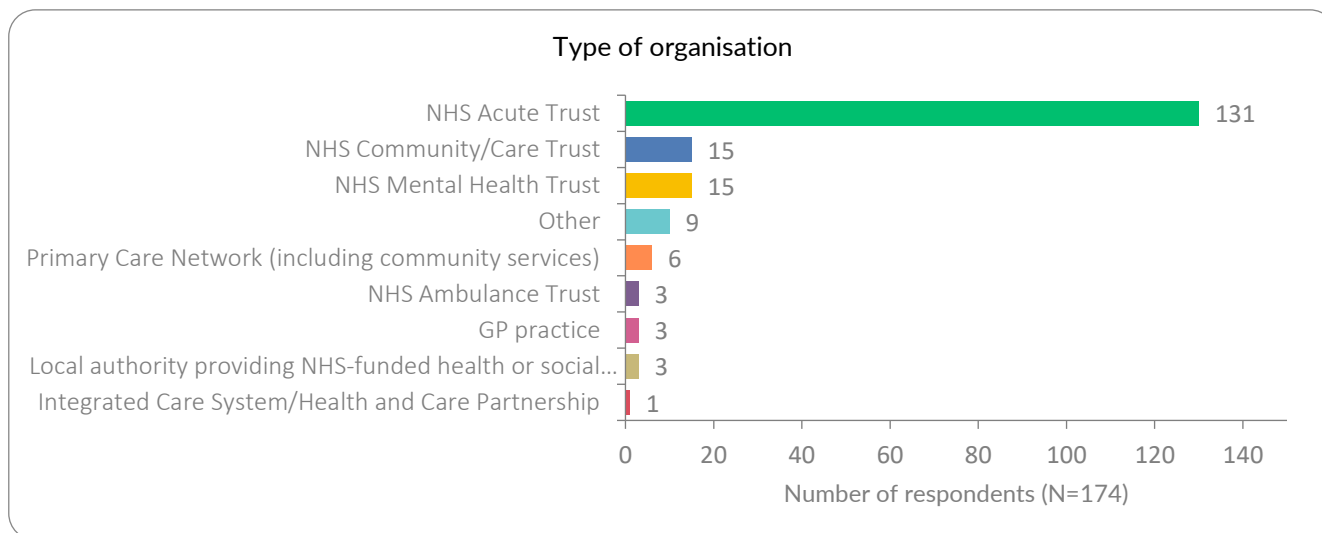


Figure 12

Of those working in an NHS Acute Trust, 1 also reported working in a local authority providing NHS-funded health or social care, 1 identified themselves as working in an integrated care system, 1 in an NHS Community/Care Trust and another in a university. 3 respondents working in an NHS Acute Trust reported working in a primary care network (including community services), one of whom also indicated working in a mental health trust and a GP practice.

A further 14 people reported working within an NHS mental health trust, 1 of whom also identified as working in a primary care network (including community services) and another within an NHS Community/Care Trust. An additional 13 respondents reported working in an NHS Community/Care Trust setting. One participant indicated working in a GP practice and primary care network, with only 1 respondent reporting working solely within a GP practice and 1 just within a

Primary Care Network. 2 participants reported working only within a local authority providing NHS-funded health or social care. No respondents indicated working within independent providers of health, social care or NHS-funded healthcare.

9 people indicated working in a 'other' setting including 4 at an HEI/university (one of whom also worked in an NHS Acute Trust), 3 at the NIHR, 1 within a "local care organisation" and another in a "mental health, learning disabilities and community NHS trust".

76% of respondents are working in an organisation with university and/or teaching hospitals status, with a further 1% of participants based in organisations "working towards" this status (see Fig. 13)

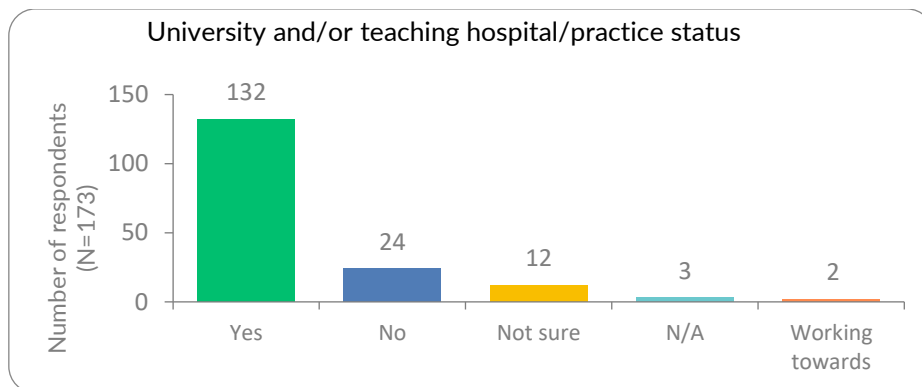


Figure 13

5.1.2 Qualifications and awards

The numbers of respondents holding and/or undertaking a qualification or training award is show in Fig 14.

86% of respondents to this question held a degree and 67% hold/are undertaking a higher degree. 14% (n=23) hold (n=18) or are undertaking (n=5) a PhD. 15 people also indicated holding/ undertaking additional qualifications and/or awards including a professional doctorate (n=2).

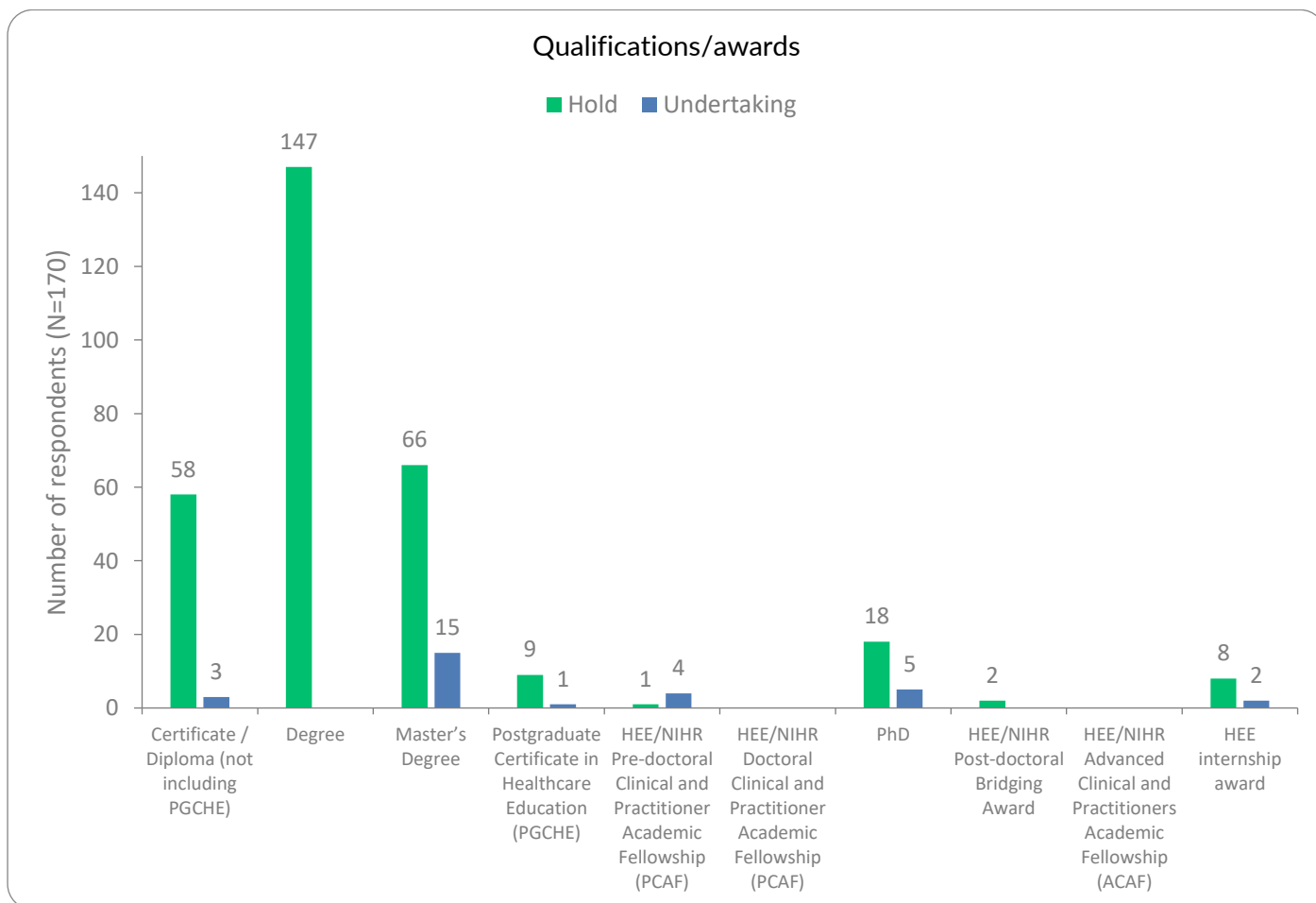


Figure 14

5.1.2.1 Recent applications

20% (N=35) of respondents to this question indicated recently or currently applying for a qualification/award (including 10 Masters/Masters modules, 4 HEE/NIHR Pre-doctoral Clinical and Practitioner Academic Fellowship (PCAF) and 1 bridging award, 2 HEE/NIHR Doctoral Clinical and Practitioner Academic Fellowship (DCAF), 1 HEE/NIHR Advanced Clinical and Practitioner Academic Fellowship). 25% have made previously unsuccessful applications/decided not to go ahead with a qualification/award including 10 NIHR/HEE/local fellowships, 1 PhD and 9 Masters.

5.1.2.2 Year awarded highest qualification

59% of respondents to this question reported having been awarded their highest qualification within the last 10 years (78% of PhDs and 71% of Masters) (see Fig. 15)

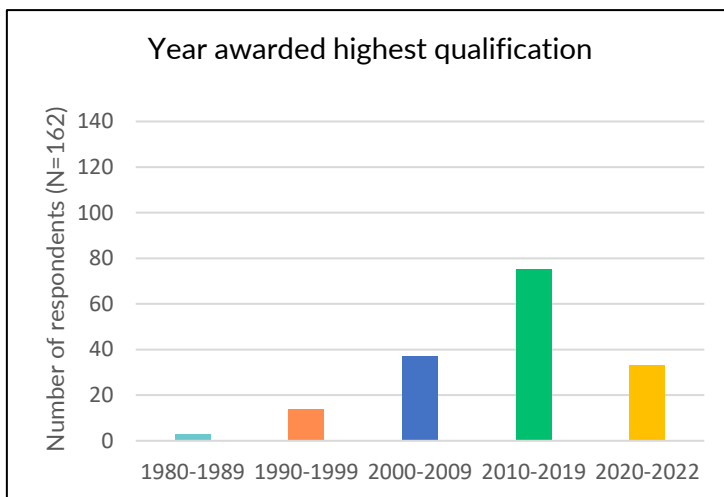


Figure 15

5.1.3 Experience

5.1.3.1 Included in job descriptions

The numbers of respondents with research and/or teaching and learning in their job description is show in Fig 16.

The majority of respondents (83%; n=144) reported having teaching and learning and/or research in their job descriptions (64% teaching and learning and 49% research) 33% (n=58) of respondents had research *and* teaching and learning in their job descriptions.

A higher proportion of nurses and midwives had research (59%) or research and teaching and learning (40%) in their job descriptions compared to the proportion of AHPs (38% and 27% respectively).

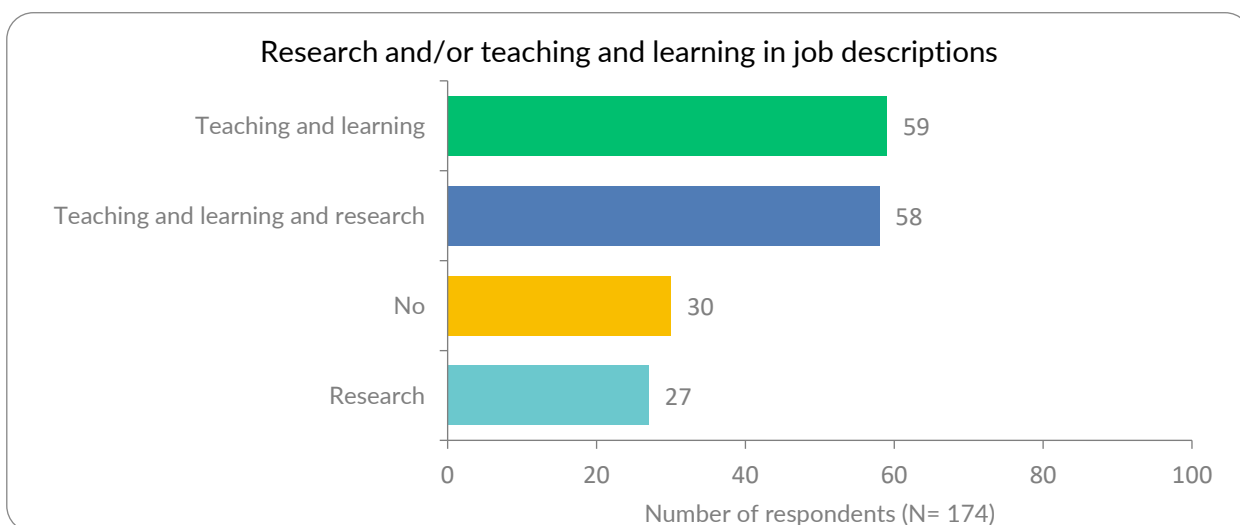


Figure 16

5.1.3.2 Involvement in research and/or teaching and learning in the last 12 months

The numbers of respondents spending time on teaching and learning and/or research in the last 12 months is shown in Fig. 17.

The majority (91%; n=159) of respondents indicated having spent time on teaching and learning and/or research over the last 12 months. 72% (n=126) had been involved in teaching and learning and 59% (n=103) had been involved in research during this period. 40% (n=70) of respondents had spent time on research *and* teaching and learning over the last 12 months. There was no notable difference in the time spent on teaching and learning and/or research between AHPs and nurses and midwives in the last 12 months.

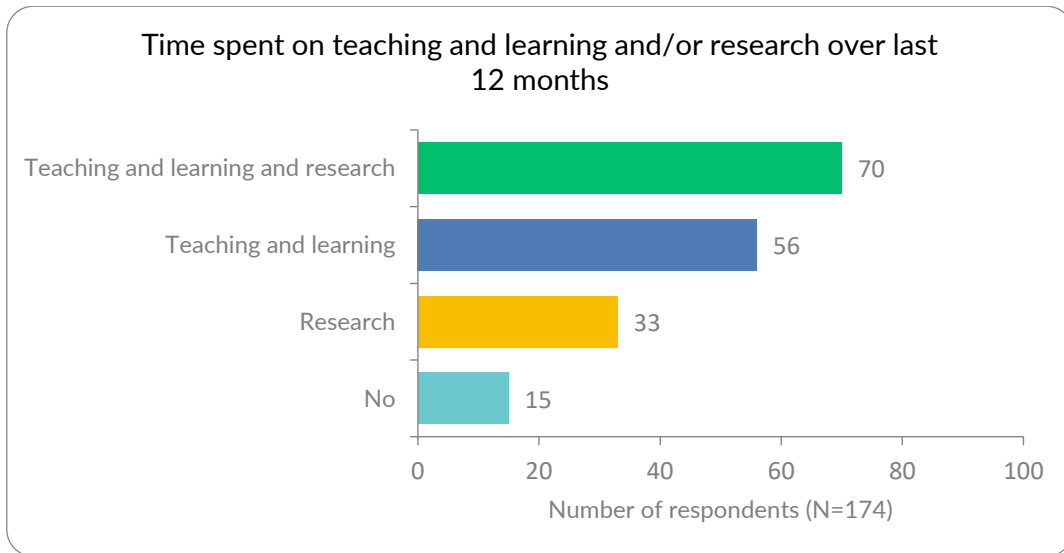


Figure 17

5.1.3.3 Proportion of time spent on research and teaching and learning activities

Fig. 18 shows the proportion of time spent by respondents on research and teaching and learning

The majority of respondents to this question indicated spending less than 25% of their time on teaching and learning (53%; n=79) and research (41%; n=60). 25% (n=37) estimated spending over 50% of their time working in research, but only 8% (n=10) spent this amount of time on teaching and learning.

Over half of AHPs spent less than 25% of their time on research compared to 29% of nurses and midwives. A higher proportion of nurses and midwives (20%) estimated spending 50% of their time on teaching and learning compared to 10% of AHPs. 41% of nurses and midwives reported spending over 75% of their time on research compared to 6% of AHPs.

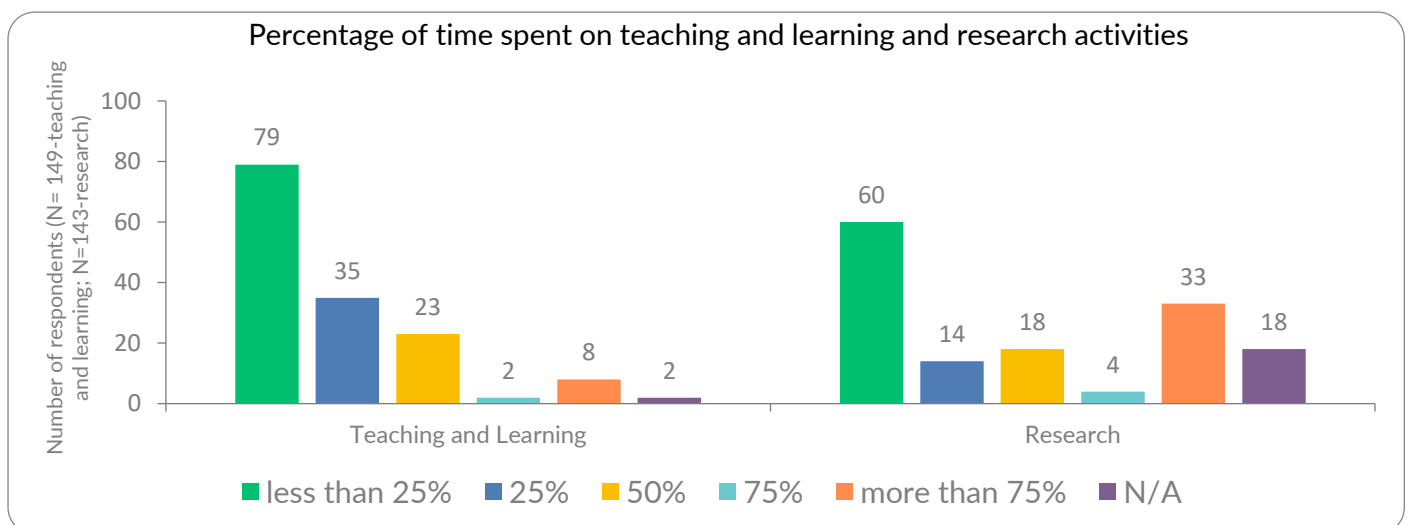


Figure 18

5.1.3.4 Experience of research activities

The number of respondents indicating experience of specific research activities is shown in Fig. 19.

Over half of the respondents had experience of one or more of the following research-related activities:

- Using research evidence to inform my clinical practice” (63%; n=110)
- Research activity e.g., data collection and analysis, writing a research protocol (62%; n=108)
- Undertaking clinical audits to evaluate and/ or improve clinical services (59%; n=103)

44% indicated experience of “supporting clinical trials/research through screening/ recruitment/ treatment delivery” (n=77) and “writing a research report, presentation or paper for publication/ presentation” (n=76). 10% (n=17) of respondents reported no experience of research activities



Figure 19

7 participants who indicated other experience in these areas included ““ongoing learning about research through internship, establishing and monitoring a pilot project in response to others’ research” and involvement with an Associate PI scheme. Another described being involved in “digital innovation and data informed digital transformation”

The majority of AHP respondents reported that they had experience of undertaking clinical audits (73%), closely followed by 72% reporting experience of using research evidence to inform clinical practice. 63% of AHPs reported undertaking some form of research activity and just over half have experience in writing a research report, presentation or paper for publication/ presentation and/or participating/running a journal club (54%). 5 AHPs reported no experience of research activities.

The highest proportion of nurses and midwives reported undertaking some form of research activity (59%) and using research evidence to inform their practice (57%). Half of nurses and midwives reported supporting clinical trials/research and undertaking clinical audits (50%). Only 34% of nurses and midwives had experience of writing a research report, presentation or paper and only 13% indicated having participated in/ran a journal club. 10 nurses and midwives reported having no experience of research.

5.1.3.5 Experience of teaching and learning activities

The number of respondents indicating experience of specific teaching and learning activities is shown in Fig. 20.

The majority of respondents had experience of one or more of the following teaching and learning-related activities:

- Student/learner supervision” (85%; n=148)
- Mentoring students/colleagues (78%; n=136)
- Clinical education/training (67%; n=116)
- Practice assessment and feedback (60%; n=105).

Just over half of the respondents also had experience of “guiding personal and professional development” (57%; n=99) and teaching/lecturing (52%; n=90). Only 3 people reported having no experience in this area.

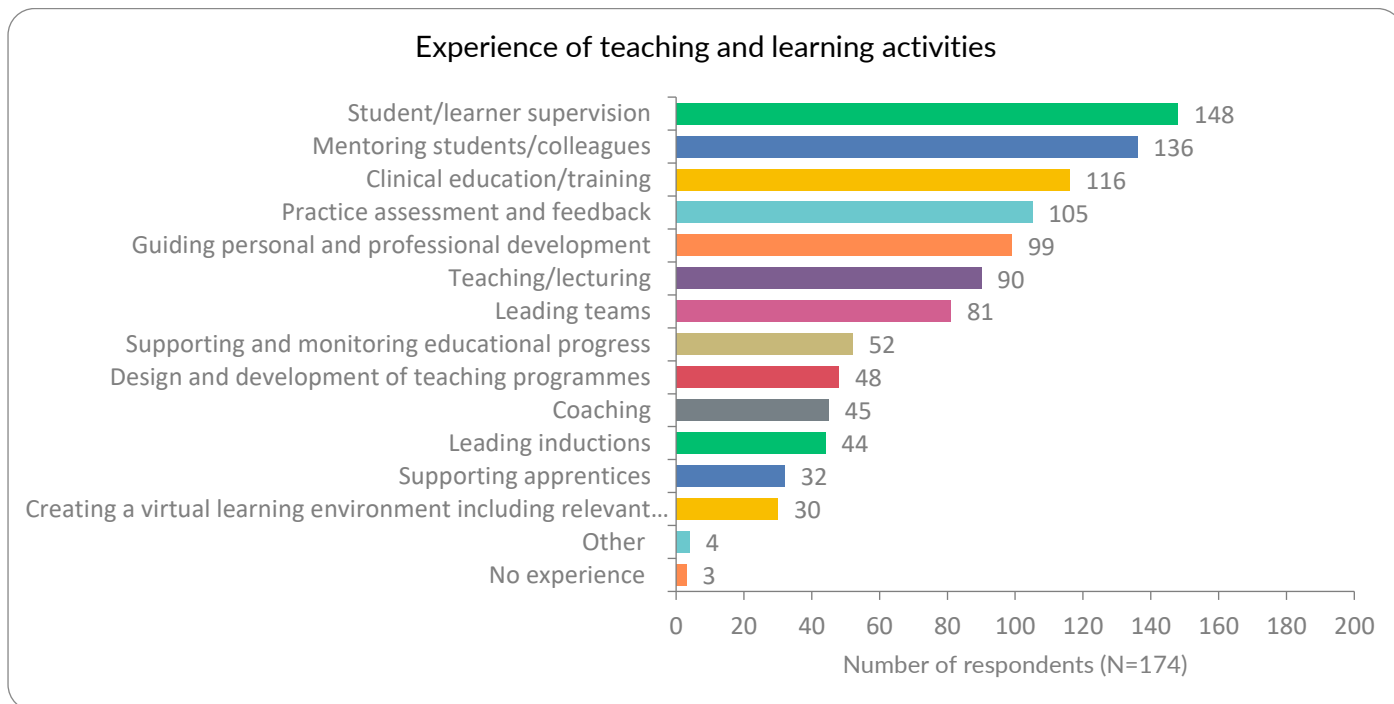


Figure 20

The 4 participants who identified other experience in teaching and learning included master’s level assessment and an NVQ D32 assessors’ certificate as well as experience of programme management.

There was no particularly notable difference between AHPs and nurses and midwives in terms of their experience of teaching and learning activities.

Over both research and teaching and learning, the highest proportion of respondents had experience in the following areas:

- student/learner supervision (n=148)
- mentoring students/colleagues (n=136)
- clinical education/training (n=116)
- using research evidence to inform clinical practice (n=110)
- undertaking research activity e.g., data collection and analysis (n=108)

5.1.4 Knowledge, skills and confidence

5.1.4.1 Knowledge and skills

Fig. 21 shows respondents' perceived level of knowledge and skills in research and teaching and learning.

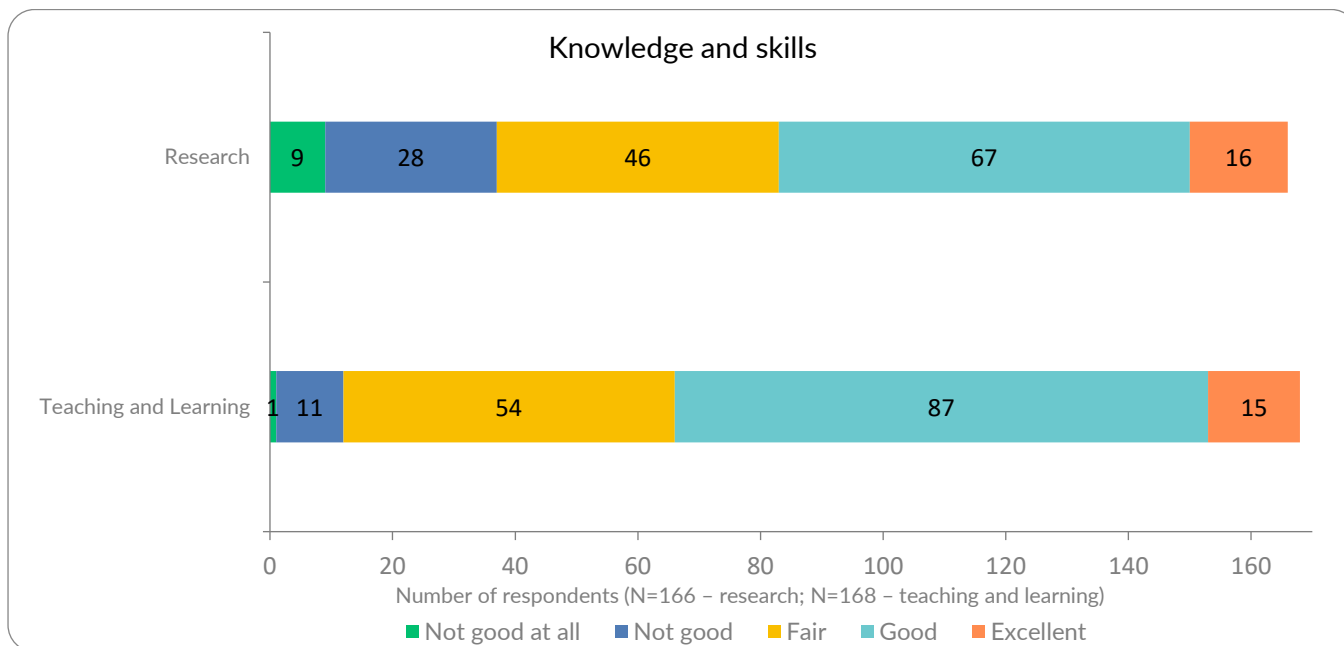


Figure 21

50% (n=83) of respondents indicated good/excellent skills in research with a slightly higher proportion (61%; n=102) rated their teaching and learning knowledge and skills at this level (see Table 1A). 59% of nurses and midwives indicated good/excellent knowledge and skills in research compared to 39% of AHPs.

22% (n=37) and 7% (n=12) rated their knowledge and skills as “not-good at all – not good” in research and teaching and learning respectively.

28% (n=46) and 32% (n=54) rated their knowledge and skills as ‘fair’ in research and teaching and learning respectively, with ‘fair’ being the weighted average in research and ‘fair-good’ in teaching and learning.

	1. NOT GOOD AT ALL	2. NOT GOOD	3. 39% FAIR	4. GOOD	5. EXCELLENT	WEIGHTED AVERAGE
Research (N=166)	5.42% 9	16.87% 28	27.71% 46	40.36% 67	9.64% 16	3.32
Teaching and Learning (N=168)	0.60% 1	6.55% 11	32.14% 54	51.79% 87	8.93% 15	3.62

Table 1A

5.1.4.2 Confidence in research and teaching and learning

Perceived levels of confidence in research and teaching and learning are shown in Fig. 22.

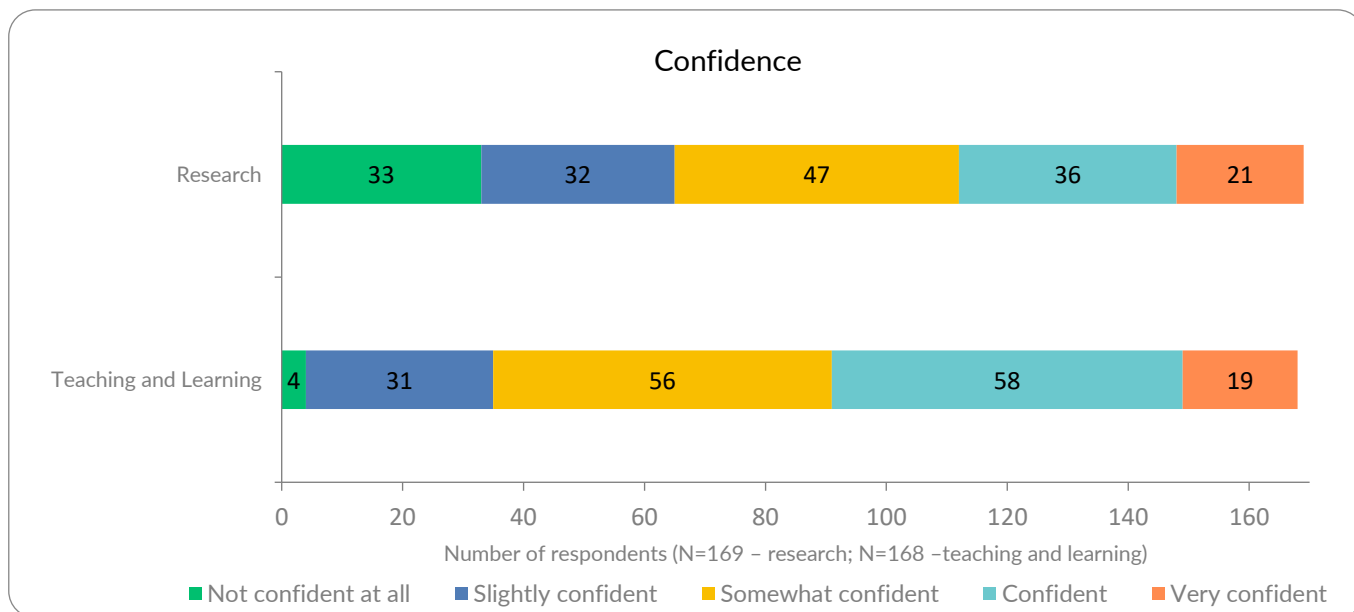


Figure 22

34% (n=57) indicated being confident/very confident in research, with a slightly higher proportion (46%; n=77) rating their confidence at this level in teaching and learning (see Table 2A). 45% of nurses and midwives. rated themselves as confident/very confident in research compared to 21% of AHPs

39% (n=65) and 20% (n=35) rated their confidence as “not confident at all- slightly confident” in research and teaching and learning respectively.

28% (n=47) and 33% (n=56) indicated being “somewhat confident” in research and teaching and learning respectively.

“Slightly-confident-somewhat confident” was the weighted average in relation to research compared to the slightly higher average of “somewhat confident” in teaching and learning.

	1.NOT CONFIDENT AT ALL	2.SLIGHTLY CONFIDENT	3.SOMEWHAT CONFIDENT	4.CONFIDENT	5.VERY CONFIDENT	WEIGHTED AVERAGE
Research (N=169)	19.53% 33	18.93% 32	27.81% 47	21.30% 36	12.43% 21	2.88
Teaching and Learning (N=168)	2.38% 4	18.45% 31	33.33% 56	34.52% 58	11.31% 19	3.34

Table 2A

5.1.5 Career Pathways

The perceived clarity of career pathways in research and teaching and learning is shown in Fig. 23.

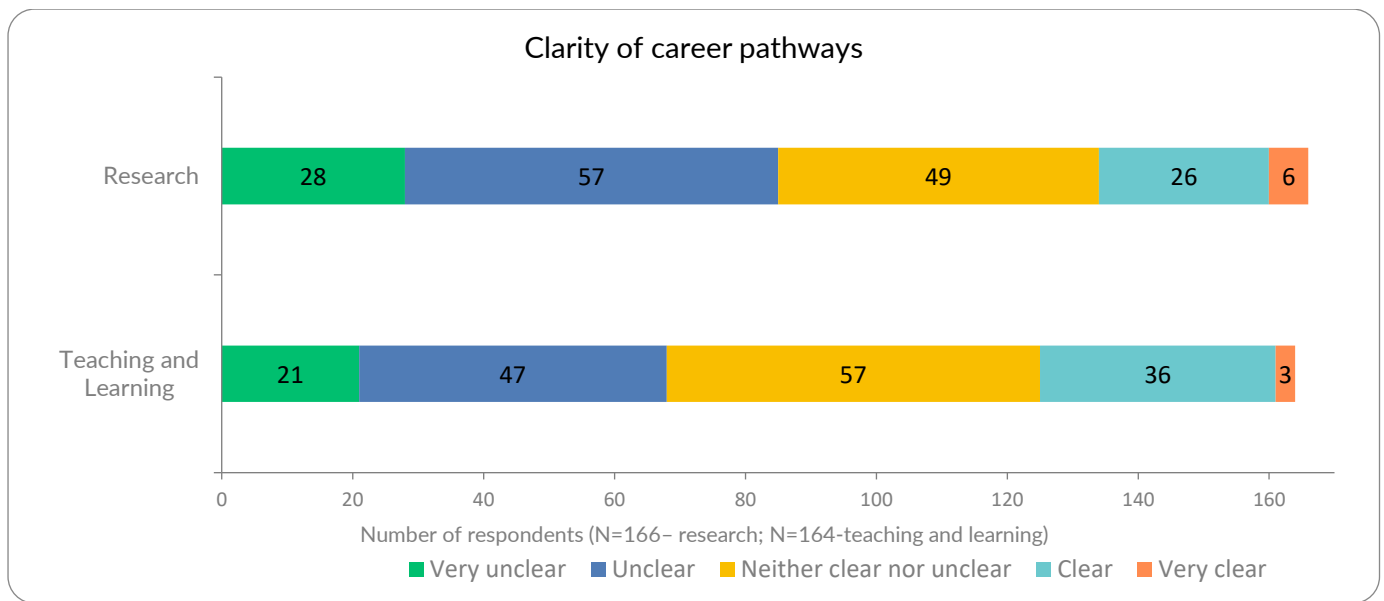


Figure 23

Half of the respondents (51%; n=85) found research career pathways very unclear/unclear compared to 42% (n=68) in teaching and learning (see Table 3A). The highest proportion of respondents indicated that research career pathways are “unclear” (34%; n=57) whereas the highest proportion of respondents rated teaching career pathways as “neither clear nor unclear” (35%; n=57)

20% (n=32) and 27% (n=39) of respondents rated research and teaching career pathways as clear/very clear respectively.

The weighted average was “neither clear nor unclear” in research and “neither clear nor unclear-clear” in teaching and learning.

A higher proportion of AHPs found career pathways in research (62%) and teaching and learning (49%) unclear/very unclear compared to 40% and 33% respectively for nurses and midwives.

	1.VERY UNCLEAR	2.UNCLEAR	3.NEITHER CLEAR NOR UNCLEAR	4.CLEAR	5. VERY CLEAR	WEIGHTED AVERAGE
Research (N=166)	16.87% 28	34.34% 57	29.52% 49	15.66% 26	3.61% 6	3.23
Teaching and Learning (N=164)	12.80% 21	28.66% 47	34.76% 57	21.95% 36	1.83% 3	3.54

Table 3A

5.1.6 Careers advice, support and guidance

Over 50% (n=95) of respondents had received some form of careers advice, support or guidance on research and/or teaching and learning careers (see Fig. 24).

43% (n=76) of respondents had received research careers advice compared to 25% (n=44) in teaching and learning.

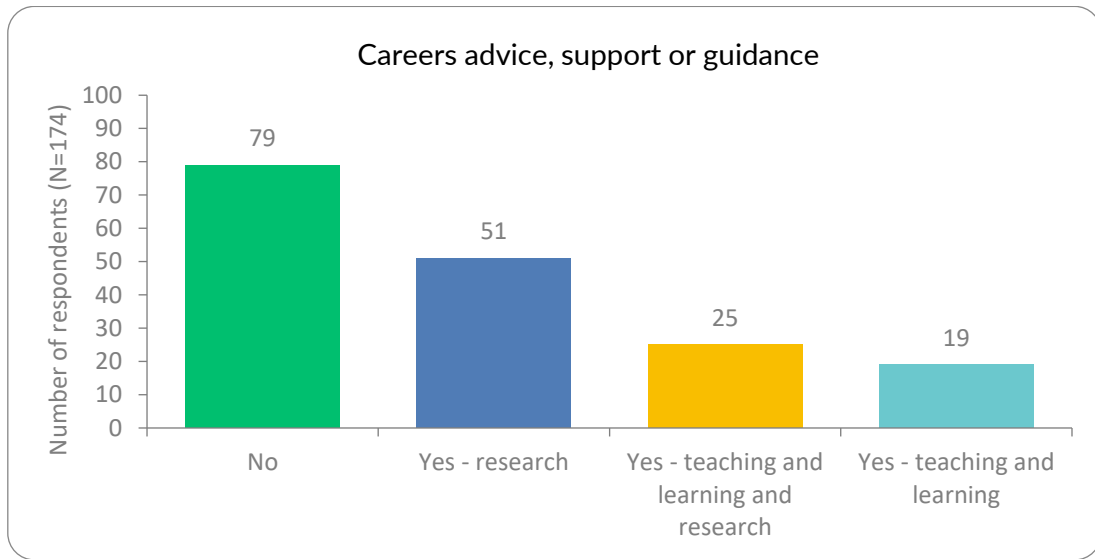


Figure 24

56% (n=98) of respondents indicated that they did not know (26 %; n=46) or were not sure (30%; n=52) where or whom to seek careers advice from in future (see Fig. 25).

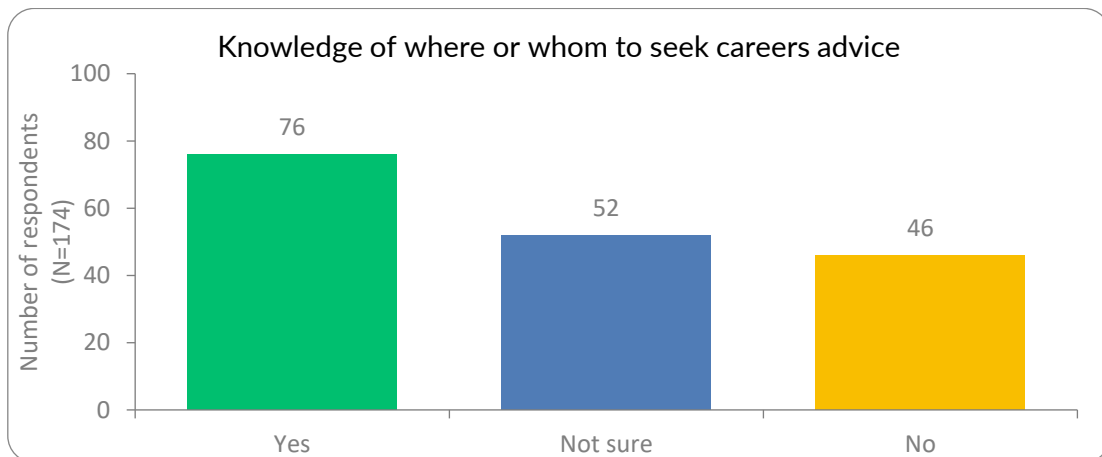


Figure 25

5.1.6.1 Sources of careers advice, support and guidance

Fig. 26 shows the difference sources of careers advice and support accessed by the survey respondents.

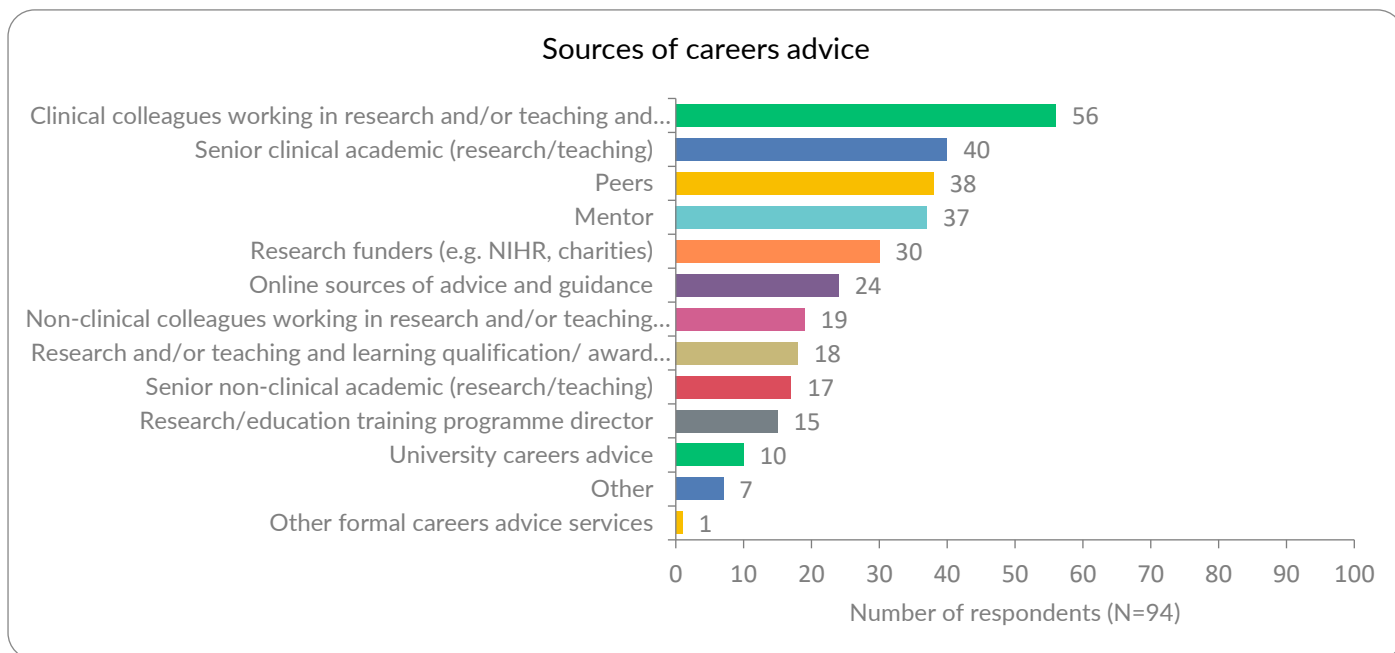


Figure 26

The majority (60%; n=56) of respondents had received careers advice/support from clinical colleagues working in research and/or teaching and learning, followed by senior clinical academics (43%; n=40), peers (40%; n=38) and mentors (39%; n=37).

Over half of AHPs (59%) and nurses and midwives (61%) indicated they had received advice from clinical colleagues working in research and/or teaching and learning. Nurses and midwives were then most likely to have received support from peers (45%), whereas AHPs were then more likely to have received support from a senior clinical academic (49%).

Of those that selected 'other', most qualified their answers e.g., noting that they received 'support not careers advice', another describing 'ad hoc' rather than consistent mentoring. One participant noted that they received careers advice/support from their manager, another from an R&D manager. One respondent indicated the NIHR Local Clinical Research Network as a source of advice and other cited the NIHR CRN NWC and GM Early Career Researcher Development Pathway.

5.1.7 Interest in academic careers

The numbers of respondents indicating a particular level of interest in research and teaching and learning careers is shown in Fig. 27.

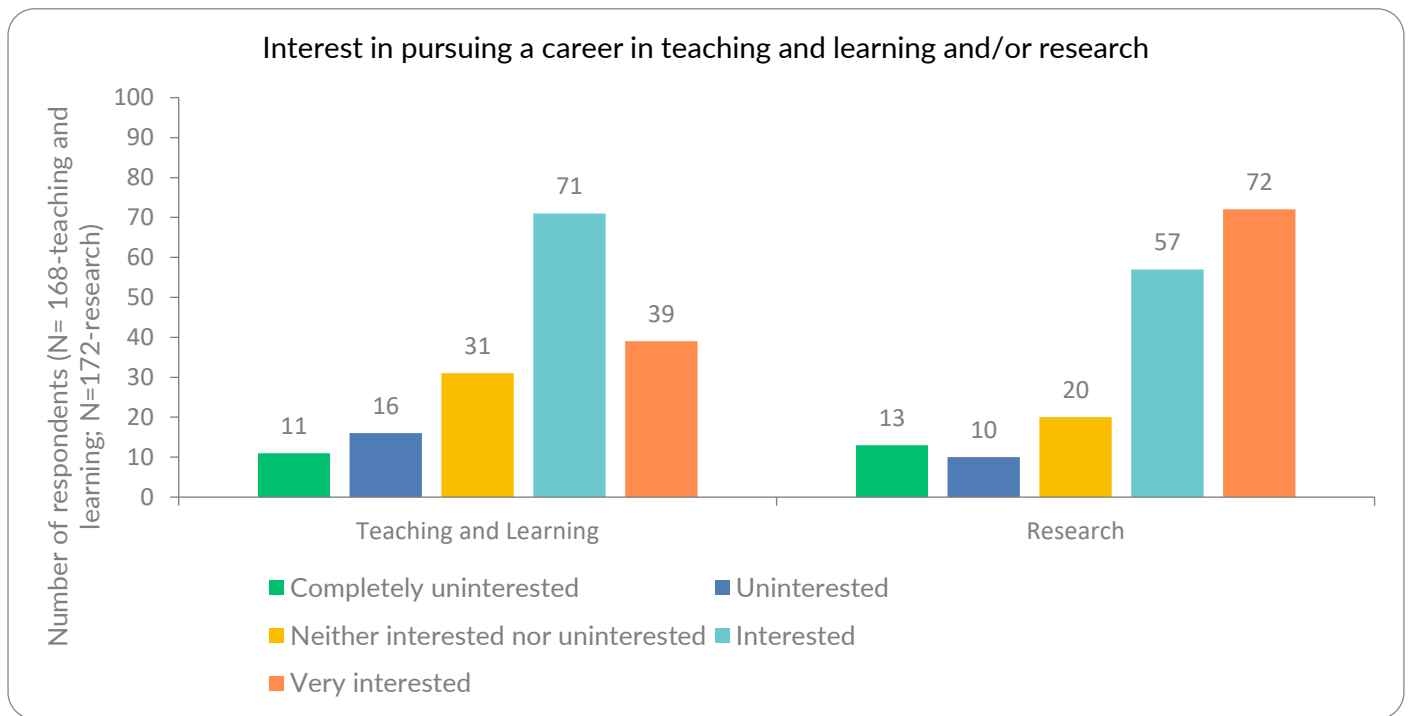


Figure 27

75% (n=129) of respondents indicated being interested/very interested in a research career, with 65% (n=110) indicating the same level of interest in teaching and learning (see Table 4A).

The highest proportion of respondents were “interested” in a teaching and learning career (42%; n=71) and “very interested” (42%; n=72) in a research career, with “very interested” as the weighted average across both research and teaching and learning.

	1.COMPLETELY UNINTERESTED	2.UNINTERESTED	3.NEITHER INTERESTD NOR UNINTERESTED	4.INTERESTED	5. VERY INTERESTED	WEIGHTED AVERAGE
Teaching and Learning (N=168)	6.55% 11	9.52% 16	18.45% 31	42.26% 71	23.21% 39	5.15
Research (N=172)	7.56% 13	5.81% 10	11.63% 20	33.14% 57	41.86% 72	5.58

Table 4A

Similar proportions of AHPs and nurses and midwives indicated being interested/very interested in a research and teaching and learning career. Most AHPs were “interested” (51%) in a teaching and learning career, whereas the highest proportion of nurses and midwives were “very interested” (34%) in pursuing a career in this area.

5.1.7.1 Sparking interest in research and/or teaching and learning

Fig. 28 shows what sparked respondents' initial interest in research and/or teaching and learning.

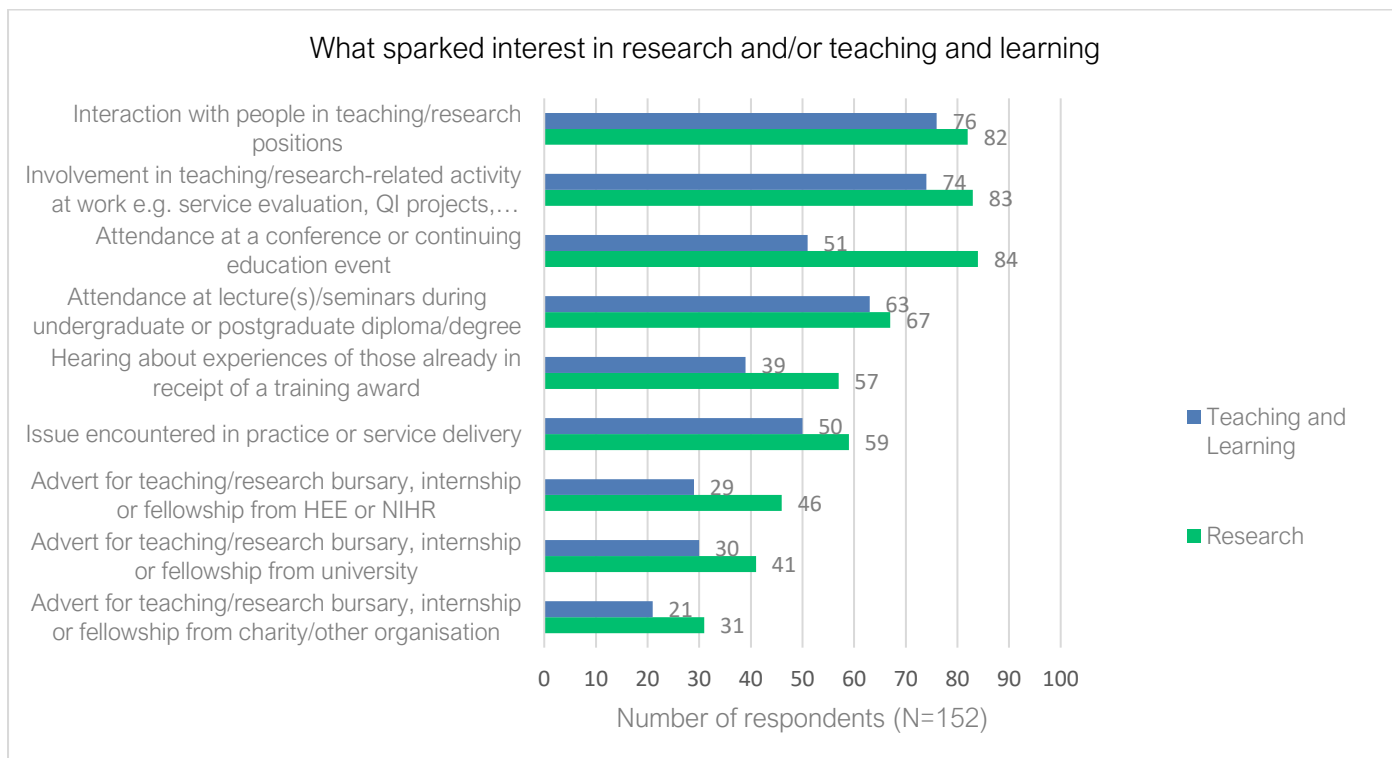


Figure 28

Nearly 3/4 of respondents indicated that interaction with people in teaching/research positions had sparked their interest in one or both of these fields (73%; n=111), this was followed by involvement in teaching/research-related activity (67%; n=102), attendance at a conference (66%; n=100) and attendance at a lecture/seminar during diploma/degree (61%; n=93). Just under half respondents also reported that hearing about experiences of those in receipt of a training award had sparked their interest (48%; n=73) followed by an issue encountered in practice or service delivery (46%; n=70)

A notably higher proportion of respondents indicated that “attendance at a conference” had sparked their interest in research (55%; n=83) compared to a teaching and learning career (34%; n=51). Adverts/hearing about experiences of bursaries/fellowships also appear to have sparked more interest in research (77%; n=118) compared to teaching and learning (53%; n=80). These differences are likely to reflect that conferences and bursary/internship/fellowships are more commonly available in research.

59% of AHPs indicated that “involvement in research-related activity at work” had sparked their interest in research, followed by “attendance at a conference or continuing education event (56%). For nurses and midwives, 61% had their interest in research sparked by interaction with people in research positions, followed by “attendance at a conference” (54%) and “involvement in research-related activity at work (53%).

The highest proportion of AHPs had their interest in teaching and learning sparked by “involvement in teaching-related activity at work (44%) followed by “interactions with people in teaching positions (41%). For nurses and midwives, over half had an interest in teaching and learning sparked by “interactions with people in teaching positions” (61%) followed by “involvement in teaching-related activity at work” (54%).

11 people ‘selected’ other’ in relation to this question. 2 remarked that they were “already in role” and another described “expectation from a senior lecturer”. Other added to their responses with the following comments:

- Our research lead asked for research champions
- Master’s assignments
- Part of the clinical post I’m in supported by the Universities
- A successful application to a teaching position
- Undertaking qualitative research for my undergraduate degree
- Developing undergraduate capacity during COVID made me more interested in teaching and learning
- Involvement with NIHR Applied Research Collaboration ARC NWC

- Personal involvement in research post delivery

5.1.7.2 Interest in teaching and learning and/or research roles and contracts

Fig. 29 sets out interest in roles and contracts in research and/or teaching and learning.

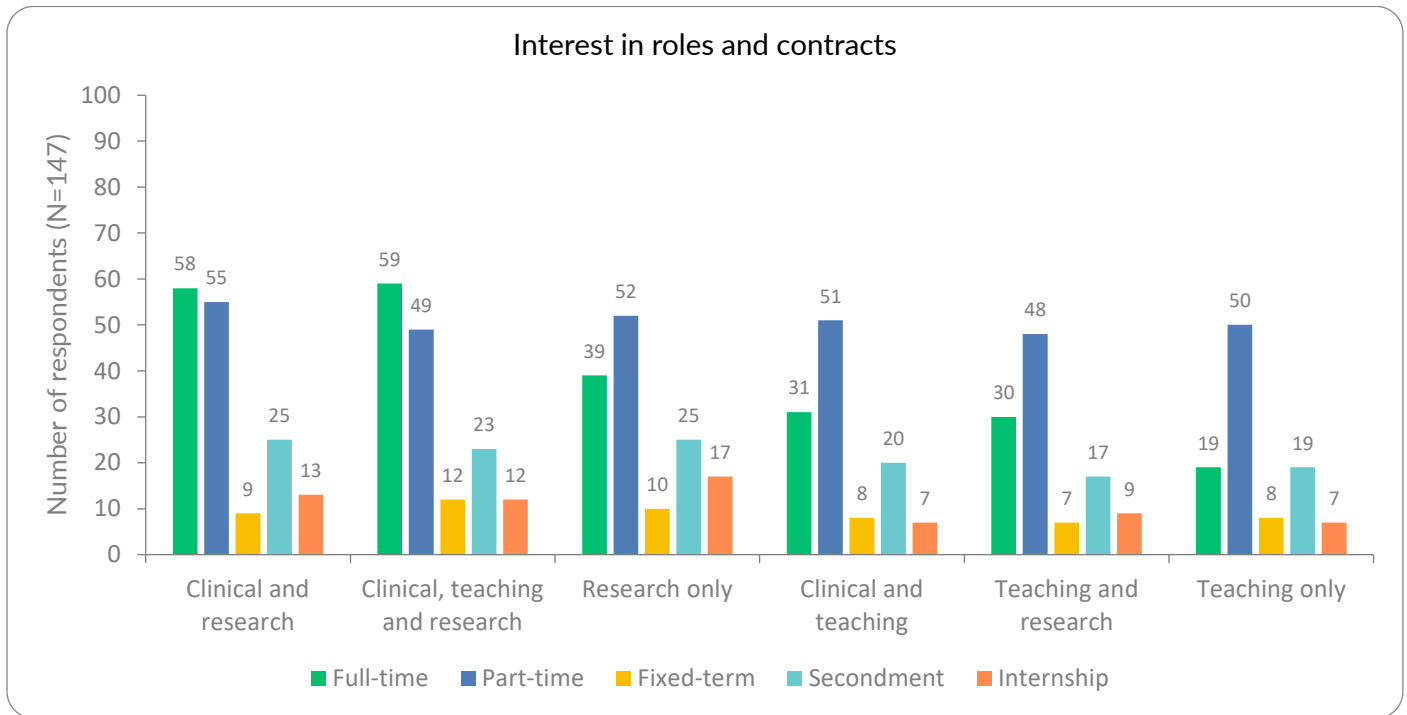


Figure 29

“Clinical and research” positions were the most popular overall, with 71% of the respondents indicating interest in one or more contracts in this role, closely followed by a “clinical, research and teaching role” (67%) and a research-only role (61%) (see Table 5A).

ROLE AND CONTRACT	FULL-TIME	PART-TIME	FIXED-TERM	SECONDMENT	INTERNSHIP	TOTAL
Clinical and research	55.24% 58	52.38% 55	8.57% 9	23.81% 25	12.38% 13	105 (71%)
Clinical, teaching and research	60.20% 59	50.0% 49	12.24% 12	23.47% 23	12.24% 12	98 (66.67%)
Research only	43.82% 39	58.43% 52	11.24% 10	28.09% 25	19.10% 17	89 (60.54%)
Clinical and teaching	40.26% 31	66.23% 51	10.39% 8	25.97% 20	9.09% 7	77 (52.38%)
Teaching and research	41.67% 30	66.67% 48	9.72% 7	23.61% 17	12.50% 9	72 (48.98%)
Teaching only	29.69% 19	78.12% 50	12.50% 8	29.69% 19	10.94% 7	64 (43.54%)

Table 5A

A “teaching only” role was of least interest to respondents (44%). A markedly higher proportion of nurses and midwives indicated interest in a teaching only role (52%) compared to AHPs (36%)

There was an overall preference for a full-time contract in “clinical and research” and “clinical, teaching and research” roles, with part-time of more interest for the remaining roles, particularly in “teaching only” positions.

There was some interest in fixed term, secondment and internship contracts, with secondments of most interest across the different roles.

6 people left additional comments in this section. One person simply wrote that they had no interest in these roles, another reported that they were “already in role” and one participant wrote that they “undertake all of these in my job role / job plan” and that they were “unable to take any more time i.e., none of the above options would work”. One noted their interest in senior management and research.

5.1.7.3 Workplace preference

Participants’ workplace preferences are shown in Fig. 30.

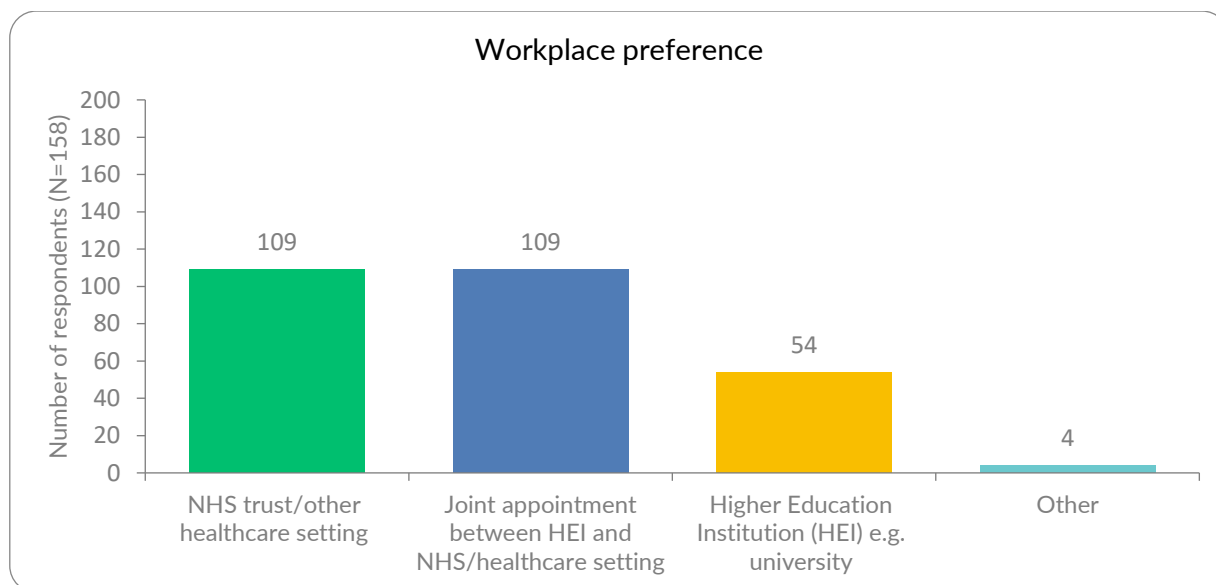


Figure 30

69% (n=109) of respondents indicated they would like to be based in an NHS trust/other healthcare setting or hold a joint appointment between a HEI and a healthcare organisation.

A slightly higher proportion of nurses and midwives expressed a preference for working in an NHS trust/healthcare organisation (76%) compared to AHPs (61%), with similar proportions indicating interest in a joint appointment (68% and 70% respectively).

Of those that selected ‘other’, one added N/A, one noted that they are already involved outside the NHS, and one expressed a preference for working in the voluntary sector.

5.1.7.4 Chosen area of focus/interest

102 respondents provided details of their area of interest. 13 people expressed interest in midwifery topics, teaching and/or midwifery research and 32 people expressed interest in nursing topics, teaching and/or nursing research (including mental health (n=5) and oncology (n=3)). 49 AHPs indicated interest in specific topics (including Musculoskeletal (MSK) conditions (n=6), neurology (n=3), pain/pain management (n=4) and paediatrics (n=3) within physiotherapy).

5.1.8 Motivators and enablers

The top motivators and enabler to pursuing a career in research and/or teaching are shown in Fig. 31.

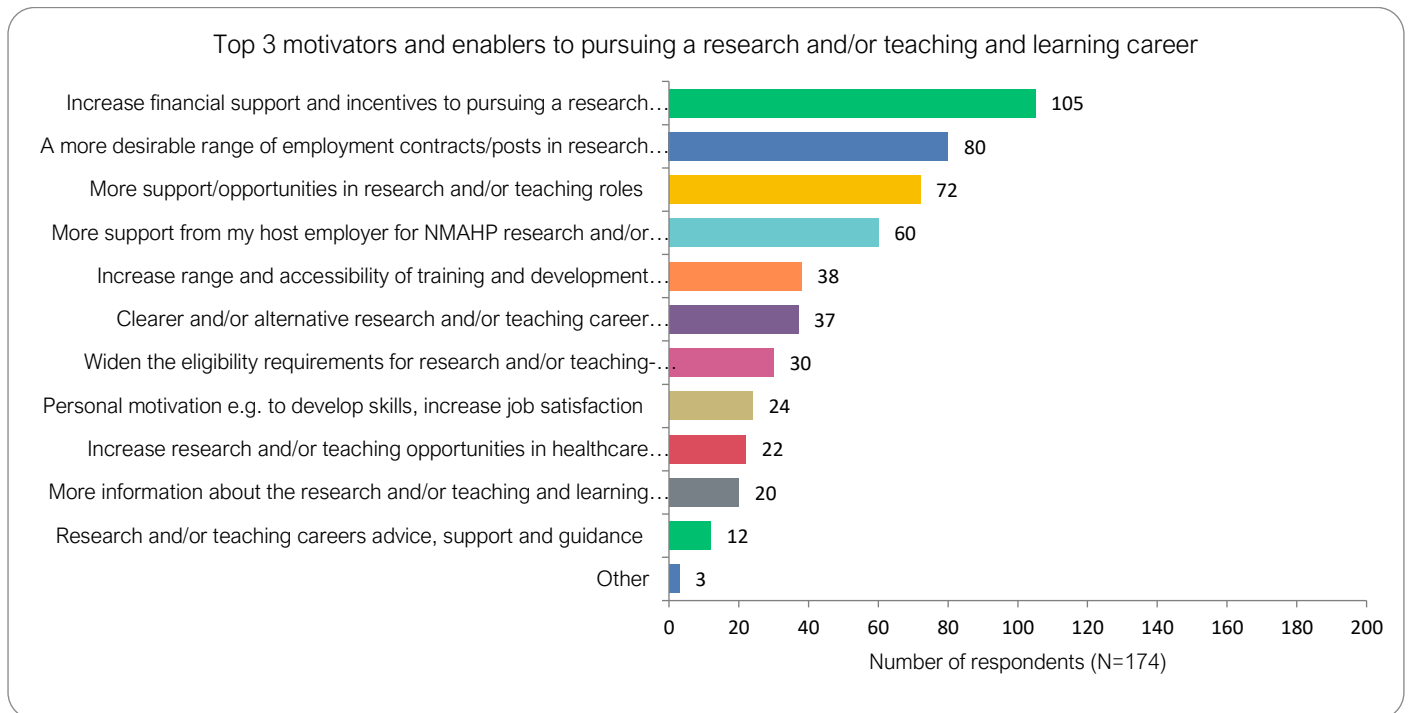


Figure 31

The majority of participants chose “increase financial support and incentives to pursuing a research and/or teaching career” as one of their Top 3 enablers (60%; n=105). A greater proportion of AHPs (72%) selected “increase financial support” compared to nurses and midwives (50%), although this emerged as the most frequently chosen enabler in both professional groups

“A more desirable range of employment contracts/posts in research and/or teaching” (46%; n=80) was the second most commonly identified enabler. 60% of AHPs selected “a more desirable range of contracts/posts” compared to 37% of nurses and midwives.

The third most frequently indicated enabler was “more support/opportunities in research and/or teaching roles” (41%; n=72).

Over 50 respondents also chose “more support from my host employer for NMAHP research and/or teaching career development” (34%; n= 60).

5.1.9 Barriers

The key barriers to pursuing a career in research and/or teaching are shown in Fig. 32.

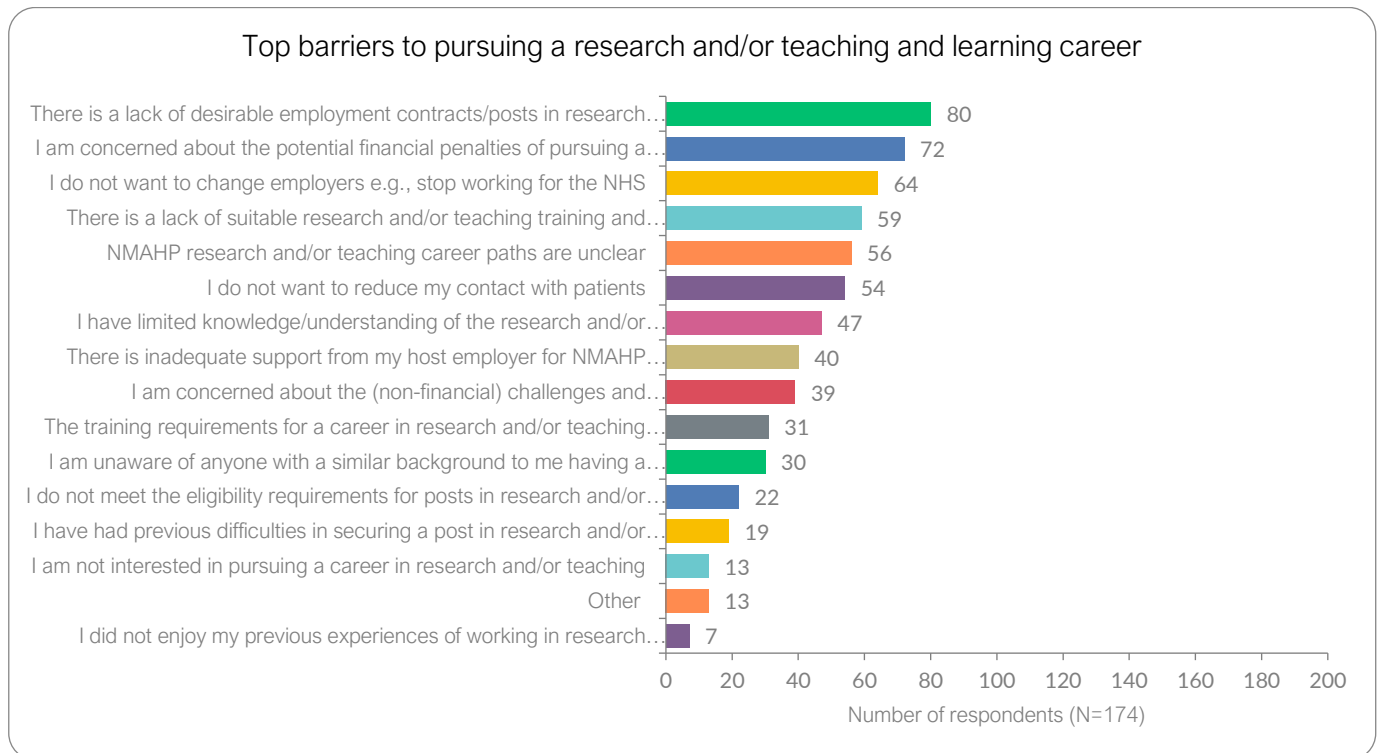


Figure 32

The highest proportion (46%; n=80) of participants selected “a lack of desirable employment contracts/posts in research and/or teaching” as one of their top barriers. 50% of AHPs indicated that this was a key barrier compared to 43% of nurses and midwives.

“Concern about the potential financial penalties of pursuing a career in research and/or teaching” (41%; n=72) was the second most commonly chosen barrier overall, with 50% of AHPs identifying this as a key barrier compared to 35% of nurses and midwives.

“Not wanting to change employers e.g., stop working for the NHS” (37%) was the third most frequently selected barrier. A higher proportion of AHPs selected “not wanting to change employers” (44%) compared to 29% of nurses and midwives

Over 50 participants also selected “a lack of suitable research and/or teaching training and development opportunities” (34%; n=59), unclear NMAHP research and/or teaching career paths (32%; n=56) and “not wanting to reduce contact with patients” (31%; n=54).

“NMAHP research and/or teaching career paths are unclear” was the third most frequently selected barrier by nurse and midwives (36%) and was also selected by 31% of AHPs.

For the 13 respondents who selected ‘other’, 3 did not select any of the options, one describing already being in a clinical academic post, another indicating no current interest “but maybe in the future” and one reporting no barriers at present.

5.1.9.1 Qualitative open-text responses: motivators, enablers and barriers

A total of 92 additional comments were left regarding the enablers and barriers to pursuing a career in research and/or teaching and learning. They have been organised into key themes below in order of frequency

Host organisation support

The highest number of comments addressed the importance of support from the host employer:

It seems to be very dependent on individual managers and trusts as to whether you are supported

Middle management support was identified as a key enabler, with some stressing the importance of managerial understanding of NMAHP clinical academic roles and pathways. Others pointed to a lack of management support and understanding as a barrier to pursuing a research career linked to issues of high **clinical workload and staffing pressures**,

with the **prioritisation of clinical work** resulting in difficulties being released to access training and development opportunities (see below). Relatedly, three comments described a feeling of “**guilt**” in taking time out of clinical work to focus on research and/or teaching. In addition, one person noted challenges with backfill to support a secondment position.

A key theme was the need for **protected time** to develop knowledge and skills in these areas. Without this time, respondents described using their personal time with the attendant risk to work/life balance. More widely, there felt to be a lack of organisational support for training and development in research, with NMAHP-led research not sufficiently “valued” within clinical practice.

It has been extremely challenging to get my clinical services to agree to supporting my research career to date. There is a lack of understanding but also the pressures on services mean that the usual first response to any request has always been no. I have had to battle to get my clinical services to release me for secondments and have often had to involve senior management. On one occasion I had to find a new job in another trust as I was simply not supported in any way.

One person highlighted that organisational support had been a vital enabler in setting up a clinical academic post.

Training and development opportunities

Competition is too high for a limited number of opportunities.

The second highest number of open-text responses related to the **accessibility and availability** of training and development opportunities, overlapping with some of the comments regarding organisational support in terms of the need for more “department-specific funding” and increased opportunities in NHS trusts. Workload and staffing pressures were commonly cited as a barrier to accessing training and development opportunities in terms of being released from clinical duties.

A key theme was the availability of **funded opportunities** as an enabler to undertaking academic study, particularly with regards to **Master’s degrees**.

Opportunities to gain knowledge and experience **outside of formal degrees** such as involvement in small research projects and workshops were highlighted. A small sub-set of respondents highlighted that their **age** was a barrier to undertaking further study. Some noted disparities in opportunities between professions, with one person reflecting that AHPs “promote the value of doctoral study far more than nursing and midwifery” and another noting a relative lack of research opportunities for mental health nurses.

Some of the comments with regards to why people chose not to go ahead with an application/offer shed light on the barriers that people experience with regards to accessing training and development opportunities (see 5.1.2). For example, one person described having considered a PCAF “for three or four years, but didn’t understand enough about the process / requirements”. Another noted that they were ineligible for a PCAF despite being awarded an NIHR internship. One respondent flagged not having an undergraduate degree as a barrier to accessing available training and development opportunities. In addition, one comment described not going ahead with a higher qualification due to:

“a limited choice of career progression pathways after doctoral studies which means there are lots of PhDs where progression is stalled”

Careers advice, support and guidance

Comments in relation to careers advice, support and guidance was the third most prominent theme in the survey.

Visible **role models were highlighted as** a key enabler in this regard, with some noting the lack thereof as a barrier. Others pointed to the importance of **mentorship, coaching and support** from more experienced researchers/ educators, particularly with regards to providing advice on career pathways and funding applications:

It would be extremely helpful to have support for research interested staff to understand what they would need to do to make funding applications/awards in order to support their development. The information is all out there but equally it is quite hard to understand if you have no one to mentor and support you. It can feel very overwhelming.

A couple of comments highlighted access to **networking** as an enabler, whilst others articulated the need for clearer “**signposting**” of opportunities, for example, including teaching roles on NHS jobs and reducing “jargon”.

Employment contracts/posts

The opportunities to undertake funded nurse-led research, maintain clinical competence, and teach just do not exist for us in the way they do for Medics. You have to sacrifice at least one (if not two) elements, either to stay in the NHS and undertake lower quality education and no research because the funding is in the HEIs, or go to a HEI and sacrifice

clinical competency and your sanity trying to manage the impossible workload and hours, but have to vague promise of opportunities.

A number of comments were left with regards to the need for more secure, **permanent contracts** to combine **research and clinical** roles, with two identifying joint contracts as a key enabler. **Job security** therefore emerged as a key barrier.

A lot of fixed term low paid jobs means that clinicians often cannot make to move to academia although they may want to

Job security limits applications and hinders new employees to research. Constant Fixed term continuously is not sustainable and disheartening to anyone wanting to pursue a career in research

Others commented on the lack of research-related posts within HEIs and one cited part-time teaching contracts as an enabler. Three comments noted keeping their **NHS pensions** as a key concern in making the transition to HE, with one wanting the trust to remain as the employer “for continued NHS terms and conditions of employment”.

Eligibility requirements

Some people called for research and/or teaching-related posts to take more account of “work experience”, with less emphasis on academic degrees. One person also noted “selection and recruitment biases”.

Career pathways and entry points

A number of comments underlined a lack of **clear career pathways** within research and/or teaching as a key barrier.

I struggle to see what my role / longer term career would look like

No established framework for clinical academics I would like to see a framework for AHPs aligning to the medics clinical-academic pathway.

Financial support and incentives

Some noted the lack of career progression opportunities and restriction on salaries in research and/or teaching, with financial concerns also raised in relation to job security (see above).

At present I have a career which involves research, teaching and clinical work. However, my salary is limited by this mix. After conversations with my employers, I am aware that I need to enter into only 1 of these streams of work in order to gain a more senior job role & higher salary which is frustrating.

Support/opportunities in research and/or teaching roles

There were some concerns regarding **work/life balance** in these roles, with some respondents highlighting a lack of support for completing the relevant academic **qualifications**.

I went to a HEI to further my research opportunities and instead got stuck in a teaching a scholarship contract working 80 hours weeks trying to "teach" and stay on top of admin and the support for PhD is non-existent unless you can bring in funding.

I work for large and progressive Trust, but trying to find a career where you can combine clinical /teaching/ research is near impossible if you don't want to work 2 jobs and 100 hours weeks. The burnout is intense

One person also expressed frustration with regards to the limited opportunities for engaging in research on an HEI teaching and scholarship contract. Another noted their desire for a role that enabled them to “keep my clinical skills”

Personal motivation

With regards to personal motivation, some participants highlighted their desire to **improve patient care**

Healthcare education

One respondent highlighted that their dissertation and elective placement within a research facility had been an enabler to pursuing a career in research. Another individual called for the introduction of research delivery to the “Centre for Postgraduate Pharmacy Education Primary Care Pathway” for pharmacists and technicians.

5.2 NMAHP Leads survey

In total, 16 people responded to the 'NMAHP leads' survey although not all questions were answered by every participant. Graphical representations of the data are included in the main body of the report. Percentage statistics are not included as the sample number is less than 50.

5.2.1 Demographics

The professional background of the survey respondents is shown in Fig. 33.

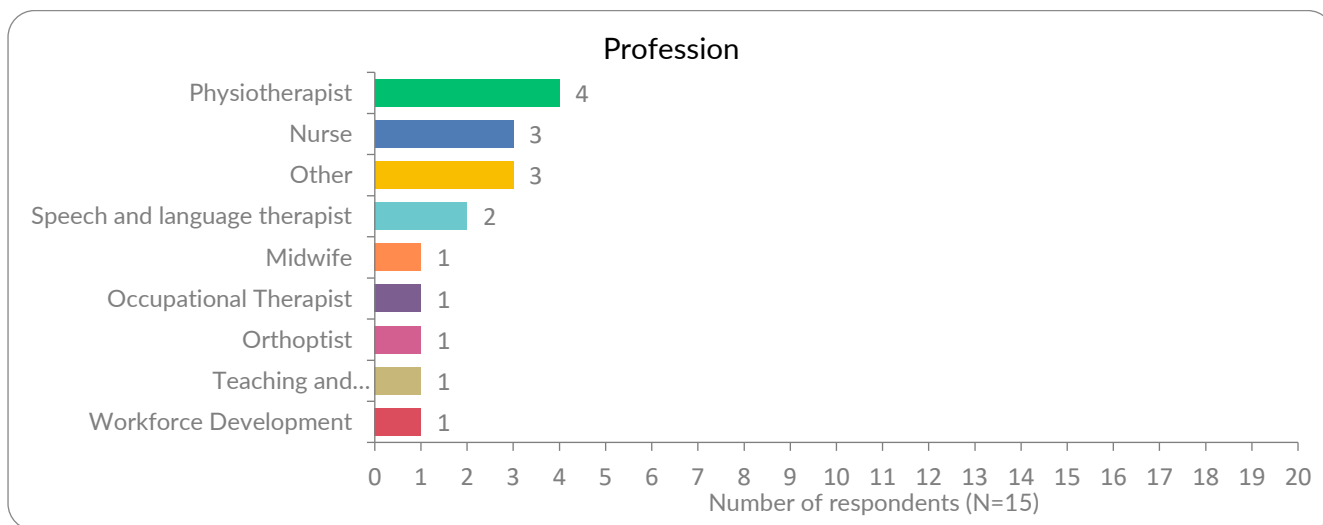


Figure 33

4/15 NMAHP leads had a professional background in physiotherapy covering a range of senior level AHP roles. Speech and language therapy (including an AHP lead role) and occupational therapy were also represented. 3/15 had a nursing background and 1 academic midwife was included in the respondents. Those selecting other (3/15) included a lecturer and GP, academic scientist and a CRP engagement management.

5.2.1.1 Region

The highest proportion of respondents work in Greater Manchester (n=9/16), followed by 4 in Lancashire and South Cumbria and 2 in Cheshire and Merseyside (see Fig. 34)

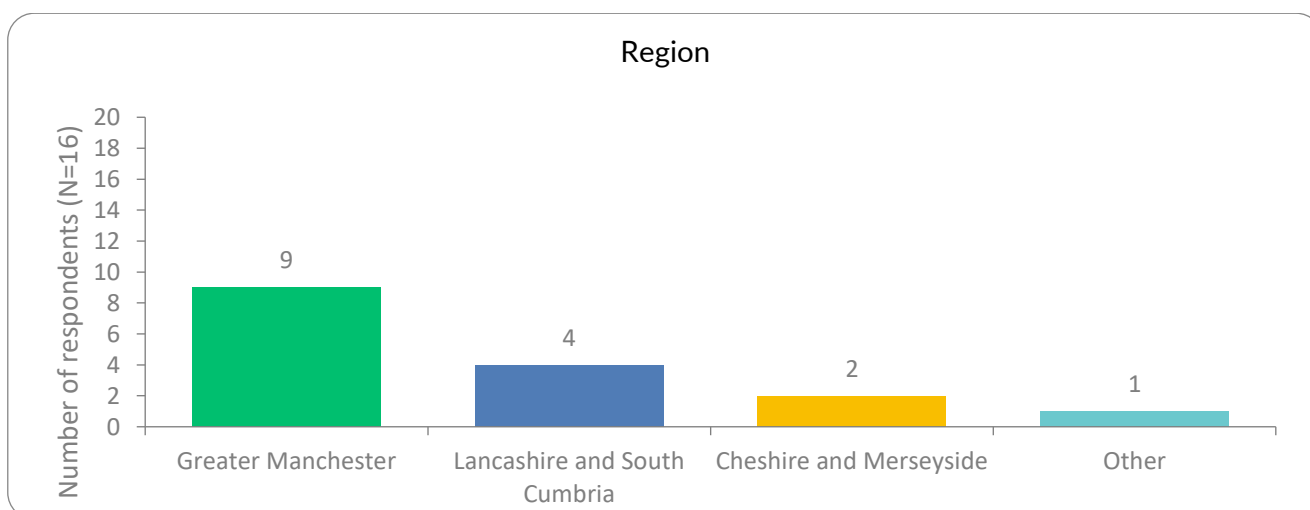


Figure 34

5.2.1.2 Type of organisation

The highest proportion of respondents work within an NHS Acute Trust (n=8/16). 4 people selected 'other' with 2 respondents working in an HEI, one in a GP practice and another in an ICS/Health and Care Partnership (see Fig. 35)

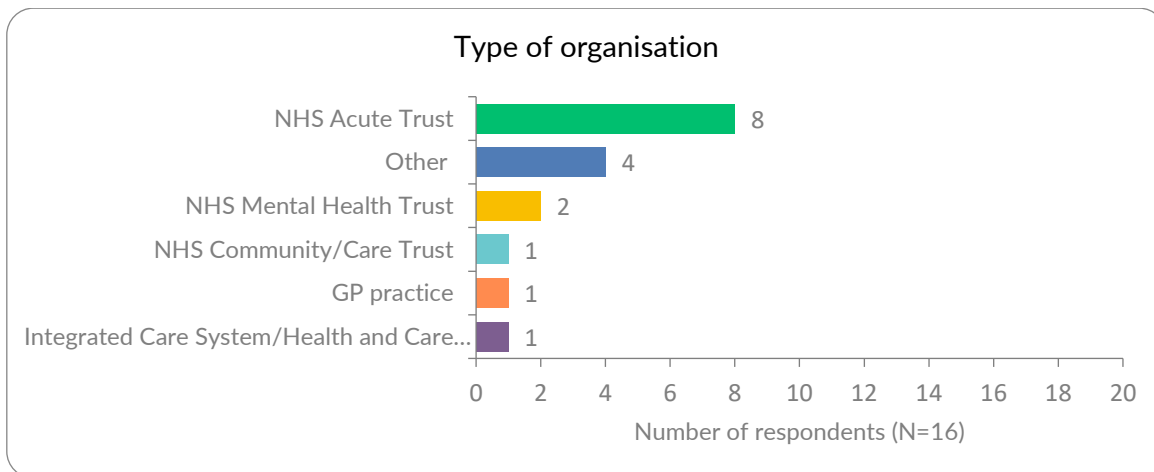


Figure 35

7/15 leads are working in an organisation with university and/or teaching hospitals status, with a further 2 based in organisations "working towards" this status (see Fig. 36).

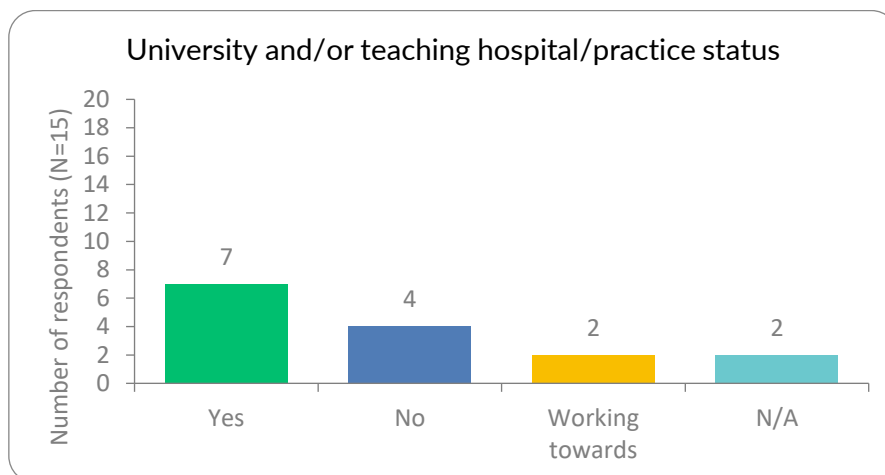


Figure 36

5.2.1.3 Age

The highest proportion of respondents were aged 50 + (n=8/13) (see Fig. 37)

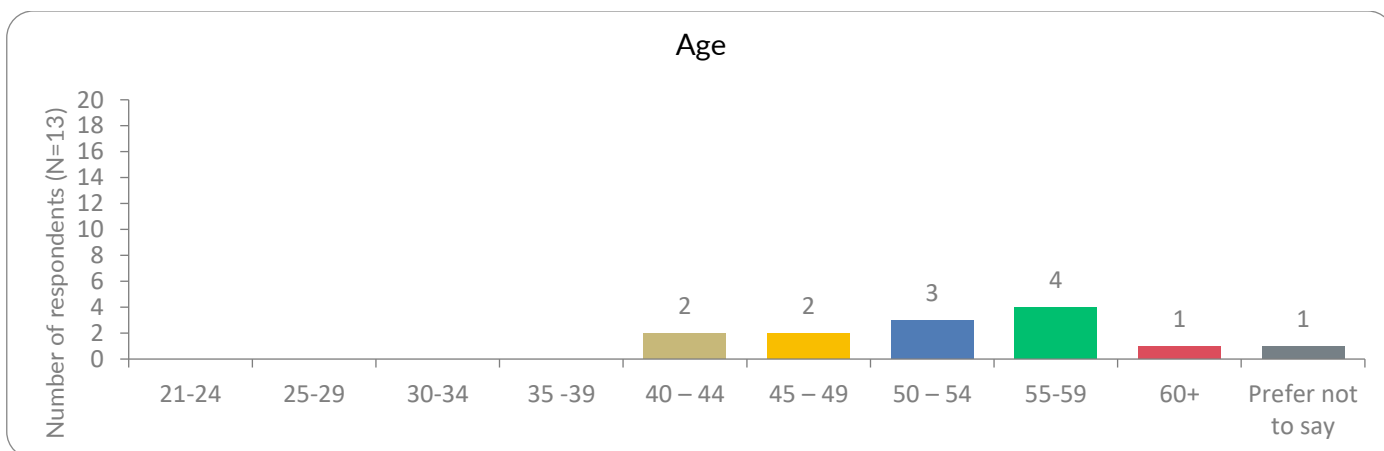


Figure 37

5.2.1.4 Ethnicity, gender, sexual orientation and disabilities/additional demographics

The highest proportion of NMAHP leads identified as “White- English, Welsh, Scottish, Northern Irish or British” (n= 11/13), female (n=12/13), straight/heterosexual (n=12/13) and reported no disabilities (n= 11/13).

5.2.2 Experience

5.2.2.1 Job descriptions

12/16 leads had research and/or teaching and learning in their job description (see Fig. 38) The highest proportion of respondents (n=7/16) had teaching and learning *and* research in their job description.

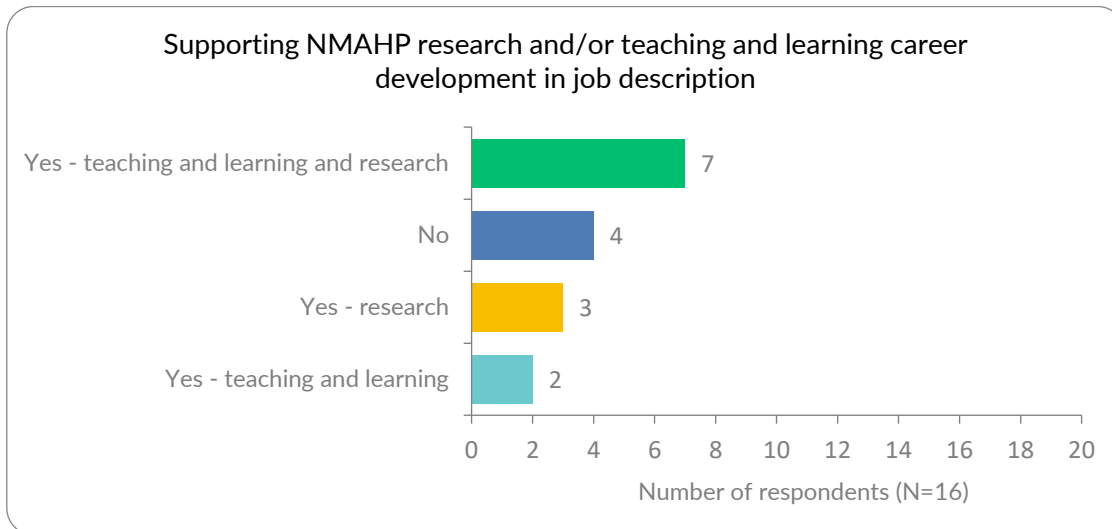


Figure 38

5.2.2.2 Time spent on supporting NMAHP research and teaching career development in the last 12 months

15/16 respondents reported spending time on supporting NMAHP career development in teaching and learning and/or research over the last 12 months. 11/16 had spent time supporting teaching and learning career development and 14/16 had spent time supporting research careers (see Fig. 39)

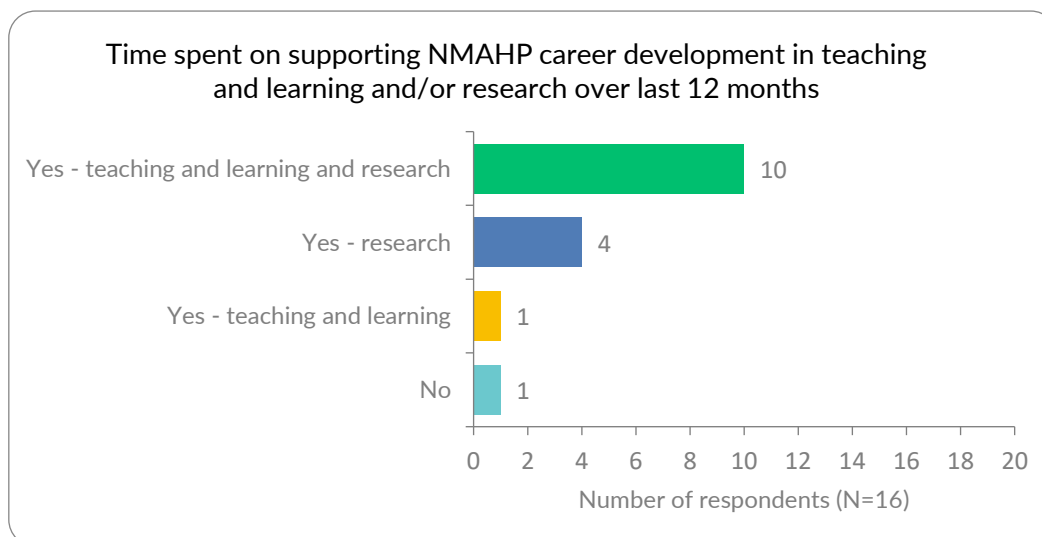


Figure 39

5.2.2.3 Proportion of time spent on supporting NMAHP research and teaching and learning career development

Fig. 40 shows the proportion of time spent by leads supporting NMAHP research and teaching and learning career development. The highest proportion of respondents estimated spending less than 25% of their time on teaching and learning (N=8/14) and research (n=10/15).

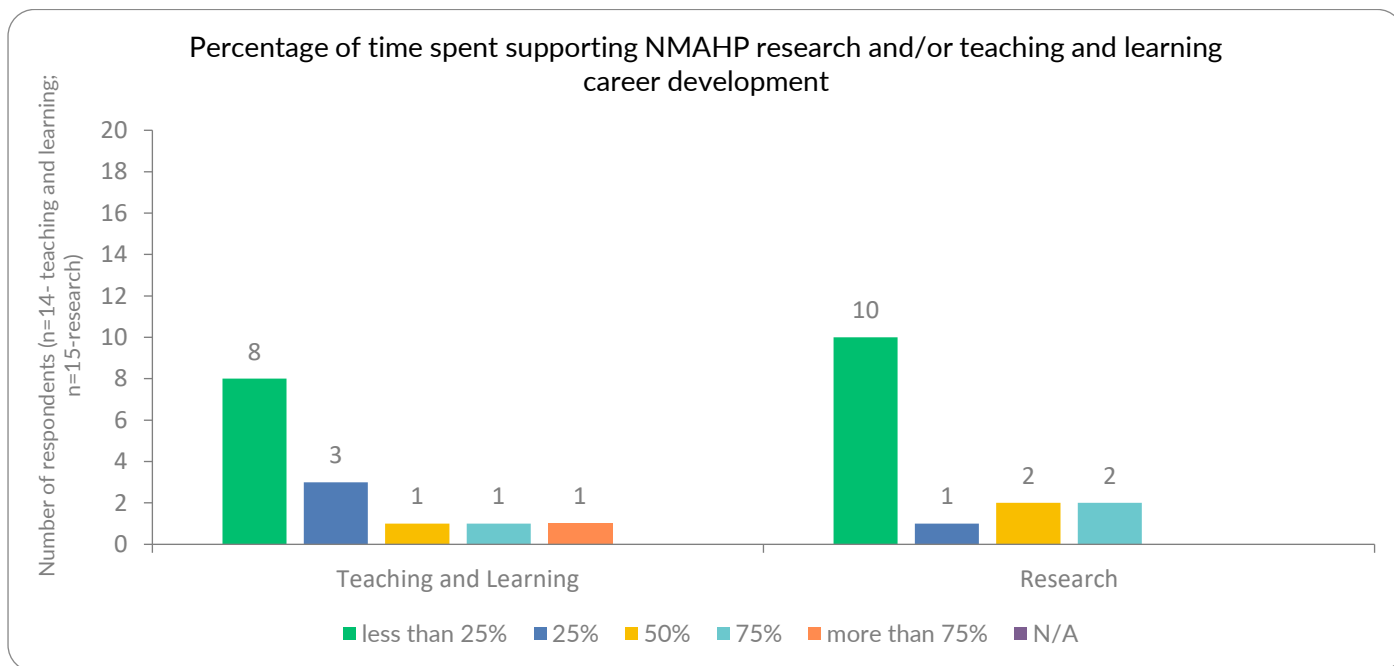


Figure 40

5.2.3 Knowledge, skills and confidence in supporting NMAHP research and/or teaching and learning career development

5.2.3.1 Knowledge and skills

The highest proportion of NMAHP leads rated their knowledge and skills in supporting NMAHP career development in research as “fair” (N=5/15) or “good” (N=5/15) and “fair” (N=6) in relation to teaching and learning (see Fig. 41).

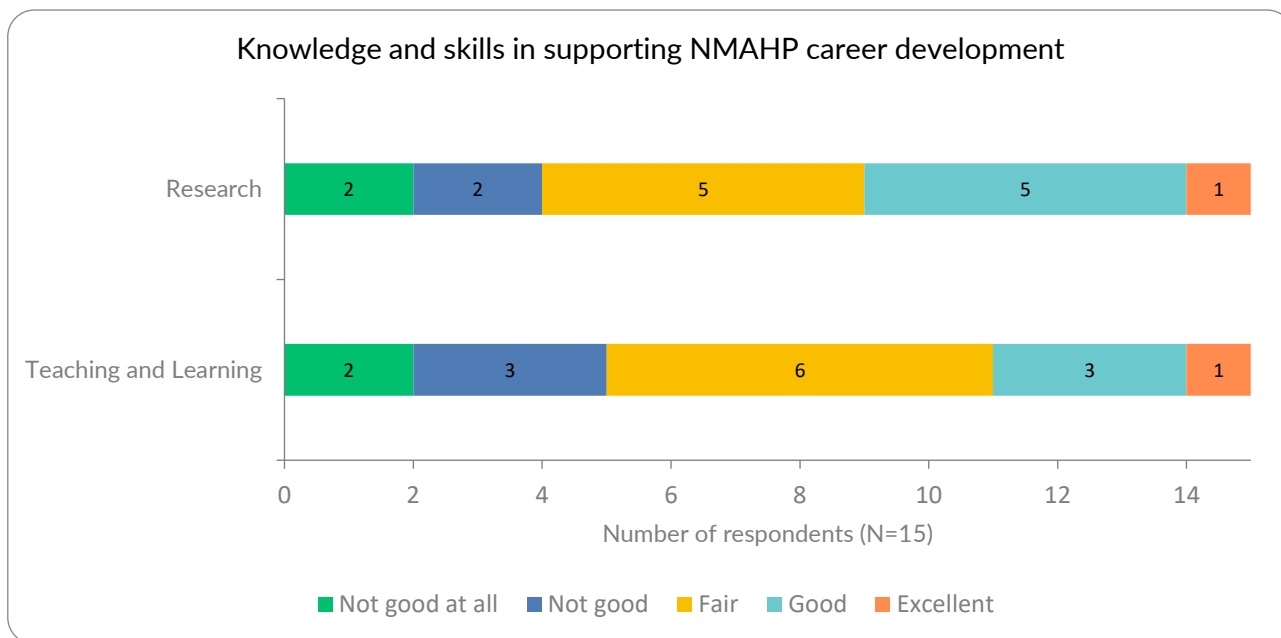


Figure 41

Overall, NMAHP leads rated their knowledge and skills in supporting NMAHP career development in research slightly higher than in teaching and learning, with the average weighting as 'fair' in research and "not-good-fair" in teaching and learning (see Table 6A)

	1.NOT GOOD AT ALL	2. NOT GOOD	3. FAIR	4.GOOD	5.EXCELLENT	WEIGHTED AVERAGE
Research (N=15)	2	2	5	5	1	3.07
Teaching and Learning (N=15)	2	3	6	3	1	2.87

Table 6A

5.2.3.2 Confidence

The highest proportion of NMAHP leads indicated that they felt "confident" supporting NMAHP career development in research (N=7/14) and "somewhat confident" in relation to teaching and learning (N =5/14) (see Fig. 42).

Overall, NMAHP leads rated their confidence slightly higher in supporting NMAHP research career development compared to teaching and learning, with average rating as "somewhat confident" in research and "slightly confident-somewhat confident" in teaching and learning (see Table 7A)

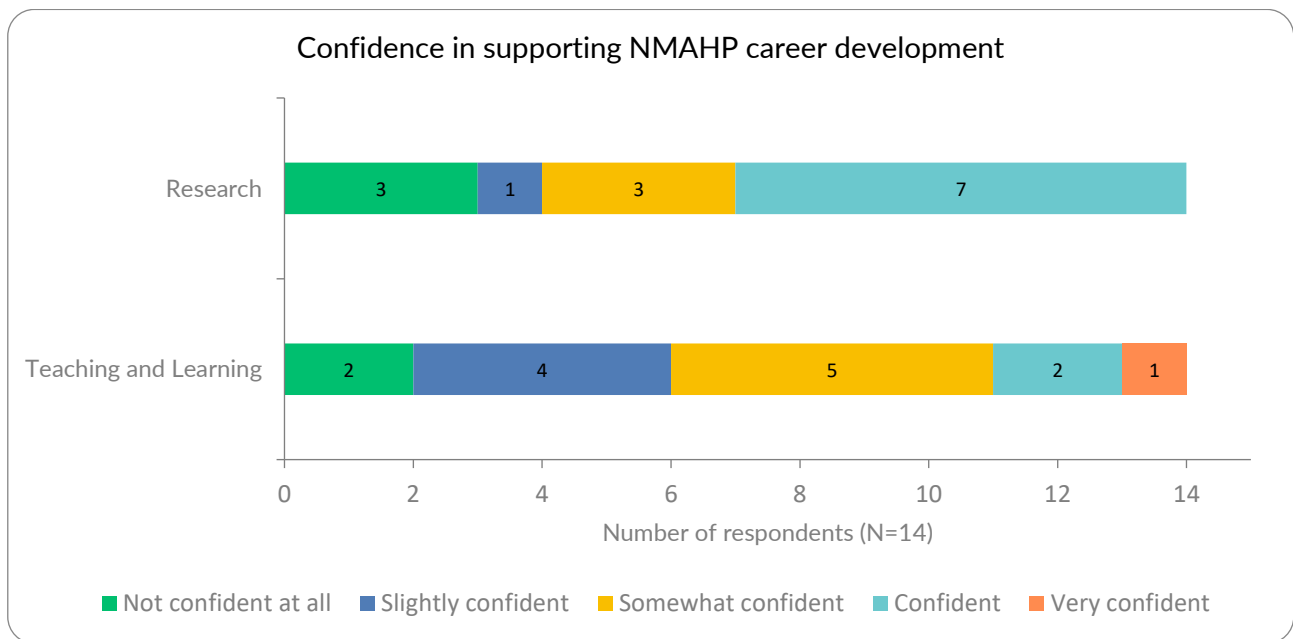


Figure 42

	1.NOT CONFIDENT AT ALL	2.SLIGHTLY CONFIDENT	3.SOMEWHAT CONFIDENT	4.CONFIDENT	5.VERY CONFIDENT	WEIGHTED AVERAGE
Research (N=14)	3	1	3	7	0	3
Teaching and Learning (N=14)	2	4	5	2	1	2.71

Table 7A

5.2.4 Career pathways

The perceived clarity of career pathways in research and teaching and learning is shown in Fig. 43.

The highest proportion of respondents (n=8/15) indicated that career pathways in both research and teaching and learning were very unclear, with 12/15 rating them as unclear/very unclear (see Table 8A)

Overall, research career pathways were rated slightly clearer than those in teaching and learning, with the average rating of “unclear” in research and “very unclear-unclear” in teaching and learning.

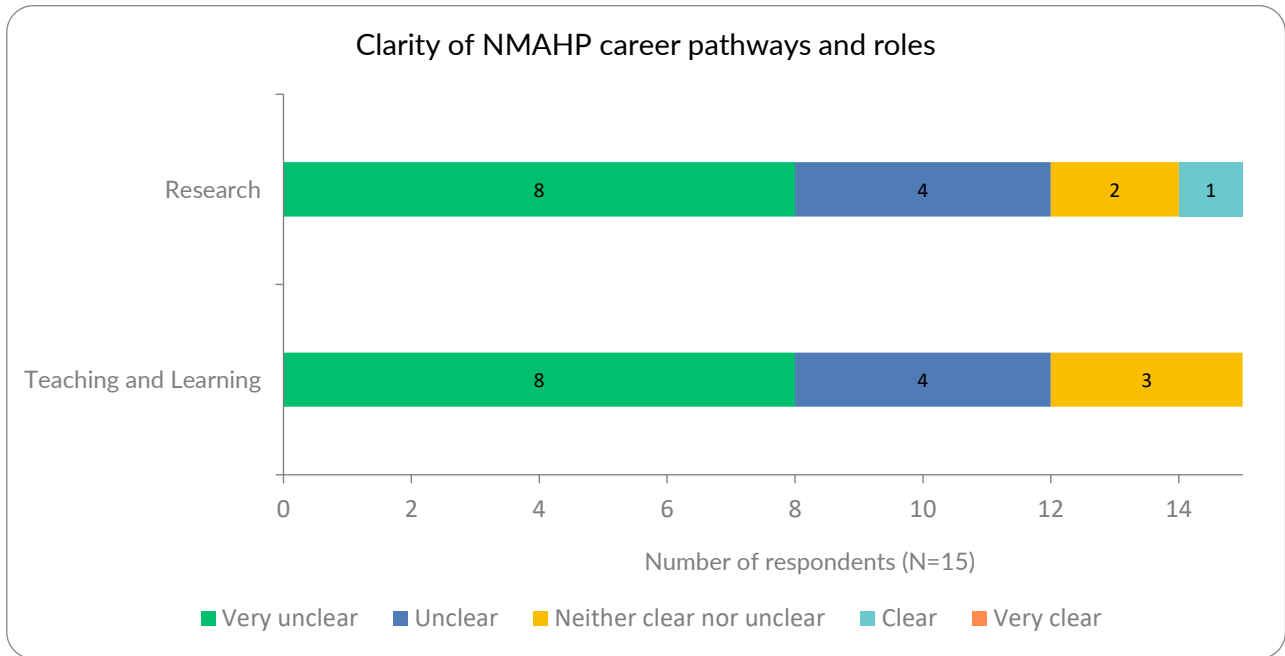


Figure 43

	1.VERY UNCLEAR	2.UNCLEAR	3.NEITHER CLEAR NOR UNCLEAR	4.CLEAR	5. VERY CLEAR	WEIGHTED AVERAGE
Research (N=15)	8	4	2	1	0	2
Teaching and Learning (N=15)	8	4	3	0	0	1.87

Table 8A

5.2.5 Careers advice, support and guidance

The highest proportion of respondents (n=11/16) indicated that they had not received careers advice, support or guidance on supporting NMAHP research and/or teaching careers. 4/16 had received advice on supporting research careers compared to only 2/16 in teaching and learning. (see Fig. 44)

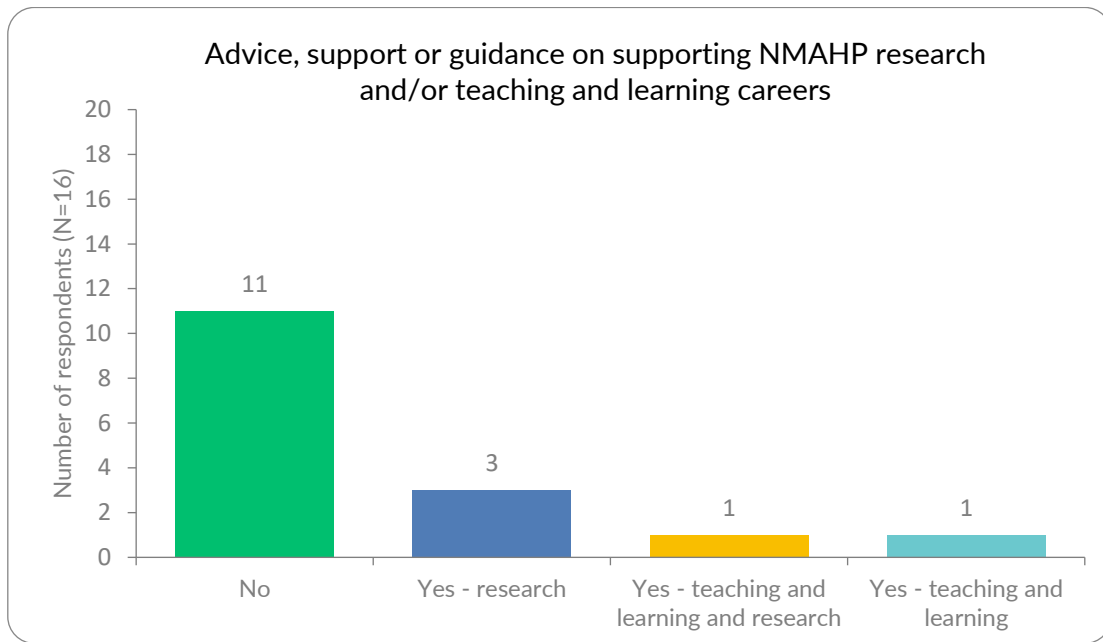


Figure 44

12/16 respondents indicated that they did not know or were not sure where or whom to seek advice on supporting NMAHP research and/or teaching and learning careers in future, with 8 providing a positive response (Fig. 45)

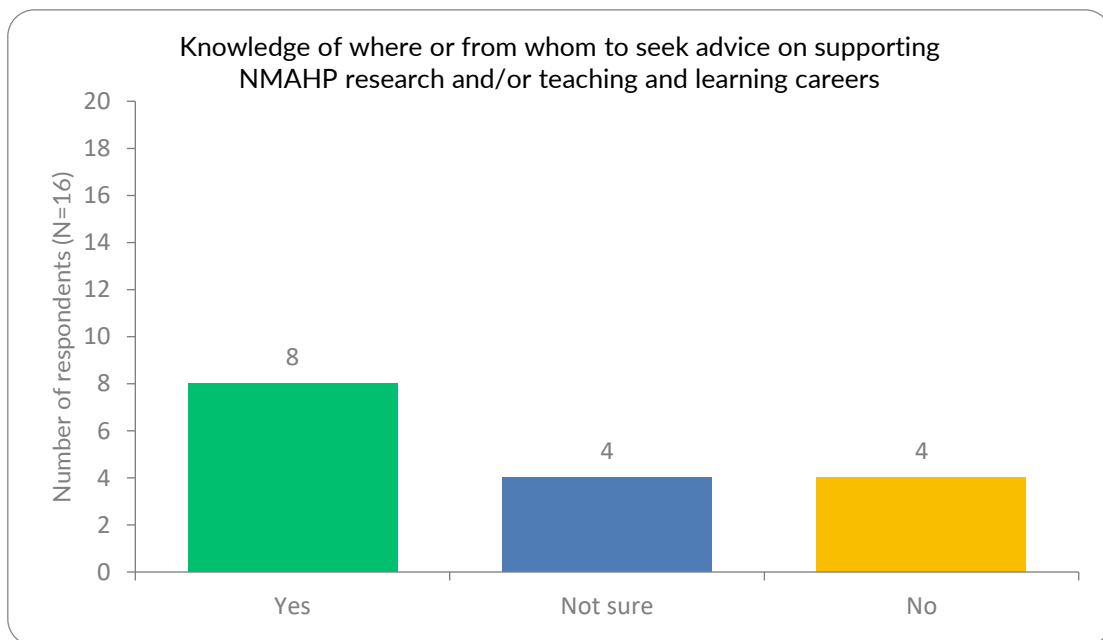


Figure 45

5.2.5.1 Sources of careers advice, support and guidance

Fig. 46 shows the sources of careers advice, support and guidance accessed by NMAHP leads.

Of the 5 people who responded to this question, most had received careers advice, support and guidance from peers (n=4/5) closely followed by senior clinical academics (research/teaching), clinical colleagues working in research and/or teaching (n=3/5, and/or research funders (n=3/5)

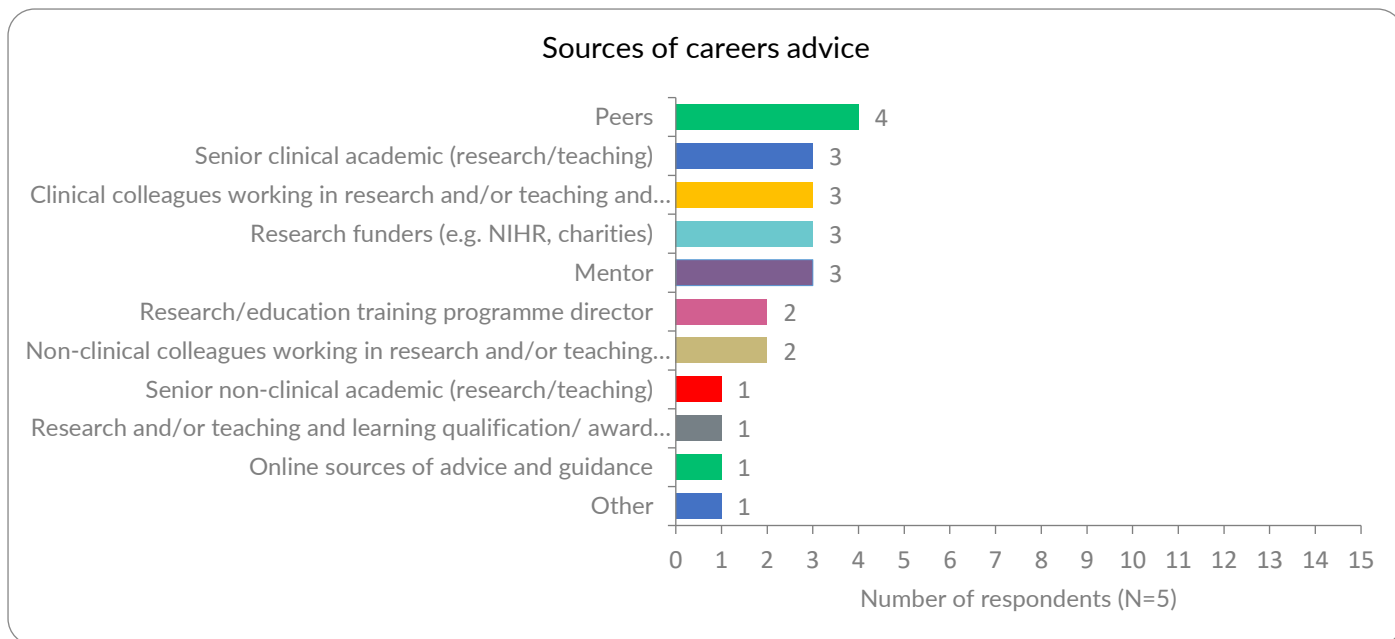


Figure 46

5.2.6 Interest in supporting NMAHP research and/or teaching and learning career development

Interest in supporting NMAHP research and/or teaching and learning career development is shown in Fig. 47.

The highest proportion of respondents were interested in supporting NMAHP career development in teaching and learning (n=7/16) and/or research (n=7/16). Overall, 12/16 and 13/16 leads were interested/very interested in supporting teaching and research careers respectively (see Table 9A).

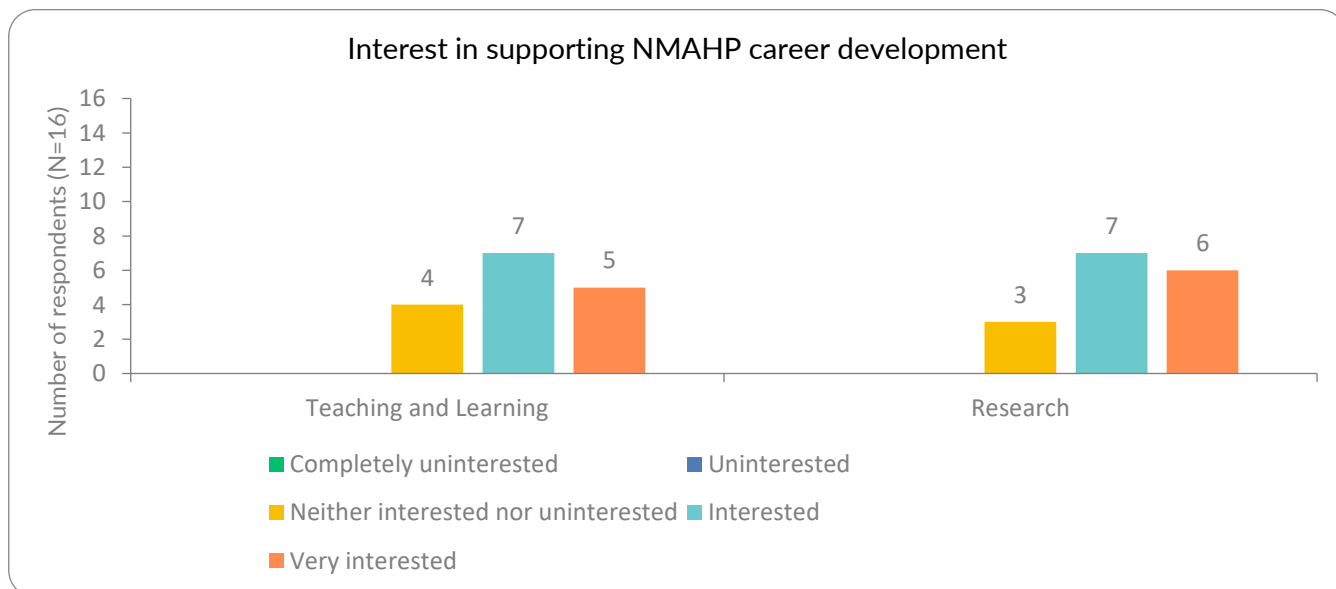


Figure 47

	1.COMPLETLY UNINTERESTED	2.UNINTERESTED	3.NEITHER INTERESTD NOR UNINTERESTED	4.INTERESTED	5. VERY INTERESTED	WEIGHTED AVERAGE
Teaching and Learning (N=16)	0	0	4	7	5	4.06
Research (N=16)	0	0	3	7	6	4.18

Table 9A

5.2.7 Organisational awareness and support of NMAHP career development

5.2.7.1 Organisational awareness of NMAHP workforce capabilities, interests and aspirations

Leads' perceptions of the awareness of NMAHP workforce capabilities, interests and aspirations within their organisations is shown in Fig. 48.

The highest proportion of respondents rated their organisation as "slightly aware" (n=4/15) or "somewhat aware" (n=4/15), with "slightly aware" as the weighted average (see Table 10A).

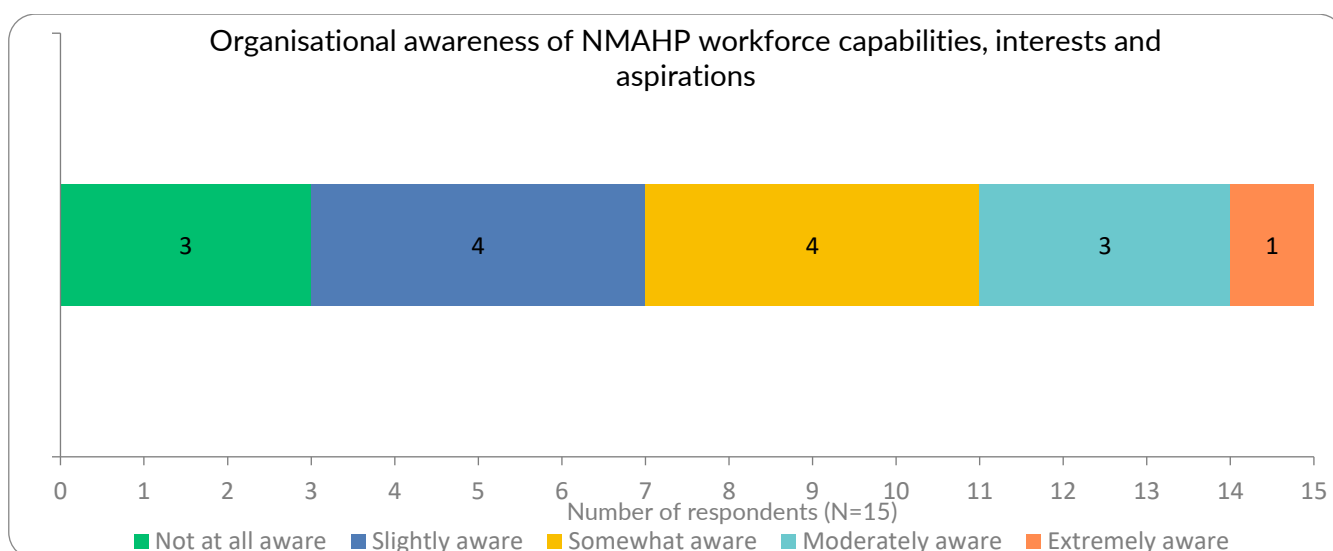


Figure 48

1.NOT AT ALL AWARE	2. SLIGHTLY AWARE	3. SOMEWHAT AWARE	4.MODERATELY AWARE	5.EXTREMELY AWARE	WEIGHTED AVERAGE
3	4	4	3	1	2.4

Table 10A

5.2.7.2 Organisational support, resources and opportunities for NMAHP clinicians

Ratings of the support, resources and opportunities available for NMHAPs in their organisations is shown in Fig. 49.

The highest proportion of respondents rated organisational support, resources and opportunities as “not good at all” for NMHAPs interested in pursuing a career in research (n=6/14) and teaching and learning (n=5/15) (see Table 11A).

Overall, NMAHP leads rated organisational support, resources and opportunities for NMHAPs interested in pursuing a career in teaching and learning slightly higher than for those interested in research, with the weighted average “not good” in research and “not good-fair” in teaching and learning.

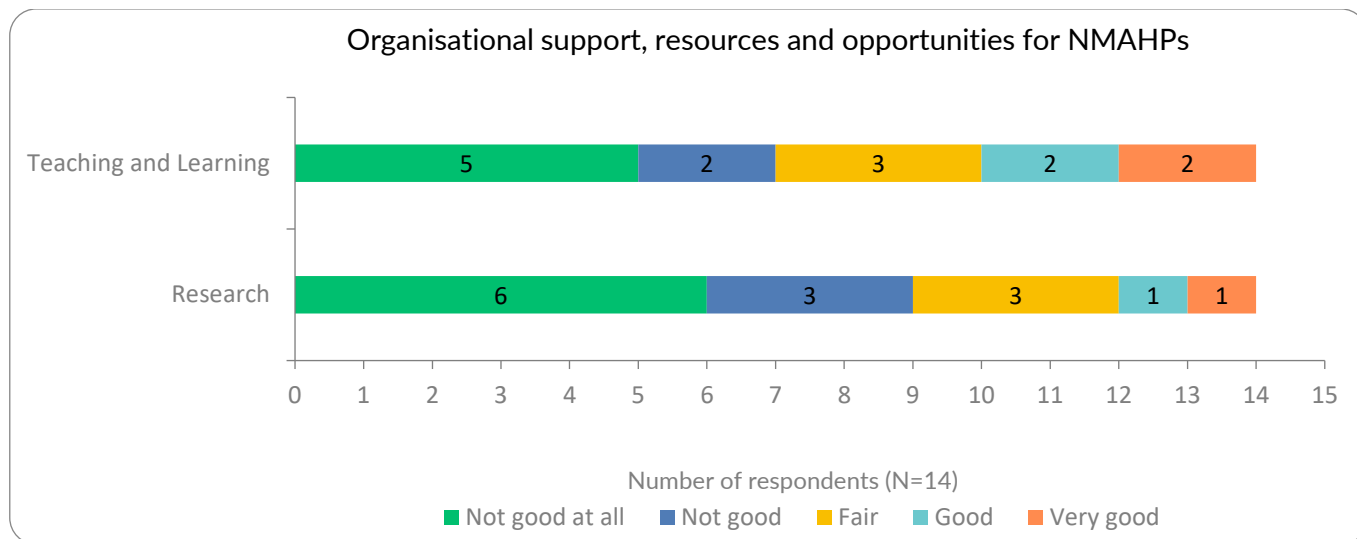


Figure 49

	1. NOT GOOD AT ALL	2. NOT GOOD	3. FAIR	4. GOOD	5. VERY GOOD	WEIGHTED AVERAGE
Research (N=14)	6	3	3	1	1	2.14
Teaching and Learning (N=14)	5	2	3	2	2	2.57

Table 11A

5.2.8 Motivators and enablers

The top enablers supporting NMAHP research and/or teaching and learning careers are shown in Fig. 50.

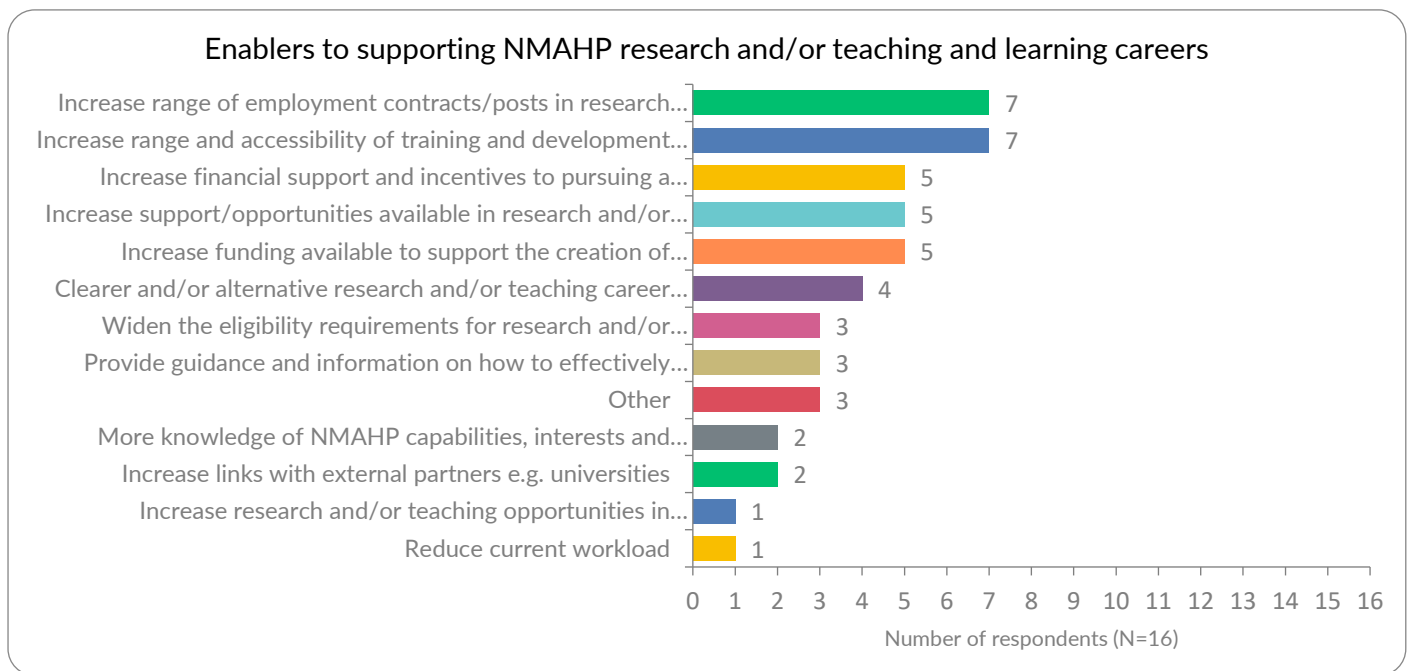


Figure 50

The most commonly selected enabler to supporting NMAHP research and/or teaching and learning careers were to increase:

- The range of employment contracts/posts in research and/or teaching” (n=7/16)
- The range and accessibility of training and development opportunities (n=7/16)
- Financial support and incentives to pursuing a research and/or teaching career (n=5/16)
- Support/opportunities available in research and/or teaching roles” (n=5/16)
- Funding available to support the creation of research and/or teaching posts /development opportunities (n=5/16)
-

5.2.9 Barriers

The top barriers to supporting NMAHP research and/or teaching and learning careers are shown in Fig. 51.

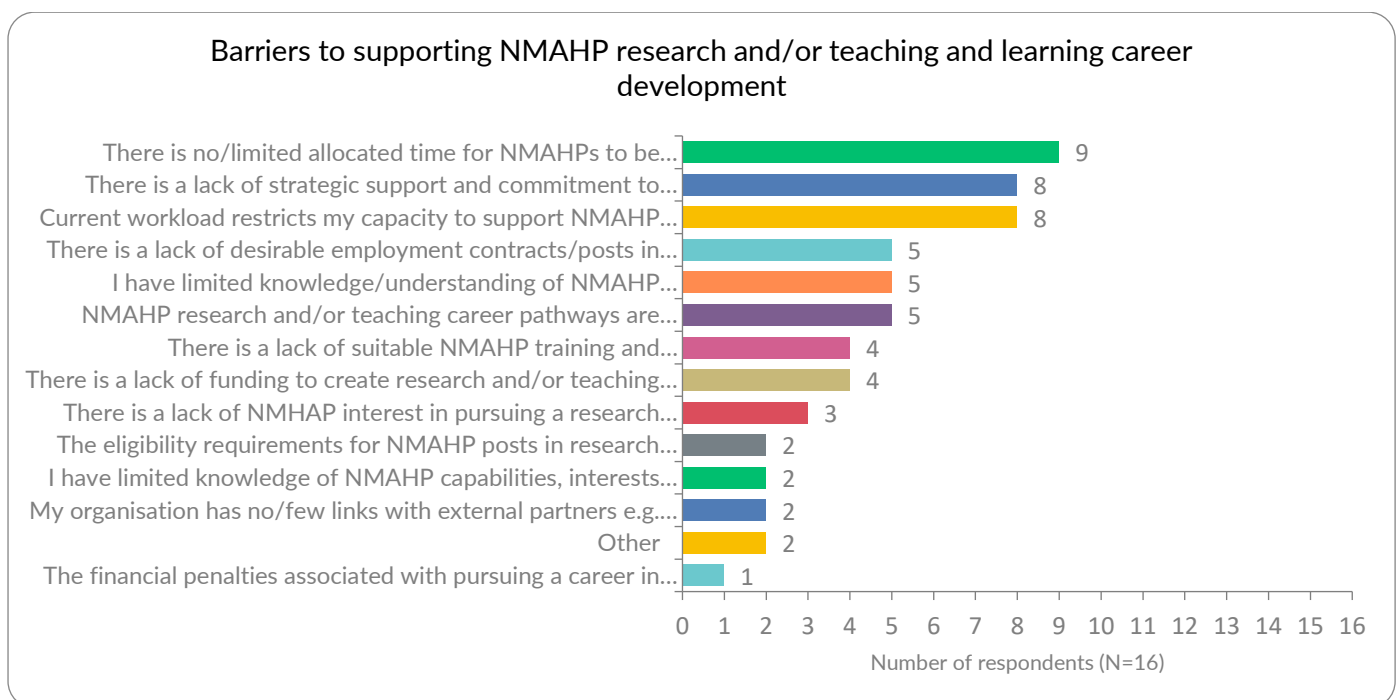


Figure 51

The most commonly selected barrier to supporting NMAHP research and/or teaching and learning career development were:

- No/limited allocated time for NMAHPs to be involved in research and/or teaching within my organisation (n=9/16)
- Lack of strategic support and commitment to developing NMAHP research and/or teaching opportunities within my organisation (n=8/16)
- Current workload restricting capacity to support NMAHP career development in research and/or teaching” (n=8/16)

5.2.9.1 Qualitative open-text responses: motivators, enablers and barriers

A number of comments highlighted the importance of organisational support for NMAHP research and/or teaching careers, particularly with regards to strategic support and commitment:

There are many barriers (or layers of decision makers/opinions about the important of research) that ultimately stop NMAHPs from becoming research active within the employing organisations.*

Lack of understanding of need for development of midwives in research careers in university and also trusts [...] structures in the university inhibit development and careers in research for midwifery.

One person flagged the “lack of executive support for developing AHP careers in Trusts” as a barrier, with the “development of an AHP lead in the Trust [...] to influence the agenda” identified as an important enabler. Another noted the importance of influencing senior leadership at a local level:

Whilst a national approach to highlighting the need for research and its value, challenges and potential solutions is important the real drive will come from local groups that can try to influence senior leaders.

Relatedly, one respondent described wanting to “shift into implementation mode with the strategy group”.¹² One respondent also identified “funding to enable a programme of work to be undertaken locally” as a key enabler.

Two comments were also made about the lack of communication and information about available opportunities:

People don't know about opportunities available to them, managers don't know about such opportunities either, people don't know where to find information, people don't know if they are eligible or not, people don't know what is involved and how they could pursue fellowships along their usual clinical role.

Some individuals commented on issues related to the available roles in research and/or teaching, with one participant flagging the need for more combined research delivery and clinical roles and for research delivery positions to be open up to all NMAHPs. More generally, a comment was made regarding not “exclude[ing] under-represented workforce groups”, and another noted that people want to retain “a clinical element”. One respondent noted that within HEI-based teaching roles the “emphasis on teaching means that research is not supported”. Job security and salary discrepancies between NHS and HEIs was also flagged as a key barrier, as well as a lack of “collaborative understanding of a NW NMAHPs research career pathway”.

With regards to training and development opportunities, the NIHR CRN development programmes were cited as an important enabler in encouraging NMAHPs to develop a research interest as well as the scholar programme providing support for NMAHPs to become chief investigators. The need for “research delivery placements recognised as development opportunities” was also flagged.

5.2.10 Shared workforce challenges across HEI and healthcare organisations

12/16 respondents reflected on the shared workforce challenges across HEI and healthcare organisations, with the key themes captured below:

- **Recruitment and retention** of diverse, skilled and motivated workforce that can meet health and social care population needs
- Need to embed research into practice
- Overstretched workforces with **limited/no protected time** for CPD especially in research
- Lack of **managerial support** for research and those supporting research careers development
- Lack of coordinated workforce development across clinical workforce (medics and NMAHPs)
- **Lack of clear clinical academic career pathways**
 - Issue with enabling clinical element within academic roles
- Difficulties with **sparking interest** in research and helping NMAHPs to **embark** on research careers
- **Lack of opportunities** for under-represented AHP professions

¹² Reference to NW

- Need to **build links** between NHS and HEIs
 - Issues with scheduling student placements
- Issue of **salary alignment** between NHS and HEIs

5.2.11 How HEI and healthcare organisations can work together to address these challenges

9 /16 people responded to the question regarding how HEIs and healthcare organisations can work together to address shared workforce challenges, with some participants also providing suggestions in their answer to the preceding question:

- Develop links and collaboration across HEI and healthcare with emphasis on **reciprocal benefits** e.g., supporting embedding of **research in clinical practice**
- Development of a **shared vision and strategy** emphasising value of research in health and social care from pre-registration onwards
- **Shared resources**, opportunities, communications, expertise (including mentors) and initiatives
 - NIHR CRNs keen to explore ways to support NMAHP research career development
- Creation of **joint appointments**
 - Apply Follett principles to NMAHP clinical academic joint roles
- Support for **part-time** teaching/research roles for clinical staff
- Importance of national and regional **leadership**
- Creation of practically-focused **case studies** demonstrating how to pursue a career in research and/or teaching and learning
- **Co-ordinated staff development** across clinical workforce

6 Interview findings

6.1 Key interviewee demographics

40 interviews were undertaken with survey respondents. Key demographics of the interviewees are shown in Table 12A.

Region ¹³	No.
Greater Manchester	23
Cheshire and Merseyside	13
Lancashire and South Cumbria	4
Profession	No.
Nursing	11
Physiotherapy	7
Midwifery	6
Speech and Language Therapy	4
Occupational Therapy	3
Clinical Research Practitioner	2
Dietician	1
Radiographer	1
Operating Department Practitioner	1
Biomedical Scientist	1
Optometrist ¹⁴	1
Pharmacy Technician ¹⁴	1

Table 12A.

The interview findings are presented below under key themes, with quotes representative of patterns in the data unless otherwise specified. Quotes have been selected for the purposes of illustration and are distributed across participants as much as possible. Long quotes are used to capture perspectives in participants own words.

6.2 Definitions of a “clinical academic”

The interviews were used, in part, to establish how participants conceptualised the role of a “clinical academic”.

The term was often used to refer to a combined clinical and research role within the healthcare setting in which there is “protected time” to undertake research as part of the clinical role. The split between clinical and research activities varied in these definitions, although many described a ‘50:50’ split.

The research component was primarily framed in terms of NMHAP conducting and leading their own research and “seeing the whole process right through from beginning to end”. Although most participants discounted research delivery from their definitions of a clinical academic, some were inclusive of this kind of research engagement. Undertaking academic study alongside clinical work was also included in some descriptions as well as involvement in research capability and capacity building.

Central to many of the definitions was the core purpose of a clinical academic in undertaking research that could develop innovative, evidence-based practice, enable patient-led research and, ultimately, improve patient care. Remaining in clinical practice was an important part of being a clinical academic to ensure a clear link between research and clinical services. Relatedly, a number of interviewees highlighted that clinical academic were likely to be senior clinicians who could draw on a “wealth of experience” to develop clinically credible and relevant research questions and translate findings into practice. The importance of clinical experience was also highlighted in the context of a teaching-related clinical academic role (see 6.3.2.4).

Many of the interviewees expected that a clinical academic role would involve working across healthcare and HE settings, usually through a joint contractual arrangement akin to the “medical model”, although for some it was simply having a “link” or “affiliation” with an HEI. Joint contracts were usually conceptualised in terms of a substantive contract with a healthcare

¹³ 27 of the interviewees work within an NHS acute trust and 4 identified as NMAHP leads. Further details are not included to protect anonymity.

¹⁴ It is recognised that these professions fall outside the NMAHP definition used for this project.

institution and an honorary contract with the university. Some interviewees also questioned the degree to which the clinician would need to contribute to and be “embedded” in the HEI in order to be considered a “true” clinical academic. Some participants also described clinical academics as having separate contracts with an NHS organisation and a university.

Teaching was very rarely included in any definitions of a clinical academic, and usually only after prompting from the interviewer. Practice-based educators and informal guest lecturers were not viewed as clinical academics solely in the context of teaching, with those engaged in full-time HEI lecturing sometimes distinguished from those undertaking research:

I feel like there's two types of clinical academics [...] Obviously you're clinical for part of your role, so it's a joint role between a kind of a university or an HEI and an NHS Trust. But there's kind of some clinical academics are half of it is kind of a lecturing type role and then another clinical academic is a research type role, but generally in the research type role in the HEI you have to do teaching as well [...] I don't think it's that clear (65)

As reflected in the above comment, there was considerable uncertainty over the term, with it being generally regarded as a “difficult” question. Some of this uncertainty was attributed to a lack of exposure to anyone in this kind of role given the lack of clinical academic posts and pathways for NMAHP clinicians (see 6.5).

“it's interesting because that's a question that I ask when I call myself clinical academic because there's no definition, I always want to go and check that I am. I am a clinical academic. Of course, I am. But because there's no pathway that's been established there should be those conversations” (91)

6.3 Interest in roles and contracts

6.3.1 Teaching and learning roles within HE

One of the most striking findings from the interviews was the distinct lack of interest expressed in teaching and learning roles, with teaching rarely included in definitions of a clinical academic role (see 6.2) and little interest shown in incorporating teaching into a combined clinical and research role. Only one interviewee expressed an interest in taking up a full-time teaching and lecturing position within a university.

With some prompting, a number of participants reflected that they were open to the idea of becoming more involved in teaching and lecturing on a part-time or more informal basis such as teaching “on a couple of modules” or doing “a bit of teaching on the side”. For some having a more informal involvement in teaching was about having the opportunity to “dip their toe” into an area of academia they had little experience of and/or had not previously given much consideration (see also 6.7.1):

I'm possibly interested in lecturing/teaching in HEI but I haven't really given it a lot of thought, but possibly yeah. [...] Perhaps even just opportunities to do certain one-off sessions[...] Just to be part of it and see how you feel about it, really, if it is something that you'd be interested in (21)

One-off lectures here and there - popping in and sort of doing a couple throughout the year. Lecturing is something that I've not really thought about full-time yet [...] maybe a bit more full-time in that role. It's something that I've always been interested in really (74)

Some early-career clinicians also described how teaching in HEIs was something they might consider later in their career, but felt that they first needed to build up their clinical confidence and expertise.

With some reflection, a sub-set of the interviewees reflected that they enjoyed teaching within the clinical environment and would value the opportunity to share their knowledge and experience at university to “inspire the next generation”. Others, however, framed teaching as more of a “moral” obligation and/or a necessary, but not particularly welcome part of pursuing an academic research career:

If you were doing a PhD, I can see that that's the road that you do have to travel down. So, if that [teaching] was part of it, absolutely fine. I would take it on as the odd teaching session or, you know, get involved in marking or whatever. But it's not ... I don't want to. I don't feel at this moment that I want to be somebody who does lectures at a university or an institution, that wasn't what I was aiming to do, but I kind of see that it's part and parcel of that further education and you know, progression [...] So sort of like, yeah, it's in the future. I've got to do it (97)

Some noted that they would only be interested in teaching in their clinical specialism and/or with a focus on research and expressed concern that their lack of interest in university lecturing more broadly would have a negative impact on their ability to be an effective teacher:

I've gone so niche with what I do, if I went into an HEI and therefore had [...] a teaching role within the university. I'd probably be way off what I kind of specialise in and I think I would resent that. So, I don't want to put that on myself, let alone let that affect people I work with, all the students [...] So I think if I did have a formal contract with an HEI, then it would probably be more within a research capacity rather than any sort of lecturing (102)

The teaching lecturing side always worries me a little bit mainly because I would worry about what I was given to teach and whether I enjoyed it. Because I know from being to uni for quite a few years you know that there's certain lecturers that are having to deliver certain lectures that you know they've no interest in and work in areas that they're not necessarily that keen on and that would be my only concern. If the lecturing side of it was specifically in an area that I enjoyed and would like to do further work in. That would be my only thing that would hold me back a little bit from the teaching side of it, but it would be a lovely job to be clinical, doing clinical research and lecturing and teaching combined (42)

With limited exposure to HEI lecturing in practice, people sometimes expressed a lack of confidence in their ability to undertake university teaching, with a particular anxiety around “standing up in front of people”. One person describing a sense of “imposter syndrome”. A small sub-set of interviewees also expressed concerns over limited development opportunities in HE lecturing positions (see also 6.7.1):

I think for teaching it's, you know, I haven't been trained as a teacher. And so I think some of the challenges would be around maybe like feeling kind of supervised and adequately trained to actually deliver teaching [...] delivering more than that kind of standard lecture-type material. I don't know that I would necessarily feel like I was doing it effectively or really have the kind of time to work on that and especially if you are doing it alongside clinical work, it's kind of hard maybe to find the time to develop your teaching materials and my understanding is that there isn't always as much kind of direct kind of supervision on that more sort of like teaching side (1)

6.3.2 Combined clinical and research roles

The ideal role for the majority of interviewees was one which allowed them to combine clinical and research work. Whilst some were looking for a “50:50” split, others put more emphasis on one or the other, often weighting this towards the clinical aspect.

6.3.2.1 Practice-based - Research delivery

A small number of interviewees currently worked in research delivery roles and valued these positions as an opportunity to combine research and clinical work. Others highlighted the importance of research delivery roles as an ideal “way into” a research-related career (see also 6.7.1). However, there was generally felt to be limited opportunities for career progression within research delivery (especially, for example, in the CRP role). Moreover, research delivery roles were not considered a viable option for clinicians wanting to undertake their own research and develop a career as a clinical academic

there's no there's no opportunity for us to do research within that. We would have to step outside of that role because what we're not doing is research. What we're doing is research delivery, which is entirely different and separate. So, if you want to do research, then you need to leave. (78)

Other than being a research nurse, when you're not doing, you're basically doing other people's research for them [...] which didn't appeal to me 'cause I didn't really want to go and be someone else's dog's body, and they're getting all the credit [...] the research career routes just don't exist in the NHS unless you want to be a research nurse [...], I know that for some people that will be what they want, but that wasn't what I wanted (30)

It is just a nursing job within a research -you're not actually part of the research. If you know what I mean [...] everyone [in research delivery] does someone else's research [...] they have loads of ideas [but] they have barriers to operationalise them or even talk about how they could be released to start to work on them, cause it becomes someone else's project then (50)

6.3.2.2 Practice-based - ACP and consultant roles

For some, the recent drive towards introducing more advanced clinical practitioner (ACP) and consultant practitioner roles for NMAHPs working across the four pillars of leadership, management, education and research had opened up the possibility of combining clinical and research work within the healthcare setting.

The ACP role was considered by some interviewees to offer an attractive clinically-based career pathway outside of a managerial trajectory, which offered “protected time” to engage with research without needing to commit to a more academic route.

I think more and more of us are keen to sort of get into those roles [...] quite keen to be progressing in that direction [...] the advanced clinical practitioner has to include all these pillars so it becomes more of a rounded

role and that's where I want to head. Not just because of banding [...] a few people in our department have got a PhD and I don't feel like I wanna go down that route. You know, like, that seems a lot [...] 65:35 would be an ideal split of clinic and then other stuff, and that would then include, yeah, research, teaching [...] I think it's just nice to have a way to progress without it having to be management (47)

So, something that I really want to do and something that I keep keeping an eye out for at the moment is the advanced clinical practice, the advanced practitioner trainee – apprentice - because that would be my idea like I'd love to get a master's in advanced practice and a big part of that includes research as well [...] I will look for those opportunities and at the moment my hope is to eventually become an advanced practitioner (27)

I've got lots of friends who've become advanced nurse practitioners and run nurse-led clinics – that is quite an appealing way to still maintain your connections with clinical services [...] it's manageable, but then you're in an environment where you're still seeing the issues. You're still engaging with an MDT, you're still understanding what's needed, so if you could do like a divided week, so you could do some clinic work and then do some research work (43)

One interviewee, however, expressed frustration that these roles often required further study, (e.g., the ACP masters) and discounted other relevant qualifications and clinical experience. Another participant pointed to a lack of ACP roles for those with the qualification within their specialism.

For those interviewees seeking to develop a clinical academic career, there were concerns that the ACP role did not sufficiently prioritise or protect time for research, with the focus remaining on the clinical aspect of the role.

*So, if you've got your 4 pillars, the clinical is very much valued. In advanced clinical practice you could be high level for the research one and the education one, and to some extent the leadership one [...] All three are massively overshadowed by the clinical pillar both in financial remuneration, but also in value and when the s**t hits the fan, you'll certainly go back into clinical, be asked to – be pulled back into clinical because that's the priority for the trust (102)*

Some [ACPs] are quite heavily involved in research and things like that, but others aren't and we're seeing across the country not all are protected 20% because it's supposed to be 80% clinical and 20% of other pillars [...] we need someone just to write a clear policy to decide on what an ACP job role looks like, the job plan and what should be involved in it (28)

Similarly, a number of interviewees reflected that there was little expectation or opportunity to lead and develop your own research as an ACP:

I think that the nursing agenda is much more centred around like advanced nurse practitioners and these kind of like 4 columns. Research is part of it and they want you to be research-active and understand, but they don't really want you to fully take the lead on that. That's my sense. They want you to understand the research and they want you to be able to translate the research into better practice, but they don't necessarily want you to actually do the research (43)

I don't think there's anything academic [in ACP posts] there's involvement in research, but there's no lead, I would say from other roles that I'm seeing people aren't leading on research projects or writing them or doing themselves. They're just becoming involved in other people's research (13)

One interviewee also pointed to a lack of clear career progression from ACP to consultant positions. Consultant roles were cited as an opportunity for NMAHPs to undertake their own research as a “clinical academic” within the healthcare setting, with research “recognised as part of the role”. Yet, similar concerns to the ACP roles were expressed by others in terms of the degree of protected time and/or expectations with regards to leading research:

I know another consultant who's got a PhD and part of the four pillars of that role is one of them is research and audit, but it's not as clear from her job description that you do research and how it will be funded and part of your hours 75

I do meet the criteria I think for kind of those consultant posts. But those posts are so clinically focused and so leadership focused that I know that I would not develop in the same way as a researcher. I might be able to be a Co-I on the odd project, but I would not be able to gain the research skills that I would like to [...] I just wonder if there's something more at that sort of level, but more academic that we create within the NHS structure [...] that would sit with having a highly specialist clinical role and sort of two days protected time research (13)

6.3.2.3 Clinical academic – working across the NHS and HE sector

Although wishing to retain a clinical aspect to their role meant that very few participants were looking for a full-time role within a university, a significant number of interviewees described working across a healthcare organisation and an HEI setting as a means of achieving their ambition of working as a “clinical academic”.

A number of people reflected on the potential advantages of working within an HEI in terms of allowing them to have protected time for research away from clinical pressures:

it might be better driven from a university and employed from a university. But working partially clinically as well. So, then you're not getting the pressure from the clinical setting quite as much. You just you know that that day you're in work you're clinical and the rest of the time you're working for the university [...] If you were employed from more of an educational establishment to do your research and essentially loaned out to do your clinical work it would be a far better set-up because then you can just walk away from the clinical stuff [...] and that would potentially make things a little bit easier cause you can be a bit more clear cut (42)

My ideal job because it's quite difficult to actually sort of do research where you can take research time when you're kind of also being clinical, so it would be better to have say however much time where you're working for that trust with those patients. But the rest of the time is very clearly like working for a university and in that time, you're doing research [...] So say I get an urgent flag through that something urgent needs to be done for a patient. I can't legitimately say 'Oh no, I'm on research time now'. I just can't do that (99)

Having a contract with an HEI was also valued in terms of being able to access academic support and “senior academic mentorship” to progress their research and professional development.

6.3.2.3.1 Joint appointments

There was some confusion over the contractual arrangements required to work across both sectors, particularly with regards to what a “joint appointment” might look like and “how it works”. However, it was generally understood to involve a substantive contract with one institution and an honorary contract with another organisation. For some, limited knowledge of the contractual arrangements meant that they were unsure as to what kind of arrangement they would be looking for, but most interviewees saw a joint contract as a potentially attractive mechanism for taking up a combined clinical and research role as a ‘clinical academic’.

A joint appointment was sometimes seen as a better way of managing the potentially high workload and conflicting demands of the NHS and HEI environment in comparison to “juggling” two part-time contracts.

You're always gonna juggle the demands of both places, but you're not constantly juggling the university being like 'Oh well, I know we said you work Mondays and Tuesdays, but we've put all your lectures on a Wednesday so you'll have to work on a Wednesday now. So, you have to go back to the NHS and kind of fight that out [...] If you had a joint contract that sat with both places, like one contract instead of two with both places [...] that would make your life so much easier rather than having two separate contracts with two separate demands. One contract across both organisations that clearly delineated what your actual job was [...] I think that would really help actually (30)

Others simply highlighted the administrative and practical advantages of having a joint contract in terms of “one pay slip”, “one HR department” with some people specifically pointing to the value of having joint appraisals, PDR objectives and one PDR process across the two organisations. Two people also expressed concerns regarding the tax implications of having two separate contracts.

Two interviewees queried whether funding and/or release to undertake academic study might be more easily negotiated in the context of a joint contract compared to working across separate contracts. One of these interviewees expressed the challenge they currently faced in this regard:

I would love to pursue a PhD, but it's that question of, well, where does that time come from? Because clinically we're so busy, potentially they couldn't release me. They would if they could. But then I'm at the university so it's quite unclear who's responsibility I suppose it is then to support it because it's a big commitment, isn't it? You're asking for a lot of funding. You're asking for a lot of time and then it becomes a little bit blurred about is that my academic career that should be supporting it? Is it clinical or should it be both and they give me a day each? I don't know. If I was here full time, I would feel much more confident to say I want to apply for this fellowship. Will you support it? This is the time I'll take out and I'll still be around to teach, but because I'm only here two days a week, that's much harder, and that's probably the thing that I find the most challenging in this role. (25)

Some queried whether managing the workload and administrative burden of working across two institutions would be exacerbated in a joint post compared to two separate contracts:

if you did have a joint clinical like an NHS and university post, it's how do you split your time because one isn't gonna think about the other like you will in that post, it's splitting your time and is that like two full time jobs really with it. Would it be that extra workload and sort of strain and everything and it's just I think it would be how you would manage that as well that post and sort of saying 'Well, no, these days are my clinical work and these days are my academic role. I think you'd just have to be quite strict with it otherwise I think you'd end up will burnout probably. (7)

They're two hugely bureaucratic organisations who aren't necessarily facing in the same direction and we don't need more red tape and ridiculous arguments about who is going to supply the laptop. [...] Like, sometimes it just can feel really overwhelming the amount of bureaucracy involved in getting those two organisations together (43)

If there was one contract would, for example, the university go 'we want more of your time' so I'm now this middle person going back to the NHS saying 'Oh, they want me to do this on this day" whereas at the moment I'm fully defined at university Monday, Tuesday [...] You know, what days will you contract? It's blurring those lines and I would get pulled a lot more in different areas (25)

Most participants expressed a preference for a joint appointment to be weighted towards the clinical environment with the university holding the honorary contract. This preference was partially about enabling them to remain closer to the clinical setting as well as maintain their NHS pension and other terms and conditions (see 6.4).

6.3.2.4 Motivation for remaining clinical

The desire to retain a clinical role was underpinned by a number of inter-related factors. A key theme was that participants did not want to lose contact with patients, which was tied to the enjoyment and rewards of working as a clinician as well as their sense of vocation. One person described it as “where my passion is”, whilst another pointed out that clinical work was “the whole reason why I came into the job in the first place” requiring “very much a change in mindset” to leave the healthcare environment completely.

A significant motivation to remain clinical was to undertake research that would directly “feed into” their clinical practice:

I don't think I would be a pure academic because I like my clinical aspect too and I like to see my patients too [...] I want to do my own research project and improve service, improve outcomes for these patients and what's more the best place to have - you have the patients that you're with, you already have your study sample [...] to still have your clinical time, which obviously is my driving force, and then you have the academic time (95)

In an ideal world your own patients would be the research participants, and then what you were finding in research would then feed into that group that you were working with. So that would be my dream would be to, you know, if there was a clinic that was very involved in research and that it all linked up quite nicely (1)

There was a strong sense that researchers needed to remain embedded within the clinical sphere to drive sufficiently clinically-relevant and credible research based on an “understanding of the problem”, the results of which would then more easily translate into changing clinical practice.

Research and clinical work very much feed off each other, so you can understand perhaps what some of the questions are and need to be asked, but also you're aware of some of the implications of how you might be changing practice in relation to the evidence that's been generated - because there's a bit of an evidence-practice gap isn't there and I think when you're within the clinical setting you can kind of perhaps understand a little bit more about what some of those issues might be (7)

Clinicians often have the best ideas and they understand what questions to ask because they spend most of their time with the patients so they can see things that might have sort of a real-world benefit for people and that could be more readily achieved than perhaps somebody that has less kind of clinical contact time. (40)

What I feel is someone who has worked on the frontline and still works on the frontline that this needs to be quicker, this whole thing needs to be quicker. We need to get better at researching something that is appropriate and timely and is gonna actually help people here and now [...] it's really important to not create this divide [between clinical work and academic research] because people need to be in clinical service to understand what the problems are like (43)

One interviewee described how combined clinical and research roles enabled healthcare professionals to “set the agenda [...] from the bottom up, not from the top down”. There was also an associated concern that moving into academia would lead them to becoming “out of touch” with clinical practice, meaning that their research would have less relevance to the clinical setting:

I still want to do that [clinical] side of the job. I do enjoy it and I feel like that will keep my finger on the pulse for, well, what kind of research do we need to do? Why do we need to do it? You can't become so detached that you spend your days at university - you want to know what do they [the patients] need? What's changing in practice? (97)

I think probably hearing people criticise research in the past if it's not clinically relevant and what do they know? You know, the author's been in academia for 15 years and they're so far removed. And I don't always think that criticism is justified, but I think you have got quite a strong argument to that if you are still immersed in your practice and you're at the cutting edge of what the questions are and what some of the challenges are around what you're doing clinically (73)

Remaining “up-to-date” with clinical practice was also of concern with regards to ensuring that teaching remained current, relevant and grounded in the “realities” of the clinical environment:

You do need to have lecturers who are fresh from practise and clinically credible. [...] when you're sort of 3-4 miles down the road, you're just completely divorced from practice [...] you end up getting - the divide becomes more and more, further and further apart [...] In an ideal world, I think, there has to be a link with practice, so I think the only way you can do it is a contract with practice (41)

There's that idea that people go into teaching and perhaps lose track of what the actual role is like and what the realities of clinical practise are (73)

Working at the university alone, you're very isolated from clinical practice [...]they're] teaching things that we haven't done in 20 years, but they're so far away from practice that the reality that you're teaching is just not correct anymore [...] You need to be in both places [HEI and NHS] you actually need to know what the reality is as well [...] and you can prepare the next generation better. That would be the dream for me. (30)

Two interviewees made the point that lecturers working in clinical practice were even more important given the minimal “on the job” training provided to undergraduates.

6.4 Barriers to working within the HE environment

6.4.1 Pensions

As noted above, a contributing factor to the preference for the healthcare organisation to hold the substantive contract was the issue of pensions, with retaining the NHS pension cited as key enabler to taking up this kind of role. Indeed, a number of participants expressed concern regarding losing their NHS pension if they moved into the HE sector. HE pensions were also viewed markedly less favourable to NHS terms and conditions.

The USS pension, I don't think it's a good pension, but I always hear, I mean. I'm not a pensions expert, but the NHS pension is, you know, one of the best pensions and I wouldn't want to [...] I don't know what's happening with the USS pension at the moment, but I hear him saying things and you hear things in the news about there's been financial problems with it and this and that (20)

Keeping your NHS pension, that would be another one. At my last university I got my NHS pension, my previous one was USS and it's appalling and I know people who refused to go to 13 universities because of who their pension scheme was. I wouldn't go back to certain universities now because I will lose my NHS pension (30)

6.4.2 Salaries

A key concern regarding taking up a joint appointment or contract within an HEI was the markedly higher salaries for NHS roles compared to those available within HEIs, with this issue being particularly acute for those working at a more senior level in the NHS.

There's no financial incentive to going into academia because generally you get paid less than you would if I stayed just completely NHS and it kind of doesn't make sense, you see a lot of kind of job adverts for university lecturers and you kind of look at the and you go “why would I go into being a university lecturer and get paid £6.00 less an hour [...] I think making right the pay structure if you're going clinical academic. If you're part time NHS, part time university, but you're on two different pay scales for the different hours you do, that doesn't make sense

[...] the academic requirements to be in academia, rightly so are very, very high, but they don't mirror the kind of pay grades in the NHS for the kind of similar clinical expertise and experience (65)

The other reality about this is that the university can't compete with the trust salaries. I've been a XX for 25 plus years. Because I've got a PhD and I'm a consultant, I'm on a pretty good salary, and if I was to go into the university as a lecturer/ researcher, that salary couldn't anywhere near compete. And I think that as an issue (75)

I really do think it's a concern because I know when I've looked in the past to work - universities are great, but at the end of the day, as much as I love my job, I want to be paid for responsibility and what I do and I know when I've looked at universities, they're paid less than what I'm on from the NHS. (28)

So if it's a part time [lecturing] role and you split it between the HEI and the trust, they're only going to pay the trust about 6, but if I'm an 8B then clearly there's a deficit then, so that by default takes me out of that equation [...] I've looked at my salary and compared it, I would have to be, you know, you'd have to pay me the same as you would an associate Dean or a Dean of faculty. So, it's never gonna happen [...] So even though I've got lots of experience that wouldn't be a role that I would be able to apply for (110)

6.4.3 Teaching workload within HEIs

In contrast to the idea that working in an HEI might allow more protected time for research, many interviewees felt there was a lack of research-focused, university-based positions for NMAHP clinicians (see also 6.5), with an overall sense that the HEI setting prioritised teaching over research.

A key theme in the interviews was a concern as to whether HEI-based roles included sufficiently protected time for research given the perceived high teaching workload. In a similar way to clinical pressures “pushing research to the side” within healthcare setting, participants anticipated research would also be “squeezed out” by the teaching demands in the HE sector. This issue emerged as a significant barrier to many of the NMAHPs considering taking up a role within an HEI.

I know some of the issues with kind of the academic side of it is needing to give the university like hours of lecturing and what I would like it to be is like half with the university being a researcher and actually being able to do research and not having that time kind of pulled away 'Oh you need to do this lecture and you need to do teach on this module' [...] I wouldn't want the lecturing to take over the time I'd have for research [...] So I wouldn't want that to happen. You know you get 50% funded by the university which you know is your academic side of it, but actually you don't get any time to do any research because you're too busy trying to fulfil kind of the lecturing side of the post, it would defeat the object of what you're trying to do (65)

The way I see it, if it's anything like the NHS, is that if the clinical caseload gets into trouble, then that will overshadow the academic part. And if they're short staffed within an HEI, then you'll be pulled into the lecturing side of things, face to face classes, tutorials, things like that, and again the academic side of it suffers [...] So I always see like the academic bit gets squeezed on both sides. And it's just trying to ring fence that time [...] When problems occur, the research is the thing to get dropped. (102)

They seem to be sort of separate pathways, you train as an academic teacher, lecturer and you don't get time to do any research. My experience of it is all my clinical lecturers during my training didn't really do any research, they had done it in the past, you know, because they'd completed their own PhD, but once in the role as a lecturer, very, very little research. It was down to just that they didn't have time to do it (78)

One interviewee described their experience of the teaching workload in a university as “horrendous”, with some people describing significant “burn-out” within the higher education teaching workforce. Workload was specifically raised as an issue in relation to part-time working within an HEI and balancing this with other work commitments.

If you become a lecturer then it's not a nine to five job. You could be marking in the evening. You can't take holidays when you want to take them. And I think when you're used to working in the NHS, we are quite good at, especially when you've been clinical, you have your shift times, you do stay a bit late, but you don't take work home with you. Work life balance, that is one thing that has put me off (20)

One interviewee also pointed to the fact that HEI lecturers often sought to do bank work outside of their working hours to retain their clinical competencies, but were not able to sustain this due to the heavy teaching workload. Concerns were also raised regarding the lack of support within HEI environments to undertake a PhD (see 6.7).

6.4.4 Research pressures and the REF

Despite the preference for research-focused roles within HEIs, a small sub-set of interviewees flagged concerns in relation to the pressure to publish and pull in grant funding within universities particularly with regards to the “anxiety provoking” REF:

You get these emails from senior researchers ‘where are you up to with your papers? Can we have a look?’ And you’re constantly having papers accepted and they’re graded, 1star, 2star, 3 star, 4star, and it’s the 3 and 4 stars that they’re after, and if you don’t get your 3 or 4 stars in the four-year period, it’s quite stressful. They’ve got league tables of how much money you’re bringing in (41)

For this individual, a teaching and scholarship contract was therefore preferable to a teaching and research contract, particularly as their experience of the latter had borne out concerns that the teaching workload left insufficient time to undertake research.

6.4.5 Fixed-term contracts and job security

Fixed-term contracts and job security emerged as another key barrier to clinicians seeking to pursue a research-related career in a university setting. Although this was also considered to be an issue for research-related contracts within the NHS (including research delivery roles), fixed-term contracts were perceived as being more prevalent within universities:

I don’t know whether for kind of job security, the NHS Trust would be better. Whether you’d get kind of fixed term with the university more than an NHS trust – you’re there forever, aren’t you? Because I think the university quite often gets fixed term contracts, don’t you for specific roles? Although saying that they’re coming up in the NHS Trust as well kind of two-year posts (65)

I think the thing that puts me off a little bit with research posts, they’re kind of short term, you know, like the fixed term contracts and not permanent and that for me puts me off. In the NHS, I know my role is permanent. I know that’s something that would put me off not having that job security and constantly thinking like ‘OK, in a year or two’s time I’ve got to move on to another project’ and then you’ve got to get another role or put grants in and stuff. Yes, it’s that kind of lack of security really that would put me off (7)

It’s almost bordering on sort of 0 hours contracts because you’re using the staff when you have a contract or big money is coming in, but as soon as that’s finished, that’s it your job finishes at that point in time, and I don’t think that’s really building your staff for tomorrow. It’s just very short term-ism ‘Oh, we need you for this contract after that we might have you back if we have another contract in the year or two’, but it’s not sustainable for a lot of people (13)

This situation was contrasted with the more secure, permanent clinical NHS contracts. Some interviewees also perceived there to be greater job security in teaching-focused roles HEI roles, although one noted issues with voluntary redundancies in the sector. Despite an overall preference for more ‘informal’ opportunities to engage in HE teaching (see 6.7.1), one participant highlighted the preponderance of “casual” lecturing jobs as a disincentive to taking up this kind of role:

Every now and then I have emails running through to my personal mailbox asking me if I could lecture in health and social care. I just kind of - because sometimes they want to keep you like 15 hours a week, 10 hours a week, [...] that’s one of the reasons why I just ignore some of the invitations I get from such universities (6)

The financial insecurity and terms and conditions associated with fixed term contracts was particularly acute for those with dependents:

If there’s a particular research grant, you might be working on a particular project for the course of the study, but once that study ends, then what happens next? You know, there’s no kind of clear progression, there’s no sustainability. So that for people with caring commitments, particularly women, it’s very hard to make career choices - you can’t sort of see beyond three years, you know, it’s taking a big risk, especially in the current climate. So, it just makes all of those barriers even harder to sort of overcome (40)

I think that’s a big obstacle for a lot of people, particularly women, you know, if they’re having children, they’ve got to think about maternity leave, all those kind of things and a lot of research jobs don’t pay that (13)

If you’re starting out trying to get a mortgage and work out family ties and family commitments and everything like that, I think that’s what puts people off [...] you’re less likely to attract people into research if it’s like ‘Oh here’s 12 months. And then we’re not sure about this and we’re not sure about that’ [...] I think if you wanna get more people into research and interested in it, it’s finding that pathway of right, actually we’re going to offer you this job and you’re gonna have this security (48)

If you've got kind of a mortgage or a family, it's not very family friendly and if you've got commitments and you're doing something on a two-year, three-year basis - where you gonna be after three years, that's quite frightening. You kind of want some security, really (65)

Two individuals also queried the feasibility of a fixed term-contract providing the necessary support and security for an individual to undertake a doctoral qualification.

6.4.6 Financial concerns

Bringing together concerns regarding pensions, salaries, and job security many interviewees queried the extent to which pursuing a research and/or teaching related career within an HEI on a full-time or part-time basis was “financially feasible. Furthermore, the lack of career progression available had significant financial implications (see section 6.5).

One interviewee reflected on how these issues were particularly acute for more experienced NHS clinicians meaning that HEIs were potentially losing out on those with valuable clinical experience:

In my opinion, the biggest stumbling block for anybody who's worked in the NHS for a long period of time is if I was to step out of the NHS, you lose all of that security blanket. If I was to look at anything else career wise or otherwise, there would have to be a lot of certainty regarding it. [...] if I was to ever step away from the job that I've got now, there's the sense of it being such a massive gamble would probably put me off, even if it was a job I wanted. In the NHS, you've got that for the rest of your life till you retire and you've got a half decent pension compared with other things. I don't think you'll find many people brave enough to do it - I can't see anybody, certainly middle-aged doing it, but sometimes it's the middle-aged people who've got the experience who are kind of like, well, these are the areas - this is how we used to work, this is how we're working now, we can improve this even more because we've seen all this change (42)

6.5 Lack of clinical academic posts and career pathways

A lack of “clinical academic” posts allowing NMAHPs to combine clinical and research work within the NHS or across a healthcare institution and an HEI was a predominant theme in the interviews. There was a sense from many of the interviewees that these roles simply “did not exist”, and if they did, there was marked confusion over “how to get there”:

Who are these people? What? Where are these jobs? [...] I've joined a few networks and forums to try and meet people because otherwise I just don't know how to do it [...] I just don't know what that role will be, how and where it exists [...] I really don't know what's the route to find it. S that's what I feel like uncertain, like uncertainty at the moment of where I'll go (97)

Many interviewees noted that the clearly articulated ICA development was not matched by opportunities for career progression, particularly with regards to the availability of ‘senior’ clinical academic posts that reflected the level of research expertise acquired during doctorate and post-doctorate training:

I think it would be better if we had some more structure. You carry on and on that academic NIHR programme, you get to the top and then you still got the drop off point at the top. Where do you go from there? think it happens quite a lot because people get, you know, a PhD, they get to postdoctoral and then they just sort of go ‘Right, where's the permanent role after that?’ And I think that's also an issue even if you're highly qualified [...]. Once you've done all that training [...] something that will enable you to keep that clinical and academic experience. And I think it's creating those roles, isn't it? (13)

I know that there's the NIHR pathways, which is great like the internship and the PCAF and then the doctoral etcetera says so. There's a pathway in that sense, but there's not a pathway in an actual, like a tangible job [...] it's difficult, isn't it? Cause I think one thing that puts me off like I would like to go down further in the NIHR pathway like maybe a PhD, but then you think well, would I just end up in my - when I've finished, would I just still be in my role that I'm in now, and you kind of think what's that for? (7)

So it's all very exciting being bought out of your clinical role for three or four years to do a PhD, but after that, at the current way things are in the trust, you would just be expected to go back to your current full time Band 6 role [...] there's nothing, there's no kind of onward development [...] Do the research for the love of doing research, but do not expect that it's gonna change anything for you like career or job wise or anything like that or come with a bit of pay progression or something [...] it's something I've had to kind of try and come to terms with. I feel the last couple of years if that's what I want [a clinical academic career] I'm not gonna meet my NHS earning potential in terms of climbing up the career ladder nursing wise (99)

I could go straight into a PhD if I could get funding or if I could find one, or if I found it myself or something. But once I've finished my master's, what is there for me to use my master's on or is it just a tick box that I've got a masters in research which isn't gonna add anything to my career [...] I feel like it has to go somewhere, but where? [...] What's the point in going down that pathway to end up - the whole idea is that you kind of do a scholarship, you do a PCAF, if you do a master's, you do a PhD. Where does that take you? It's great, you get letters after your name, but where does that actually kind of end up [...] It'd just be nice to be recognised if you have a PhD, you are top of your area of expertise and that should be rewarded in some very high clinical role. [...] I could imagine if and when I get a PhD people are going to assume that I've got a ridiculously high role that's very well paid and I'm the top of everything. It won't make any difference. I'll just be doing what I'm doing now, but I can put doctor on my passport. (65)

As one interviewee pointed out, taking time out from clinical work to undertake academic study also impacted on their capacity to acquire clinical experience that more readily translates into career progression within the NHS.

Although many comments related to the lack of senior “clinical academic” roles, some interviewees also noted a gap in roles at an early- and mid- career stage.

So, I haven't really seen anything in the NHS [...] other posts usually you have to have a PhD, don't you? I don't know. I think I'm still navigating it all and trying to work - it's still feels a bit hazy[...] I know they've got the advanced clinical practitioner roles. Well, again, I mean, I feel like you've got to be very experienced with that [...] they're usually for people much, much further - all the people I've seen who hold those posts are so much further down their career [...] For early career researchers, what's available? [...] it does feel like there's this gap where there's just no - there aren't the posts. I think it would be creating a clearer pathway [...] Almost like a bit of an intermediate kind of role (7)

One interviewee also specifically pointed to a lack of “mid-career” opportunities in HE-based roles:

In universities, there's a lot less roles available. They've got sort of professorial roles at the top and lot, lot less infrastructure between the two, so. [...] you know, research assistant and professor at the top in our AHP department. So, there's no sort of associate professor. There's no reader. (13)

There was a strong call for more “entry level roles” combining clinical and research work at a lower banding, for example, in research delivery (see also 6.7.1). However, some interviewees reported that it was generally “frowned upon” for early career clinicians to take up positions outside the purely clinical sphere, with an expectation that they first needed to build up their clinical experiences and competencies before embarking on a research/teaching career:

The midwives I've seen go into research, have been midwives for about 6 years. 5-6 years seems to be like a magic number and I just think yes, I could potentially do it for another couple of years and reach that magic number. But by that point I want to be doing something a bit more like, you know, I've worked a long time to get to somewhere by that point, not just to be starting out at the bottom and still have potentially another four or five years before I'm somebody really like in on the studies or, you know, making a real, big difference (97)

The lack of roles and career progression opportunities was linked to the absence of a clear career pathway for combining clinical and research work in comparison to the “linear” models of career progression available within the clinical sphere.

I'm really not clear now on what going forward looks like [...] I do feel like it's a bit of a fly by the seat of your pants type situation and see what happens. And I feel like I've got my head round that a little bit now that it's not like your clinical progression where you do this and you do that and you might do this course and you get some competency signed off and then you're really well placed to go for another job (73)

I think in all honesty to help grow clinical academics would be to have those clear pathways that people could follow, whether it's an NHS thing, you know, kind of your band 5, band 6, band 7, you kind of move your way up. People like quite a linear progress. They like to see the routes, you know, if there's stepping stones that move parallel perhaps to the NIHR ICA pathway (102)

Often, people expressed a desire for an established career pathway and framework that mirrored the medical model.

I think you look at the medics and you look at their career pathway and they've just got it set, haven't they? They've got an entire training programme that takes them to consultant and along the way they're expected to do research. (30)

Some did note that the ACP-consultant route had started to “open up” a pathway within their trust, whilst others reflected that “educator” pathways were becoming more available within NHS organisations:

We've got a career pathway and we've got roles in education from Band 4 educators who are our NAs all the way up to 8A and 8B educators. So, we have a real career framework, sorry career pathway. [...] And so we've got a really kind of good pathway now for people coming into education that gives people development. So, you can come in as a band four and obviously there's opportunities then to progress to five, 6-7 and eight whereas in the past when I first started in this team, if you were a band four, there was absolutely nowhere for you to go because the other jobs were band 7 (110)

Although ACP and educator roles were valued in terms of creating alternative career progression pathways outside of managerial roles, it was generally considered that these were not “academic” trajectories (see also 6.3.2).

Overall, a lack of career progression opportunities for combining clinical and research work meant that many interviewees described having to make a choice between leaving the healthcare environment to seek limited research-related roles within HE or remaining in the NHS and “giving up” on their research ambitions:

Part of me is also like I think I'm just gonna look outside the hospital now. If something is based in a university as a research assistant, I would probably leave the hospital to go and work there [...] I do feel very much like I'm on the outside looking in to that academic world, that research world and I feel like you have to be somebody who works at the university, is doing a PhD. is going to teach and lecture sessions - I don't know. I just feel like you become that person if you want to do that kind of work. I feel like it's either I do that or I don't do that. And I feel like well, I am still that clinical person and I don't wanna just work for a university. [...] It just seems one or the other to me, and that's why I feel a bit like maybe I should just commit to the research, you know, the academic and forget [the clinical] (97)

I still feel there's quite a separation, so if you go and do like a PhD, I'll think you maybe do end up more perhaps in academia and universities and teaching and applying for grants and things rather than [...] Although there's more sort of roles merging the clinical and the academic, but there's no job description as such, which is really difficult [...] it does still feel, unless you have been lucky enough to create your own post, they are quite separate. To either be clinical or...[...] the NHS has got clear pathways and probably there's probably stuff in academia. I mean, there's probably pathways in academia as well. But it's merging the two (7)

In reality, I think those [clinical academic] job positions are just very few and far between. Like they don't seem to, it doesn't seem to be a thing. It's either, you know, you're either a healthcare professional in clinical practise or you are in academia and you're kind of based with the university. And there seems to be very -it's either one or the other. I mean, I think there is a view for it to be more merged and that's so needed, but at the moment it feels like they're very separate things (27)

For those committed to finding a way of combining academic research and clinical work, interviewees described having to “carve out” and “forge” roles and pathways for themselves. People variously described having to “build” their own jobs without clear job descriptions or “blueprints” of what those roles might look like and how to get there:

The job expectations and roles are I think the bit that I really struggle with. There's no clear job description or definition, so it's really difficult to know what do I need to do to get to that next level and what does that look - what does that role look like? [...] I just don't know what the roles are. They said you kind of really have to create a role (7)

6.6 Support from host employer

6.6.1 Organisational and professional cultures

Many of the interviews highlighted a lack of embedded NMAHP research cultures within their host organisations as a key barrier to pursuing a clinical academic or academic career.

In particular, interviewees described a lack of understanding and recognition of the value and benefit of NMAHP-led research in relation to healthcare organisations’ aims and objectives, for example, retaining and recruiting staff and improving patient care.

I think it's the value, isn't it? And I think it all comes down to sort of maybe a higher level recognising how that fits with your organisation [...] there's a lack of awareness about what this [clinical academic] role is and how it fits [...] I don't think there's any sort of buy-in at higher levels, it's just that unknown. Think about what advantages that can bring to the organisation [...] It's seeing that bigger picture. And I think there is a little push within the NHS to consider actually we need to retain stuff and actually that is part of retaining staff for me because if you have

people who want to be involved in research but can't, then they'll move unfortunately, and I think you want the best staff and usually they're gonna be the staff who are doing cutting-edge research and they know what's gonna be the best thing for their patients. They're gonna probably go the extra mile because they're interested. It's kind of beneficial for your service in terms of quality. But I think that's a fixation on numbers as opposed to what quality service you can offer sometimes. And I think that's why we don't get the release unfortunately (13)

It was felt that in prioritising clinical work, organisational and professional cultures did not recognise research as “part of the role” of an NMAHP clinician resulting in it being viewed as “someone else’s business” and with little “expectation” to engage in activities outside their core clinical remit.

I think the culture within the NHS is that research is for researchers and everybody else does nothing. So, they don't understand that concept of the big R of research and the little R using evidence-based practise. Therefore, you must have done some research to inform that. We need to do a lot of work around what research actually is. [...] do your Band 5s on the shop floor even know what that is and what does it mean to them and what's in it for them (110)

Working on the wards, you don't know anything, you're not taught -it's [research] is not part of mandatory training. You don't know what research is happening in your trust a lot of the time [...] if you went to the wards now and asked someone like where's the clinical research facility and where would you find research? Do you know what research is happening in your hospital? A lot of the time, you know your normal band 5, band 4s, band 6s will be like 'I don't know. What research? What do you mean?' (48)

The main thing is an awareness that it is a possibility to do research [...] I think there are lots of people who would be interested in it, but it's just not on their radar and they don't see it as a possibility. They see that either I need to specialise in research or I need to be a clinician (54)

Some interviewees commented that support for NMAHP research was often only seen through the lens of “research delivery”:

We are very research active in delivering studies. But that's the understanding. That's 50% of research. The other 50% is developing primary research, bringing money in, bids. We're not doing that at all. There's nobody really doing that other than a little bit. So, the support is there in terms of, yes, they'll pay for me to do a master's. But do you understand the core problem that yes, we are delivering research, the NIHR sent you a study and we get a PI and we collect data, but we're not developing it. We're not writing protocols; we're not doing research projects - we've not got the other 50%. So, it's trying to get that message through a bit more that I'm struggling with (65)

Limited organisational funding for training in research/teaching and a lack of communication and information about related career and development opportunities (see 6.8) was also linked to these wider, cultural issues. Increasing opportunities for undergraduate students to engage in research and learn more about potential careers in research and/or teaching was also flagged as an important mechanism for “normalising” academia as part of the professional identity of an NMAHP clinician (see also 6.7.3).

Moreover, a number of participants reflected on how organisational barriers to pursuing a career in research/teaching reflected a more systemic lack of opportunities for professional development and career progression in the non-medical clinical workforce, particularly within nursing, exacerbated by an increasing clinical workload and staffing shortages. One interviewee, for example, described how their career goals had been “left behind [...] and put on hold” in the face of clinical pressures. There was a sense that pursuing further professional development, particularly outside the immediate clinical role, was at odds with the core identity of these professions.

It doesn't feel like there is a particular impetus upon actually developing the nursing workforce [...] the way we think about nursing staff is that anyone who's ambitious who wants a career is like 'nurses don't argue'. Nurses should just care. That's what nurses are here for. [they] should just care about people. If you're ambitious, you're a bad nurse [...] There's just no development and everything we do - so much of what we do is in-house. [...] even trying to get them just any opportunities. [...] we're stunting people straight away because the progression jobs that people want to go to require development that we don't offer them [...] we are losing really, really good staff every single day because they'll tell you there is nothing for me, there's no development, we can't progress - we don't make that available to them, and I think as well, this might not be across the board, but it's because of the way we think about nursing staff (30)

Nurses and I'm sure for AHP it's the same, still don't get protected CPD time [...] We're all under pressure and the clinical work comes first and that's fine. But then where do you stop and start developing people? (28)

Unless it's built into your job description, they don't want to release you for it. And if I had the time and they had a path, then yes, I would have followed it without a doubt. But the pessimist in me feels that even if they give you that time, they wouldn't have wanted you to follow that path because it's taking you away from what you're actually employed to do. (95)

A small sub-set of interviewees also described how nurses, in particular, were less likely to be “assertive enough” or “push” themselves to chase an academic career, with one interviewee noting that they were unlikely “to fight for the opportunities in the same way the medics do”.

In the face of these cultural barriers and in the context of the current pressures on the NHS environment, a number of participants expressed a sense of guilt in undertaking research and/or teaching activities that might negatively impact their colleagues' workload and/or patient care:

We've just got such high clinical demands that it feels quite selfish often taking time out to work on a project or writing a paper or whatever it is [...] I really want to develop my research skills and I want to do XYZ, but you've got to work quite hard to justify that sometimes (1)

We're very short staffed at the moment, so I wouldn't feel comfortable to say “Yeah, I'm gonna quit half my job cause I'm gonna go off and do some research” and because of the other team members really and sort of how it would affect patient care as well (18)

Obviously at the end of the day, your patients will always come first. So I wouldn't take myself away and just say I'm gonna have half a day just to do research, I wouldn't do that. I always put them first (95)

6.6.2 Senior strategic leadership and commitment

Senior strategic leadership buy-in and commitment to supporting NMAHP research was cited as a key enabler in driving the cultural change needed to open up development and career opportunities in research and/or teaching. NMAHP research leads within NHS senior leadership were considered particularly valuable in terms of “push[ing] the agenda” and developing targeted organisational research strategies. A number of interviewees called for more strategic support to embed research into NMAHP job plans and appraisals as well as to develop ‘clinical academic’ roles.

For some, senior-level support and influential connections were a crucial part of helping them build their clinical academic career pathway:

You need that person that also believes in what you're doing and has the same vision and the same ethos of trying to promote research within a trust [...] have a good working relationship with someone else who's very senior and has the same vision and the same kind of ideas about moving forward with the research (50)

6.6.3 Collaborative leadership

Interviewees recognised the importance of senior leadership commitment across HEIs and NHS organisations to strengthen cross-sector partnerships and develop the collaborative working arrangements needed to create joint appointments. One interviewee, for example, pointed to the need for universities and trusts to write a “joint strategy” supporting clinical academic careers. Another highlighted the importance of “system leadership” that recognises the importance of building cross-sector relationships and collaboration to identify shared goals and challenges. Integrated care systems were cited as a key driver in this regard. Recognising and articulating the reciprocal value and benefits of supporting clinical academic careers was cited as an important part of building cross-sector commitment:

It needs to be really clear what this person will bring, what their focus will be, so there was this really simple way of demonstrating the value, which was that the clinical academic supported say 5 students on a research placement and so that brings in tariffs if that's a new placement that we wouldn't have had before, that brings in student tariffs, so you can then say this tariff can go to funding our part of the role. And there needs to be that joint funding and it might only be two days a week. It doesn't have to be a lot. Somebody can have a normal clinical role, but then two days a week can be really focusing in on research and clinical academia [...] we needed that cooperation between the trust and the HEI. We needed both of them to understand the value and the benefits that that brings to the team, to the patients and the opportunities that brought to other people. (34)

Some people went onto discuss the specific requirements needed from a joint contract. For example, the importance of joint objectives and PDRs across both organisations were highlighted, ensuring that these were realistic and sustainable for the clinician and of mutual benefit to the HEI and the NHS trust based on “understanding the needs of both places”.

Another interviewee highlighted the importance of working with centres in the region that are further ahead in terms of building these connections, such as the clinical academic centre in Manchester.

Why don't we ask them how they have done it? How they are doing it? What did they do to start it? Why have they been able and how have they been able to be in the position that they're in? (75)

This kind of collaborative working was felt, by some, to require a reexamination and strengthening of existing relationships between the two sectors, reflecting on a lack of HEI “visibility” in the healthcare environment and a sense of a cultural “separation” and “divide” between the two sectors:

I think at the moment they exist quite separately. Unfortunately, I don't think they're fully integrated, I mean, it should be, but I don't think it is [...] it's almost culture as well. Culture and value systems. And that is a big obstacle really of how you integrate it more. But I think there needs to be in buy-in very much at sort of top level, commissioner level [...] there needs to be buy-in at the top to say we need these clinical academic roles so that they can filter through the system (13)

I'm coming from very much a clinician's point of view from the pressures on the ward, you know, the pressure clinically and that it would be nice for the university to maybe come in to understand - give us their ideas, but maybe understand the everyday challenges that we have with just the working environment that we're in and the challenges of just treating the patients and the general workload [...] Also it would be nice for them, the universities to come into the working environment, more even if they're just saying 'Can you find us a sample of patients for our particular research project. Or can we present our latest research to you? [...] then we would get a better understanding of where the universities ambitions are as well (98)

This separation was felt to be particularly marked in the context of student placements, with a number of participants pointing to perceptions of a “power imbalance” and “frictions” between the two sectors:

Better integration. In the past, lecturers used to come in to the trust and stuff and then after Covid that all stopped, like, they didn't know who we are, we don't know who they are [...] You don't have any contact with them and they don't come into the trust. We don't get invited to meet them or anything. I think we need better communication and better collaboration and just a better relationship really (104)

Rather than being two separate places, why don't we look at it as one? We're all looking after these students [...] but it is viewed as 'they're asking us to take more students' and you don't see anything for it. I get more students but I have exactly the same number of staff in my clinical team. So, there's no reflection from that respect. [...] I think that it is becoming really difficult and the student experience then is hindered because of it. [...] So, higher education might assume this is the training and this is what they need, but do we actually ask clinicians and teams what they want from us? I don't think we do (25)

We take students for their placement then we send them back [...] I don't feel I'm part of the university by taking a student and maybe that would be better in a way. I don't know how that would work. Maybe that would be nice if you felt like you weren't babysitting them or like you're doing them a favour by taking their students. [...] It would be nice if it was one big - we're all in it together really. So, one workforce. I can see it from a slightly bigger picture in that if we do good placements, we help the workforce. [...] But it does feel like it's put on us and it's our responsibility to do it and, yeah, not much communication from the HEI (65)

Some interviewees also queried the degree to which course funding “flows back into the [healthcare] teams that are providing some of the education”.

Strengthening cross-sector partnerships was felt to require a stronger focus on shared goals and challenges and a sense of being “one workforce” whilst recognising the distinct “priorities and pressures” of the two sectors:

By their very nature I know NHS England is, you know, a separate thing but the NHS is focused on sorting out its patients like ultimately that's what all of it is set up to do and the university is set up to train nurses and do research - just the very nature of those two different focuses, they don't have a unified way to look at anything, even though they're involved in the same thing. I don't know how you overcome that, because you're never going to change the goals so you really need buy-in from those people. [...] It's about finding some shared goals that can be genuinely agreed upon together. I think that is ultimately the first step, isn't it, you can't fix the whole thing, but just starting with some shared goals that can actually be achieved and worked on together and like starting small and working up (43)

We're asking for placements and people are saying no [...] but it's only when you went into the NHS and worked with them on the shop floor or in senior management positions that you understood why facility was reduced or what they were actually experiencing. So, for me I think there's got to be a link and you've got to have somebody working full time in an HEI say for teaching on the healthcare programme, [...] you need to spend time in the NHS to really understand the function [...] So I think there is something to be said about being able to navigate between

the two to really be able to fully understand what our offer is, what our support is and how we work together. But also, 50% of their [undergraduate] programme they spend in clinical practice, but it is very much they belong to the university. And that's something again that I think needs to be looked at is that actually we take joint responsibility rather than feeling that actually we're just there to provide placements because that feels like the message that gets put out there and it really shouldn't be and it isn't really the case, but it is the perception I would say of people on the shop floor {...} I think we need to work better together to understand each other (110)

It's just really building those relationships, taking time to do that, to take time to look up and to focus on what we can do together. Because we've got brilliant people in both areas, we can create sort of, you know, new working relationships [...] Just building that I think because we need to - for retention of staff, for growing staff across the board. We're all in the same boat, we're all getting older and we need to really inspire the next generation to have that sort of leadership in research, teaching, education. If we're not teaching – if we're not encouraging a really good proportion of our workforce to be educated, we won't manage the targets that are set in that workforce plan. They're expecting so many more people to be trained, so we're all gonna need to be educators in the workforce to an even greater extent so I think doing that with a really strong eye on the evidence base, a really strong eye on what's the best thing for patients (34)

Relatedly, one of these interviewees noted the importance of opening up senior, HEI-based administrative and managerial roles to those with equivalent experience in a healthcare organisation to help bridge the divide:

So, there's a job just been advertised recently that I've looked at and that's in a university that I think says something around like extensive experience as a senior manager in the NHS [...] But that's the first time I've ever seen that stipulated in a JD 'cause it's always been about your experience within an HEI. So, you've had a very HEI career, whereas that felt very different. That felt like they were saying to somebody actually we value the experience of senior managers in the NHS and we know that we would benefit from having them in the higher education institutions (110)

Overall, there was a sense that both institutions needed to focus on “what we can do together”, particularly in terms of addressing shared recruitment and retention issues:

They just need to get together and agree to have joint posts, don't they? Just to me that seems quite simple, but who has got the incentive to do that? I guess both because both the NHS is short clinical nurses, the university is short of lecturers, so to me it seems to make sense, but I don't know anyone that has the impetus to make that happen (8)

Other suggestions included exploring ways in which the universities might be able to reduce the costs for NHS clinicians to undertake masters in return for an arrangement in which the recipient would contribute to HEI teaching as well as fulfilling an educator and clinical role within the NHS. Another proposed that universities invite recent graduates to share their experiences with undergraduate students, providing mutual benefits in terms of preparing student for the transition into the workplace, adding value to the course and opening up an HE-based development opportunity.

Working together to support student dissertations was also highlighted by some interviewees as a potential area for strengthening cross-sector partnerships in terms of identifying clinically-relevant topics that could “add to the evidence base”. One interviewee reflected on the gap between the university setting and clinical sites through the lens of their recent experience undertaking a postgraduate project:

Literally down the road there's that huge hospital full of lots of really useful hospital people and we can't really get anything out of them - there's not a link there that can help once all the students get to that point.[...] they were just never involved in it [...] nobody comes forward from the hospital like 'well, you could do this thing for us or you, you could help us out with this thing that's already running' 'cause I was happy to jump onto something, but there was no back and forth in that sense. I found that quite frustrating. (97)

Similarly, some interviewees identified a gap between HEIs and NHS organisations in terms of access to academic research:

There's a massive gap between the university and the trust- even when you try and get involved. So, I tried to get involved with like a research group that was related to my area and all they really were offering was 'Can you recruit to our study? It's like they don't really see us like actual academics to actually get involved in running projects. It's more like what can we get out of you? They see us as a way to access patients, but not as actual like collaborators. (99)

Improving cross-sector research collaborations was felt to have important mutual benefits in terms of enabling greater alignment between academic research and clinical priorities and processes, ultimately improving the translation of research findings into practice:

I would like to see more helping us as clinicians explore research that would really relate to our practice, perhaps on a smaller scale, perhaps at a bit of a lower level, [...] I guess it's more around what do we need as a service or as a team? What sort of knowledge are we looking for? What sorts of areas would we like to research as a local service, and how could that be assisted maybe through the universities [...] it's quite hard to see how some of the research that's gone on can kind of help on that clinical basic level, it's quite hard to relate to it sometimes and to translate the findings into practice, it's really quite hard sometimes to understand. So, I think support and help around that would be useful. What does that actually mean to us and how can we use that knowledge to assist our practice? (21)

When they [academics] come into primary care, they haven't got any idea how that actually works, how it operates, how it's set up. And how we can sort of drop research into our everyday practice. They will come in sometimes with designs of studies that are just in no way, shape or form and we've actually gone back and said 'look if you just changed this a little bit or you look for this instead of that that will get your participants much easier. It will be quicker. I think there's just that sort of gap between [...] how much time things take in academia, [...] we are very much of that mindset of our resources [...]. Anything that we do that takes away from patient facing care, it has to be efficient and it has to yield the result in one way, one form or another. And so, I just think that's where there's just this massive culture clash almost between academia and primary care. It's just a different world I would say, it's very, very different [...] I just sometimes think it could be so much better if we could make the two meet somewhere and actually have an understanding of one another [...] even just putting primary and secondary care together in a room or putting academics and research delivery teams in the room to actually talk. I just think there would be such opportunities for us to raise some burning issues and how do we do this better, how do we reach harder to reach populations and work together to do that. (76)

Similarly, others suggested increasing opportunities for clinicians to connect with and learn about academic research being undertaken in their clinical areas. Two interviewees suggested “exchange programmes” through which clinicians and HEI-based researchers could share knowledge and expertise.

6.6.4 Managerial support and prioritisation of clinical work

In terms of a lack of organisational support being a barrier to NMAHPs pursuing a career in research and/or teaching, it was middle management support that was most commonly cited as the key issue.

I think this is about the education of the managers [...] it's not like they've got one person a week coming up saying 'please, can I be released from my role?', you know, nurses who want to do research, there's about one in every 100 million people! [...] I know that services are tight, but ultimately most of the senior managers I've spoken to have said they don't come around often. And if you've got someone who wants to do it, just let them do it. So, it's about educating middle managers around how best to support people to do this when it does come up, which is going to be hugely infrequently. [...] teach those middle managers that it's not hard to say yes and it won't ruin their service (43)

I think kind of the top people are pretty good at saying how important research is and that it's not separate to NHS work, like it's part of it and we have to work together, but I feel at the moment there's just lots of managers who [...] still don't understand, don't wanna know. And so, I feel like research being seen as a priority needs to come from high above and that like that is happening, it just feels like people aren't hearing it. And all 'cause they just don't get it. [...] Managers don't get it, so they're just blocking or just stopping progress from happening (27)

As alluded to in the previous comments, there was a sense from a number of interviewees that although there was some degree of buy-in at a leadership level, this was not translating into organisational objectives and outcome measures that might help managers be more supportive of clinicians wishing to take their career in a research/teaching direction. Instead, clinical workload “always takes priority” at a managerial level, with limited recognition of the value of NMAHP-led research:

It's not seen as a priority by the people who are managing you [...] I mean they will encourage things like audits and things like that, that they see as benefiting the service you're delivering, but I don't think they really see the benefits of research. They just see the fact that you won't be in your clinical role for a certain length of time. [...] they would rather you didn't take time to do things other than your clinical world. That's what they see as the priority. [...] if it's not a priority from above, it's not something they will prioritise. I think if they're told from above, yes, this is a priority we want to get X amount of people involved in research then they may - that's the target they've got - they may be more willing to push that and allow that (54)

At managerial level I think there's a lack of value around sort of that role and what it can bring. I think there's a sense of unfortunately 'who do we need to see within this time' and actually 'I don't have a box to tick to show we're doing research' [...] The parameters are how many patients are being seen within this time [...] so their parameters about what success looks like are very much based on the clinical outputs not on the quality of the

outputs and I think research feels a lot of the time that it's not measured and maybe that comes down to actually 'it's not important, it's not on my list to tick, it's an adjunct to what we do and it's all very nice and it looks good on paper, but actually for me at ground level what I need to achieve are these things, not research' - that almost feels a little bit sort of extra for them I think so it it's not valued, the buy-in's not there. (13)

The manager's priority is always clinical no matter how much the talk is spoken. I can see a shift in the culture in the NHS as a whole, which is very positive, but I think at the end of the day, many inexperienced managers have a very much clinical focus. That's their metrics. I don't know of any strong metrics that can challenge the clinical aspects with regards to their key performance indicators for individuals that are clinical academics (102)

6.6.5 Study leave and protected time

With a lack of managerial support and in the face of increasing clinical pressures and staffing shortages, interviewees described having to “battle” to be released from clinical duties to access research and/or teaching development opportunities, with study leave often refused (see also 6.9).

I am desperate and I mean that word truly for them to make this whole thing easier. I don't think it should be this hard if you think about how many nurses are trained and out of those trained who want to go into research, we are talking about needles in haystacks, and so for those people who want to go down that path, I want them all to just make it easier, make it easier for us in terms of how we can be released from clinical practice [...] just make it easier, that's like literally my plea (43)

I think because the NHS is so pressured in terms of like nobody's got enough time, there's always patients, there's always very, very poorly patients, often clinical work is seen as a priority rather than R&D. Opportunities for CPD get taken away from people and they're not seen as like essential which can mean that staff miss out on opportunities. (27)

The service is just so under strain. [...] until they sort the staffing and retention out, I don't think we can even begin to have the conversation about releasing people. [...] we've got a lot of very practical, basic things to sort out before we can carve out anything as great as a clinical academic career. I think it's a really hard road (78)

In particular, a number of people noted a lack of support for early career clinicians to access training and development in research and/or teaching, often meaning they were denied study leave (see also 6.7.2). Two interviewees also pointed to difficulties with accessing study leave on rotational contracts.

A lack of protected time within clinical roles and job plans to undertake research and/or teaching activities, apply for training awards and/or access related development opportunities was another key theme in terms of a lack of organisational support (see also 6.7.2):

There's Qi projects, there's audits. So, they say all the nice buzz words, but they just don't give us the time to do it. It's always like you're chasing things and I feel that if I had a couple of hours or even half a day or, you know, a luxury is a day just to improve services, that would be really, really good [...] I have clinical cases as well as a manager your responsibilities for the team too and then we have students thrown into the mix. It's so many things. It's a lot of things being juggled at the moment, and so it's finding that time [...] I think it would be good to have that ring-fenced time that you're not doing - like non-clinical thing, it doesn't have to be a day, even half a day or even one day a month might be more than enough to have a look at ideas (95)

That's the difficulty we don't have time in our job plans to factor in doing research off your own bat sort of thing. [...] every spare moment that anybody's got they're just back to the floor and working clinically because there's just not enough staff. There's not enough time in the day and that's just how it is, you know, you need multiple people whose are job plans are half clinical, half research and then you might get somewhere (42)

It's always down to time and what's on the job description and what time people have got and they're always being asked to do more and more stuff[...] They talk about us being in research, but some of the job descriptions don't have research in them. I mean, now and again I look at what's available. You know, we're talking deputy ward managers, it doesn't mention research in their job description. The one line is research and audit if t's there, well, we're not audit - we need some basics going in. (69)

6.7 Funded training and development

Overall, there was felt to be a good range of training and development opportunities available ranging from the ICA pathway and the ECRDP programme to free sessions run by NHS knowledge and library services and NIHR YouTube

channel webinars. However, there was still felt to be a lack of funded opportunities to undertake academic study, especially with regards to master's and doctoral-level qualifications.

The ICA programme, for example, was frequently flagged as important enabler in supporting NMAHPs to build a clinical academic career and defining a clear development pathway. In addition, the backfill funding was particularly prized, although this did not come without its problems (see 6.7.2). Yet, many interviewees cited concerns with the level of competition for these awards. The complex application process and eligibility criteria also contributed to the feeling that these opportunities were "unattainable", compounded by issues with accessing organisational support (see 6.6).

Although the introduction of the PCAF and bridging schemes were recognised by some as going some way towards helping to address this issue, competition was still felt to be too high for the limited number of these "gold standard" opportunities, with few alternatives to "break into that space".

The NIHR thing, their schemes really good [...] in the sense that you still get your salary and they pay to backfill your post, I think that's what makes it quite unique. In other opportunities, you don't get that salary or even if you apply for other fellowships, I don't think you get that backfill, that salary like you would with the NIR ones, so obviously that's what makes that really competitive and that's kind of the ones that you want to be looking at probably for that reason [which] narrows that down, doesn't it? (7)

To reduce competition for these awards there was a call for more funded opportunities at a regional, local and organisational level. One interviewee, for example, suggested having a regional-level development pathway mirroring the ICA programme to help reduce competition and make opportunities more accessible:

I think having similar options if that's [NIHR ICA programme] too competitive, or if people give that a go then is there a second stream? Is there another option that sits below that, maybe on a regional level, which almost mimics that, but perhaps isn't quite so competitive on a national level where the bar is set so high [...] why can't you have a second stream or a third stream, or a fourth stream where the funding is maybe less, but again comes from somewhere else where you're not losing these individuals who otherwise would have potentially excelled (102).

Another interviewee called for "ring fenced money" for those interested in an educational career to undertake a masters. It was suggested that this funding could be predicated on an agreement that the recipient would work for the trust for a set amount of time. One participant also pointed to the issue that internationally-educated nurses were charged prohibitively costly international student rates to undertake a PG Cert. Overall, there was felt to be a lack of CPD funding available for NMAHP clinicians (see also 6.10), with one interviewee describing the difficult and off-putting process of applying for funding:

The training budget is extremely limited, so you might get it [the course] part funded, you wouldn't get it completely funded [...] and it has to go through a big panel and you have to go and justify it all and all this kind of thing, which is fair enough, but then that almost puts you off as well doesn't it? (98)

A lack of funded opportunities had led some people to self-fund or consider self-funding academic study, although the financial impact was a clear barrier, especially in the "current climate".

Two interviewees also raised the issue of the financial impact of reducing their clinical hours in order to undertake a part-time PhD:

The main one is that at some point I would like to do a PhD. [...] and if I was doing that part time then would I be able to meet my household requirements? Would I be funded to actually have a stipend as a PhD student or would I essentially be dropping my wage in half to then be on student support and it's that idea of - especially if you're then doing part time study how that takes even longer -how long am I taking a financial reduction in order to benefit? (1)

I wanted to do a masters, but I couldn't afford it. Gotta pay the mortgage. Got to eat, you know, practical considerations. I couldn't get funding, couldn't get the time out. It would have meant changing my contract, you know, reducing my hours. [...] So I decided it wasn't worth it. (78)

Others were concerned that there would be "no job to come back to" if they were to take time out to pursue an academic qualification:

A lot of it for me is to do with job security and knowing that I will have a salary to come back to if I step out onto fellowships and things like that, that there will be my old post available still [...] I think that at the moment is quite a gamble. (73)

Getting a sabbatical is a massive ask and with no guarantee of your job being there for you when you get back so it feels like if you go down that pathway then you have to accept that you're gonna lose your clinical post or you

couldn't guarantee that you'd come back to the same post at with the same contract [...]. So, it all feels too insecure. (78)

I have a colleague actually who went off and did a PhD and then when she came back, they basically said 'Oh well you can't, your job's basically not gonna be here any longer'. And she felt that it'd really contributed to the fact that they'd said we're getting rid of your roles that she'd been away. So, I suppose I would have concerns around that as well. I'd need that guarantee that actually if I go off and do this on a secondment or with funding or whatever is it guaranteed that when I come back a job would still be there. (18)

A small sub-set of interviewees noted that they were too near retirement age to consider any further study, whilst others flagged the challenge of returning to academic study after being in employment.

6.7.1 Entry-level opportunities

A key theme was the need for more informal, accessible "entry-level" opportunities for clinicians to develop their knowledge, skills and confidence in research. Suggestions included one-off introductory workshops and stand-alone modules, as well as opportunities to take part in small research projects or get involved in research delivery.

These more 'informal' opportunities were particularly valued as a way for people to develop their research competencies and capabilities in a way that fitted in and around their current role and allowed people to gauge their interest without having to commit to a longer-term academic trajectory:

I think it's a big commitment, isn't it, to go into it sort of full speed kind of thing. So, I think certainly things that introduce you to it gradually. So maybe tell you what it is or something so that you can experience it a little bit and do something sort of a really small project or like a literature search, something like that. I think that would be helpful to kind of spoon feed you really to get to the point where you go actually 'yeah, I do really like this. I'll go ahead with it'. I think it's quite scary prospect to change and go 'oh yeah, I'm going to go into research 'cause if you hate it, then what do you do? You can't always go backwards (18)

It's a new NIHR thing [...] it's ultimately like master's units that teach you about clinical research, but you don't have to commit to a whole kind of master's and you can build your own programme, so you could perhaps work up to being like a PI or be involved in research, but not necessarily committed to a clinical academic pathway (43)

Being involved in research, not necessarily doing your own, would have been a really good stepping stone for me. I think I would have really enjoyed trying it and understanding a bit more 'cause I've just felt out of my depth quite a lot [...] pathways into it that are less of a commitment because that's the one thing nurses don't have is time and resource - giving them a stepping stone like the internships are amazing [...] just an easier way to get exposure to this stuff that feels less of a commitment (43?)

In addition, these kinds of opportunities were felt to be less 'overwhelming' and 'intimidating' than studying for an academic qualification for those with limited research experience, knowledge or confidence in their academic abilities:

I do think there needs to be something that's a different type of programme, that's less scary, that's gonna stop scaring them[nurses] about research. To actually show them that research is a good thing, it's what makes changes you can create material, you can massively contribute towards developing services, innovations, treatments, interventions [...] I think we try but everyone gets scared of it for someone unknown reason and they don't know why. It's cause it's always for doctors, isn't it? It's that old 'research is done by doctors' [...] it's about that inspiring people, I think, and helping people to change that viewpoint that we aren't good enough, that we can do it equally as good (50)

It's making it much more approachable [...] like a XX conference and basically our AHPs had to do posters and abstract and most of them had never done a poster in their life. And when I asked them why, it's because they didn't know what to do and they were scared of it. And at the end of the conference, we evaluated it and we looked at confidence levels and things like that. And it was crazy how much it changed purely because I'd given them a route that wasn't daunting [...] training sessions looking at how to publish a paper, how to write an abstract. [...]. You lose really great work that clinicians are doing because they just don't know where to start. So, I think we need to simplify it and go back to basics (25)

When you say about building career pathways it always seems to be you do a master's and you do a PhD and then you do this and you do that and you're like, that's kind of not my pathway. [...] if you say 'oh we're gonna do this academic thing' as soon as you say 'academic', people go 'Oh I'm not clever enough for academic. I'm not an academic'. [...] But then if you've heard it a different way, like we're doing a workshop on XY, Z and you don't use

certain terminology and certain words, you pique the interest of people that you wouldn't normally depending on the word you've used. And it's having like them dip in and dip out - I'll do a little bit of the this then I'll go back to my usual job. Right, I'm gonna do this and this and add on to that and do like a stepping stone type of thing in small little manageable chunks (48)

Others flagged the need for alternative training and development for those without the relevant academic qualifications:

I think it's very much about you what academic achievements you've got, what degrees you've got, what master's degrees you've got [...] I suppose it's just thinking about, are there any other ways that people can access opportunities and open things up really to people from different backgrounds that might not have taken a traditional route, for example, I mean if you think about your nursing workforce [...] how do we open up opportunities for people and bring people with different types of experience. Is there some overlap there could research and education perhaps think about other ways to give people exposure to research and education (40)

I feel like you have to have a degree to start off with, don't you really to do it? Then it has to be a 2.1, that's what you've kind of been told in the past to do any level of further advances study [...] There's no reason why any level couldn't do a bit of research, really, if they were given the right support, it just depends on how academic that is." (98)

I know people I've spoken to is that you have to have a degree level first, but some of us don't have them, but that's what they keep offering from a masters to PhD, and there's nothing in between [...] there's no offer between the university - everything that comes through is for somebody who's working on a PhD or somebody who wants to do their master's. [...] most of those opportunities that come through for nurses to go and do research is for somebody who's already done a degree. (38)

In comparison to research, there was generally felt to be more informal development opportunities in teaching and learning within the healthcare environment, whether supervising student placements, in-service training or acting as a mentor. However, a small number of interviewees noted a lack of training and development opportunities available for clinical educators:

The education for educators is not fit for purpose at the minute [...] with education, I think it's about actually how do we educate our educators, how do we prepare them to teach in clinical practice and it can't all be about going on a PGCert. There's got to be something that prepared to make our educators fit for purpose that doesn't cost a substantial amount of money (110)

Other comments pointed to the need for more informal opportunities to gain experience of teaching in the HE sector (see also 6.7.1), potentially building on existing relationships between HEIs and NHS organisations in supporting student placements (see also 6.6.3)

The HEI do like training days on how to be a student educator, but you feel we've got to do that cause we've got to take students, it's not seen as a positive [...] what do you get out of it by being an educator there? They could tap into the ones that are very keen to take students - 'hey, do you wanna come do some guest lecturing?' (65)

At the moment the universities and the NHS, they have a kind of partnership in the sense that they send their students to the hospitals and to practice, so they are already having that partnership, but I would like them to go a little bit further than just with students, so programmes for those in the healthcare sector who want to take up a lecturing roles with them at the university and then make it a little bit easier for such persons - they could be doing it like once a week to attend lectures or even imparting knowledge to students at the university (6)

A small sub-set of interviewees also highlighted a lack of in-post training and development opportunities to support new lecturers within HEIs, with one interviewee describing novice lecturers as being "thrown in the deep end" and flagging concerns with regard to the lack of support available given the workload of other lecturing staff (see also 6.4.3):

When they start, they're a bit like rabbits in the headlights. I'd like them to have a mentor. I'd like them to be able to observe teaching and be supervised and then do some teaching with one of those observing them to help them settle in. But we don't have time to do that. I'd like them to have supernumerary time to start with - a month would be great. And marking they can shadow mark [...] but you can't do that [...] You haven't got the time to put the support systems in place, because you're just working 10-hour days all the time (41)

6.7.2 Accessing available opportunities

Overall, a key theme with regards to training and development was not so much the availability of the opportunities, but the difficulties in accessing them given limited organisational support (see 6.6).

I think the opportunities that the NIHR provide are excellent in terms of - it's an excellent trajectory, but I think it's access to that [...] I think it all comes down to not that the training's not there[...] there's a lot of activity that you can access in terms of how do you start, how do you get there and there's a lot of organisations supporting [...] there's a lot of support networks and how to get there, what you need to do, what the opportunities are, what funding is available. But I think it all comes boils down to whether you can get support from your own NHS organisation to access any of those. And I think that's where it falls down. (13)

Others noted that even with backfill funding, organisations often struggled to find staff to fill the vacancies:

I think the challenge is finding the backfill as well, 'cause people don't want temporary posts, they want permanent posts so there's not a big pool of staff to draw from to move people around to release you to go and do something for 12 months and then come back into your role (98)

As a result of these issues, a number of interviewees described working outside of their clinical hours and using their annual leave to undertake additional study with the associated impact on a sustainable work/life balance.

They finally got back to me and said they're worried about service provision and they'd agree for me to do it if I took it as annual leave. So, 12 days, which I can't do because I've got children and it won't be a good work life balance for me - I know you have to make sacrifices to chase your dreams, but I think I'll probably say no because I have to put my family first [...] but part of me is like can I be bothered with this battle? Will it make my life harder having to fight for every single thing forever? [...] It will affect my health and wellbeing if I have to take more than two weeks of my annual leave doing a course. (63)

The only time I could do it was when I was taking annual leave and I used to spend all my weekends in the library [...] I was meant to get 15 hours, but I only got one day back, so I just played around with my annual leave and of the days when I'm not meant to be in university, I would come and work so I could bank it towards the end (95)

I put in a request for flexible working so that I knew I would have set days to do study on [...] So I asked to only have long shifts. [...] I did that for maybe six months and I was just finding it too much. I had no life. When I wasn't in work, I was at the computer studying [...] I've used my holidays (97)

Some people pointed to the impact that the lack of protected time had on their capacity to apply for available training and development opportunities and gain the experience needed to increase the likelihood of success:

If you're looking at NIHR fellowships, they want you to have such a wealth of experience and it's like how on earth are you expected to achieve all of those objectives in the constraints of your clinical role with no protected time to do research, no protected time to write anything up. And so again, it's just those barriers, it's how do we remove those barriers to allow people the time and space to do those pieces of work that are gonna make them a stronger candidate (34)

Everyone's saying there's so many opportunities and I couldn't help but say the staff have not got the time to step back to apply for those opportunities and you need the head space (28)

A small sub-set of interviewees also raised issues regarding the lack of support within HEI environments to undertake a PhD (see also 6.4.3).

When I was working in the university, it was like 'Do a PhD, but we're gonna give you absolutely no time, we're gonna give you absolutely no funding. Do it in your own time' which when you're already working 60 hours a week just doesn't feel. [...] you didn't get supervision, you didn't get mentorship, you didn't get anything. [...] I have friends who work in universities and other fields, and I know that they have scholarship time and that kind of thing. But in [profession] that's just non-existent. It just doesn't happen (30)

People who started in the same cohort of me who work in a university have still not completed [their PhD] they've reduced the number of staff [in HEIs], therefore they don't get as much study time. They don't get the sabbaticals they used to get and things like that [...] people are not finishing them at universities when you think that would probably be the better place to and you would be better supported (110)

Others queried the benefits of undertaking further study given the lack of 'clinical academic' posts and career progression opportunities (see 6.5). Some also flagged that without a clear career pathway, it was difficult to understand what kind of training and development to apply for:

I don't really have a job role in mind, I guess it comes back to the fact these career pathways are unclear and that if you've got an idea about potentially what role you might want to move on to next, then you might have an idea

about what training and development you might be looking for. I'd be happy to do future study, but I just don't really know what that would be or look like (20)

Another barrier to clinicians applying for training and development was a lack of knowledge about the available options and how they “fit together” as well as eligibility requirements and the complexity of many of the application processes.

6.7.3 Undergraduate opportunities

A number of interviewees commented on the paucity of information in undergraduate training with regards to research and/or possibilities for pursuing a research/teaching career:

I was asked to go and help out to talk about research and do you know 80% of the student nurses that came, I was told by them that they don't talk about research in the universities to the nurses that will come here. That on the curriculum, there's no research in it. So, I think if the universities can do that, prepare these nurses that are coming through [...] incorporate this in the curriculum [...] so that when it comes to when they qualify and they come to the hospital, it's not gonna be something new to them (38).

there's absolutely no research [...] It was just never something that you were ever spoken to about [...] we were expected to go on and progress and we were always being spoken to about progression and development, but it was very much that kind of clinical progression” (30)

So, I'd spoken to the tutors at university and they knew that I wanted to work in research. They knew that and there was just no guidance from them of, well, what you should look out for is this, this and this. We had lots of careers sessions about 'this is how you can write your CV; this is how you prepare for your interview; these are the trusts that are in our area' and lots would help you towards that because obviously that's where the majority of the group were going towards. I don't know if they just didn't know about it because of the university I was at, [...] But I feel like if at that point somebody could have said 'right, you've mentioned research, there's this pathway and you could start on this pathway' from day one of starting your career (97)

I think in certain clinical academic posts, say doctors, clinical psychologists, they've been sort of schooled in that way of thinking as a part of their core training that is embedded within their core training. Whereas I guess in nursing and allied health professionals, it isn't so much. And so, I think that they're kind prepared really in terms of how to navigate further their clinical academic career [...] really to start people thinking about research a bit more when they're doing the core training (34)

Introducing more research content, research-focused guest speakers, research-based placements and/or advice on navigating an academic career into the undergraduate programme were variously suggested to help build interest in, support and “normalise” clinical academic and academic career trajectories (see also 6.8.2). Targeted support to help students with presenting and publishing their dissertations was also recommended.

On a related note, a small number of interviewees raised concerns as to whether lecturers have sufficient experience of research to adequately teach research and “bring it to life” as part of the undergraduate programme, especially if these positions no longer require a PhD or significant research experience:

How are they then teaching research with confidence and with experience and anecdotes and things - they're not, they might as well just give the student a book to read' cause that's all they're doing is they're reading a book, they're putting some points in the PowerPoint, and that's teaching research, and that's why people are not engaging in research because they might as well just read the book themselves. [...] if you've got somebody who's inexperienced and draw on their knowledge because they've not got it for whatever reason, because they're relatively junior, then it becomes a very dry, boring subject where people go 'Oh' God, research' (110)

Your educators need in-depth knowledge and understanding, and they need to be able to critically think [...] and you'll get that from the master's degree [...] they need to have really good in-depth knowledge of research. So, I do think that educators do need a specific level of knowledge of research [...] it comes back again to the qualifications of your educators (41)

6.8 Information and advice on training and careers

As noted above, a key theme in the interviews was not so much the availability of training and development opportunities, but their *accessibility* (see 6.7.2). A contributing factor to issues regarding accessibility was the idea that there was limited communication and/or information about the available opportunities, particularly within the healthcare setting. As a result, people variously described difficulties with “finding” relevant information and the challenge of knowing “where to look”:

I actually think there's a lot of training opportunities [...] The problem I had when I surveyed [...] and that was a little bit kind of frustrating for me, is that it's people just don't seem to know about it. [...] You kind of have to get on that

train before it becomes obvious. So, a lot of people don't know where to access anything and you kind of think, well actually there's so much you don't even know. If anything, there's too much 'cause you don't where to start. So, I think it's there already, I just don't think people know how to find it very well or aren't looking in the right places. (65)

I think there's a lot going on in the North West in terms of training and development around research. [...] I think it's probably signposting people to what's available rather than they're not being enough available (75)

Similarly, some interviewees were uncertain as to where to access information about potential jobs:

It's a bit of a mystery, to be honest 'cause I know that people do go into that sort of thing, but I don't know whether that would be advertised on something like NHS jobs, I don't know where I would find that information to kind of approach people and say 'oh, actually yes, I'm interested in this'. I wouldn't know where to go for that (18)

I wouldn't even know where to start if I wanted to become a lecturer at university. I just don't know where you'd find those opportunities coming up [...] it'd be nice to have a more formal route like NHS jobs, see what jobs are out there, that would be nice if there was a way of knowing what was out there (47)

In particular, some interviewees noted that the ICA pathway was relatively unknown amongst the NMAHP workforce, with people describing difficulties in finding information about these “hidden” opportunities:

I have started putting the actual NIHR clinical academic pathway slide into any presentations I give so that people know that it exists and that if they want any more information, they can just contact me because it is literally impossible to identify (43)

There's no guidance really. I only found out about the clinical academic pathway in the trust a couple of years ago. It's like a secret network underground. It's not really talked about, especially in my profession [...] it was only recently, relatively recently, I found out that this exists [...] it's not really talked about in trust comms and things like that, you find out by accident (63)

More overt signposting to the available opportunities was thus felt to be an important enabler in supporting NMAHPs to pursue clinical academic careers. However, the complexity and unfamiliarity of the information and terminology used in advertising these opportunities were also flagged as potential barriers to people going onto make an application:

We sometimes do get an e-mail through and it might say 'sign up for this'. I don't know what they are, I don't know what even they're called, I don't know if they're called fellowships or something like that and I read it and I think 'I have no idea what that's all about'. Even when I've read it, I sometimes still don't and I think I don't know if that applies to me'. It might be like a research project you can go and work on and then you get your salary paid, but I would really say I just don't understand what it's all about. So, I kind of read it and think 'oh, I don't think that applies to me or I don't know what it's about'. So, I don't pursue it [...] I think that you'd attract a lot more people to careers in it if they knew more about it to start with [...] how do you become that person? [...] Who are NIHR? What do they do? What are all these acronyms and you just don't know what these organisations do (20)

I have seen the different- I'm not sure what the words are – like PCAFs and there's the other system as well, I don't know what they are, they're out there [...] I just didn't understand what those courses led to or what the study would be [...] I don't know if it's the responsibility of the organisation you work for or whether it would be something more while you're at university, if you've expressed an interest to just know about things like that a little more [...] I feel like I'm just on the edge, I'm on the outside looking in. (97)

For others, the “overwhelming” breadth of options and potential development pathways was especially “confusing”, making it difficult to understand in what ways they “join up” and how to decide on the “best route” to follow

It's still really quite messy, it's still really a very convoluted route It's very unclear. There's so many different resources that you can kind of gain access to, there's a lot of people doing similar things. Overlap. So apart from the NIHR pathway, it can look really messy (102)

In terms of the pathways. I like it to be clear 'you do this, then this, then this'. But what I found is you could do this; you could do this or this might help you [...] I want to do a DCAF. I've already got my master's. I know I'd be able to do a PhD. I wanted to do one years ago, but then they said 'Well, it's so competitive, you're better off doing a pre doc first to strengthen your application. And then there's also all these other little things. And then one-day workshops and you have to show your commitment'. So, it's kind of like everyone does it so differently (63)

I think perhaps the thing that I struggled with it first is a very general overview of what the different paths look like, so I feel like people, and certainly me, at first, I didn't really understand the difference between the NIHR clinical academic and purely academic routes. And I found that quite difficult to pull out of the NIHR website. I feel like there's huge amounts of information on there, but it's almost like if you don't know what you're looking for, it's quite difficult to get started (73)

Not knowing where to start, not having a foot in, if that makes sense. I don't feel I understand how it works in a wider sense, where it comes from, who funds it, how it can apply to me, what my role might be in it (21).

There was a general sense among interviewees that working within an HEI would most likely require them to acquire a Masters and a PhD. A small sub-set of participants pointed to different doctoral routes available including a PhD by publication and a professional doctorate, with one interviewee raising concerns regarding whether the latter was recognised as an “academic” qualification. However, a number of interviewees expressed uncertainty as to what qualifications might be needed to pursue a career in research and/or teaching.

Some also highlighted difficulties in terms of understanding the entry requirements for academic qualifications and training awards, particularly with regards to how much prior research experience was required:

So, you apply for an internship and then you're told no, you've got too much experience, you can't have that opportunity. So, then it's like, well, what's the next thing and then 'Oh well, no, you can't have that because you don't have enough experience' or 'you need to do a bit more of this' (40)

A number of interviewees also described difficulties in understanding the complex application processes and underlying logistics needed to access these opportunities, for example how to access funding, organize study leave and negotiate employment contracts.

Some suggested that a central resource would help to bring together some of the information about the different development pathways available, explain key terms and link to available job opportunities:

A dummies guide website would be good. I think sometimes when you look on websites it can be quite complicated, they can word things quite complicatedly, it's a bit complex, so you come off them and think I still don't know if I'm any clearer. So, I think something that's really very basic and breaks it down for people that don't understand the system and how it works. I think sometimes the websites and stuff that's out there you can look at isn't made for people that know nothing about it. There's a certain presumption that people know something and that's not always the case. [...] I think what you don't want to have to do is then sort of start Googling things that are on the site to work out what the site means. If it was just explained there, that would be really good. (18)

So almost like a very, very entry level, all the different schemes on one page. Whether that's even possible to have that all in one place, I don't know. But yeah, almost something to get you off that first step and even explaining what the terms are like what is a clinical academic and what is the research network like a glossary or some definitions of what the different new words mean (73)

It would be nice to know that there was something there, a bit like the NHS job site, just somewhere that you can go to say well, what are the career options? What are the training aspects [...] when you do research there's so many different avenues and pathways that you can go down, especially when it comes to nursing and you're like, I didn't realise that was an option. So, if you had all of it somewhere that you could go and that's all research based. It's all research jobs. You're not having to go to like LinkedIn or NHS jobs or somewhere else to try and find them and then work it out [...] it takes a lot of digging. [...] It's researching your research career before you've actually got to that point. Because it's not an easy task and especially if you're not quite sure like myself, it's like I don't know. Even if you had like a short synopsis for what was involved in this (48)

Another interviewee suggested that “job fairs” aimed at more experienced clinicians that could showcase some of these opportunities would be welcomed.

6.8.1 Mentoring

Given the lack of a clear career pathway, the range and complexity of the different training and development opportunities and the lack of easily accessible information, mentorship was highlighted by many of the interviewees as a key enabler to pursuing a career in research and/or teaching. In particular, participants described the importance of a mentor in providing support with complex funding applications (see 6.7.2) and advice on navigating development and career pathways

My mentor and I meet every couple of weeks. So, she looks at similar questions you're asking me. Where do I want to see my career? Where do I want to see myself? So, she's basically helping me, giving me the tools, and then like, what I need to work on, what courses I need to do to build, to look forward (38)

She knew I was interested in research, she used to talk to me about how she'd done it. [...] if it hadn't been for her, there's no way, absolutely no way, I'd ever have got to the point of doing a PhD, because she's the only person who actually spoke to me about practically how to make it happen (30)

So, I had a sort of informal mentor from my clinical role who pushed me and showed me some of the opportunities [...] through sort of coming up against a bit of a block as to not quite knowing what your next steps are, and being aware of some of the programmes and the fellowships that are out there, but it's quite a big step, I think, to then try and apply for something successfully. So, you almost need those people to show you what an application might look like or even to translate some of the eligibility and what the programmes are offering. So, the mentoring was helpful from that point of view for me. [...] And at the same time, I was starting to think this would be really nice, I think I might want my career to go this way. So being able to match where I was, where I thought I was heading with what [my mentor] had done (73)

For some interviewees, the absence of this kind of mentorship was a key barrier in pursuing a clinical academic career:

There hasn't really been anyone who said long term to get to this point you need to do XYZ. I think that's the thing. So specifically like in terms of academic progression, no one has sat down with me at any point and said right, do if you want to be a Reader you need to do, blah blah blah, you need to have X, that's the kind of thing I've not actually ever had (99)

I think what I would like is someone to sit down with me and spend some time with me and my ideas, this is what you need to focus on [...] like you just don't have someone to really back you up and I think that is what is lacking. [...] a proper person to sit down with me maybe in the [profession] world. I feel as if I'm a dog in a little pool and I'm just paddling along and then I'm trying to do all these things and then I just don't get the backup to kind of lift me up and put me up there [...] it's just finding that appropriate mentor, I think. I think that's the key that's missing in my research journey, possibly. And then you get disillusioned, you know, halfway through you just get 'What is the point?' (95)

As alluded to in the above comments, mentorship was also seen as a source of much-needed encouragement and support to weather the challenges of pursuing an academic career (see also 6.9).

In addition, there was some degree of overlap between the role of mentor and role model, with mentors valued for providing a potential career pathway for others to follow (see also 6.8.2). In this way, mentors with a similar trajectory and background were particularly valued:

I think having maybe some kind of mentor. [...] If you've got somebody there that knows the system and how things work, you can ask those questions as you go along [...] An AHP guide would be fine, I wouldn't want it to be more general than that. Sometimes we sort of end up with leads that are nurses and things which is great, they do a great job, but I think to have somebody understand what AHPs do that's different [...] to be in that role of guide it [a subject specific guide] might be really helpful (18)

So again, maybe it's having a mentor who is in both places which would help [...] specifically someone who understands the pull between two places and how to navigate that. (25)

However, it was commonly held that suitable mentorship and careers guidance was not easy to find. Interviewees described not knowing "where to look" for this kind of support and the associated challenges of trying to identify "the right person".

I'm not sure where to start to find somebody to speak to about it, sticking with your clinical role if you want to also become more academic (73)

I think that's difficult sometimes because you might not see the people that you need as your mentors and as your academic support and things in the university. [...] you've got to seek it out. You've got to be really determined to achieve, because you have to go out of your way to find those people to support you (104)

I feel like I'm constantly connected with people, but I'm not maybe connected with the people who would be able to support that kind of career pathway. So, I don't link in with the universities really and that's just probably

because I've not been forward thinking enough about making those connections, and also, I just feel like I don't wanna hassle people or take up somebody's precious time. (27)

These comments point to the need for people to actively seek a mentoring relationship as well as there being a degree of “luck” in finding the right mentor (see also 6.10.2.1).

It's pure luck, I've been really fortunate in my career that I've met various people along the way who have helped me, supported me or kind of done a bit of mentorship. And I've been really, really fortunate, if it hadn't been for those people that I've met, I would never have got the opportunities or known to look for the opportunities that I have since found because they're not easily accessible, I don't think and not very visible (30)

I literally just bumped into one of the professors who was from my undergraduate degree and we got chatting over a coffee and she said give me a ring and come for a cup of tea at my office. And I did and I'm not sure that many people would have emailed a professor [...] And then she's put me in contact with other people who are really positive and have really supported my journey. But that's literally just down to her and her personality and her willingness to help some random nurse from a research day. There was absolutely nothing organised or structured about it. It was pure luck ultimately (43)

6.8.2 Role models

The importance of visible role models to map out a potential career pathway and “raise the profile” of NMAHPs working in these areas was a key theme across many of the interviews:

Paths are made by walking. So, you know there are people who have stepped on and are trying to work all that out now and hopefully we can build on that. Having a consultant XX is great who can help negotiate that, who's forging a path for the XX coming after her (78)

I think we really lucky in X that we've got these people who have paved the way and they really champion it as well that they want people to go on and pursue these careers, which is great (7)

So, finding people who have this role but then also what you can do from there and how you can pursue your academic interest, having people a few steps along the ladder [...] it's just so helpful to have a path for yourself to go down, not just to learn from but to aspire to as well. (100)

To have somebody that perhaps we could signpost people that's done this successfully would be really helpful. [...] we haven't really got anyone at the other end to sort of like pull us up and bring us along (73)

I hear names like 'professor this and professor that' and I think I have no idea what their role is or what they're doing or how they work between the two institutions. You sometimes hear them mentioned and think well have you become a professor, how have you done that? (20)

However, a lack of visible role models was attributed to there being very few NMAHPs in clinical academic and academic positions, with some interviewees describing the impact of this on their ability to see themselves in these kinds of roles:

There was just nowhere to know how to do it [...] I didn't know anyone doing it [...] That's just not something that you see. There's nobody doing it. There's nobody out there that I that I saw anyway [...] other than being a medic, it just wasn't an option. It didn't seem like it was an option, it wasn't accessible, if that makes sense (30)

At the moment I just think I wouldn't even have a clue how to even get started ' cause it's not the norm. I've not really known people who have done that. [...] I don't know people who have that split role, a clinical academic role and so I feel like because you can't see it, it's not really there to be seen and it's really hard to kind of like, imagine it (27)

In the absence of these role models and a lack of career pathways, some interviewees were actively taking up the mantle of creating a pathway for others to follow, a number of whom also had more formalised research capability and capacity building roles within their respective organisations:

I don't think one thing should just be for one person. I think everyone should have an opportunity [...] so my role is hopefully going to create more and more people who are gonna become involved [...] So one of my next things when I do move is to link up with some more senior people to think about how can we do that? What can we do? It's alright me creating my own path, but that path needs to be replicated. It can't just be for one person. You're not going to really generate enough research (50)

If I can get myself that role moving forward from next year, can I then open it up to other people if that makes sense. So, if I can kind of forge a way forward then we can open it up. I don't know if that will work. [...] If it does happen, it will be me starting with help from external and then trying to then build up people from below, once I'm a bit further on. (65)

There is very little or certainly nobody that I know of that does XX research" within a clinical setting [...] That person I can walk in the shadow of to start with and then step aside from further down the line. At the moment it's kind of me that's blazing that trail, even though I'm not really that far down the line yet, I'm very much sort of tentative steps". (42)

6.8.3 Peer support

Given the myriad challenges facing NMAHPs looking to pursue a clinical academic and/or academic career and the sense of it being a "lonely" road, a number of interviewees pointed to the importance of building a peer-support network to reduce the feeling of isolation, get advice and build their resilience (see 6.9)

You do feel like you're on your own bit - so there's quite a few that are on the predoctoral fellowship. So, they've all now got the group, there's about 8 or 9 XX I think in the country that all link up and makes it a bit less scary when you're like 'Does anyone know anything about that? So, I'm doing my PhD application, what have others put?', just that you're not kind of flying solo because the support and the knowledge is out there (75)

The network is so unbelievably helpful, you can ask people that have been there, know what you're going through and say, yes, I'll meet with you and I'll share my experiences, I'll read your application and give you some tips. And it's really good. It's helped me cope with rejections 'cause you realise that everybody, no matter how successful you are, you have many, many rejections [...] it keeps you motivated and we cheer each other on and just knowing that this network exists, because I probably would have given up by now if this group wasn't there because it's really tough to progress (63)

You need to have that network. You need to have people who are supportive around you and you need to have people who know what they're doing and people who are kind of passionate about it and interested in it and I suppose it would be kind of linking in with researchers, whether that's clinical researchers or, researchers more based within universities. (27)

6.9 Fighting the battle: dedication and resilience

As alluded to in some of the comments in previous sections, barriers ranging from the lack of a clear career pathway to difficulties accessing study leave, meant that pursuing a clinical academic/academic career was often experienced as a "battle" or a "fight". Participants emphasised the personal impact and "sacrifices" they had made in seeking to develop an academic career and reflected on how this might discourage people to progress further:

It's you pushing this boulder up a hill all the time and you know it feels like, you're on some kind of The Apprentice or something and you're just trying to pitch all the time and it's very draining and hard work, so I can understand why it might be very off putting for people (40)

I found myself trying to navigate my own career, not really knowing how I can make this happen [...] it's exhausting (8)

What is putting them off is the process of getting there because it's really hard, it's really hard to get anyone to agree that a clinical academic pathway is a good idea for a nurse [...] every other role I've had it has been a battle [to be released] I have managed to do this through just perseverance and not letting go, but I just don't think other people would probably be bothered (43)

It's frustrating, demoralising, time consuming and you think, gosh, this is hard for me to navigate. Imagine if I was, you know, somebody where English perhaps isn't my first language. And, you know, from a kind of a marginalised group (40)

The sense of needing to "persevere" was echoed in other comments, with people variously highlighting the levels of "motivation", "commitment" and "dedication" required to overcome the difficulties of pursuing these career paths.

6.10 Unequal opportunities

6.10.1 Organisational inequalities

A strong theme in the interviewees was the perception of disparities in the availability and/or accessibility of development and career opportunities between organisations and regions. In particular, this was felt to be an issue for those working outside of geographical and organisational 'hotspots' for research in their profession/specialism such as large acute trusts with a more embedded NMAHP-led research culture:

Although there appears to be some infrastructure, it's not consistent and it's not equitable across trusts. So it seems to be if you're in a large organisation, you have access to more opportunities, whereas in the smaller sort of community-based [...] I think we need to move it away from that and sort of think about how can that structure be consistent across the NHS as opposed to in individual organisations [...] And having those roles within all organisations as opposed to just research-active, very active organisations [...] I just wonder if we had some sort of infrastructure that was across the NHS then it would make it easier for people to access whatever trust they are sort of within [...] I know certain organisations get a lot more money coming in because they are research active, but I'm not sure smaller organisations are always aware or know how to do that or see it as their role maybe as well (13)

There's very distinct clinical career pathways that I'm aware of, but as far as research goes, I think there are clear pathways in terms of if you worked in a big or an acute hospital setting, but not in a community service. So, it's just not something that we ever really hear about or have any sort of opportunity to be involved with really other than like bigger research going on, organised usually by an acute hospital (21).

Somebody's done the research but we've always thought it's never us. It's a big hospital, it'll be St. George's in London or Saint Thomas', these huge hospitals, they are the ones doing the research not us. And I think the not knowing that actually district general hospitals do it, you wouldn't even think about a career in research. (69)

If they were in any other location where research wasn't being done or it wasn't particularly research active, they just wouldn't get any perspective of that. So, they wouldn't even know it was an option for them (76)

Some trusts reportedly had opportunities to be involved in research delivery, but few opportunities for NMAHP-led research (see 6.6.1). One interviewee also reflected that opportunities to develop as an educator within the clinical environment depended on where that role "sits in the organisational structure".

I think it depends which organisations you sit in as well and where education in the NHS fits. So, if you're sat under a corporate nursing structure, there are many more opportunities to progress as an educator, whereas a lot of education sits under what's called the people function in organisations, which is very HR-led, so you can only go so far unless you're an HR practitioner. So, where education sits in an organisation influences how far you can progress (110)

Furthermore, there was inter- and intra-organisational variation in the degree of managerial support (see 6.6.4)

I think it depends on who your manager is as well. I've had some really supportive managers who have said, 'yeah, just apply for it, go for it'. And then I've had managers that just think 'why do you wanna do that?' Like it's not to do with your role, it's not officially the service we're not gonna support you to do that, these patients need to be seen'. I think it really depends on what the trust is like and what your manager is like. (27)

I think it does work in certain organisations, but I think it's very much based on the individual. So, if you have a manager who has a specific interest in research, they tend to encourage it within their staff. And again, that comes down to how do you make things equitable [...] individual middle managers are saying yes or no and it seems really unfair that some people are able to access the system and some people aren't (13)

Two interviewees reflected that trusts with limited clinical academic career opportunities risk losing staff if they support academic training and development:

They'd leave to go somewhere else. They'd leave to go to a teaching hospital, wouldn't they? You train them up and then they'd leave. So, you wouldn't want to, would you? [...] . It's a waste of [their] time paying (65)

We've had staff that have completed fellowships and they've had no post to come back to and then the host organisation that supported them through that DCAF and then has got no job and then another NHS Trust has then benefited from the skills and expertise and knowledge that that person's gained over their NIHR award (40)

6.10.2 Professional inequalities

There was also felt to be significant variation in the career and development opportunities between professional groups. Physiotherapy was generally felt to be the most "research active" amongst the AHP profession, with two interviewees

noting fewer opportunities for the “smaller” AHP groups. However, one interviewee also pointed to disparities in opportunities between physiotherapy specialisms. Others felt that AHPs were “running behind” their nursing colleagues, with nurses generally felt by those outside the profession to have clearer research and teaching career pathways, greater access to funding and more opportunities to engage in research delivery:

It feels like the focus is always nursing, nursing, nursing. What can we do to encourage more nurses into research and a little bit of midwifery? [...] But there's this whole other group of people out there who are willing and interested and able. But so many things are closed off to them because these people in the leadership positions are just thinking, nursing, nursing, nursing [...]. I just think there's a massive opportunity being missed [...] So I think there's so many different people with different skill sets out there, and I think we're just leveraging that enough because we're just too busy talking about research nurses and clinicians and not really thinking outside of that sphere [...] I would just say that sometimes it's very hard when you see things like there's offers where there's a very rigid - there's a pot of money for this that you can apply for [...] but because you don't fit into a particular box or framework you don't get anywhere (76)

Midwives and nurses are taught a lot more about research from day one. So even at university they're a bit more geared up for the fact that research is a massive part of their role and going forward it's almost not expected, but it's sort of you will be being involved in research as you go through your career and further in the profession. XX is very, very late on that and it's only recently they've started saying well actually you need to be doing a bit more research (42)

Two interviewees specifically reflected on the lack of career progression and development opportunities for CRPs:

Sometimes it just kind of feels like we're somewhere in the middle, we're not laboratory staff, so we're not classed as the scientists or the HCPs. We're not just admin, even though we do some data support [...] we're not an NMAHP even though we're clinical, but where are we? [...] I can't remember what the funding call was, but it went around our research department asking us all to apply for this funding to do some extra courses [...] but the application got denied because we weren't officially within the remit for it. [...] Even things like CPD points, mine have all been rejected because I'm not listed within the CPD framework (100)

Within the nursing profession, mental health was flagged by two interviewees as having fewer research opportunities compared to “general adult nursing” reflecting the lack of funding more generally within this clinical area. One interviewee pointed out a particular barrier for mental health nurses in accessing research delivery roles:

It's such a weird barrier, but as a mental health nurse, you don't get taught as standard to do venipuncture because the doctors do it on the wards. So, whenever research nurse posts come up, they always put in the desirable criteria 'venipuncture trained', but no mental health nurse is gonna, unless you've been lucky enough to work in a clinical area that has given you that training, is gonna have that. So that kind of excludes loads of research roles that would be a really good stepping stone in based on a really random quirk of the training (43)

Overall, there was the sense that without an embedded organisational and/or professional research culture, NMAHP clinicians not only have limited access to career and development opportunities, but are also less likely to see research and teaching as a potential career option.

6.10.2.1 Luck

Whether it is identifying a mentor, finding out about a research/teaching role or working in a research-active organisation, a key theme in the interviews was the sense of “luck” and “randomness” to developing a clinical academic career that was dependent upon “knowing the right people” and being in the “right place”. Relatedly, some people described having “fallen” or “drifted” into a research/teaching trajectory:

"I've been fortunate as well that I've had opportunities that other people haven't had, I know I've been lucky [...] and everyone I speak to about jobs always - you get chatting to people who have these fabulous jobs - how did you even end up there? And there's never a clear route to that job, it's always just 'Oh well, I got talking to X, I fell into this, fell into that, fell into that'. And I've not met anybody yet who hasn't had that sort of career. It just happens to be that they were in the right place at the right time, or they got talking to the right people or they took a punt on something (30)

Everyone takes such a different route. It seems to be who you know more than what you know more than ever in this. I don't think there is a structured clinical route for this stuff. [...] I wouldn't have even known where to start unless I hadn't just bumped into X That was literally it. (43)

I think a lot of this is relationships and how you've built relationships over the course of your career and a lot of things are done on goodwill rather than it being strategic and I think that's a problem because again, if you don't

have those relationships because you've not had that experience, 'cause you've not had that opportunity, that's gonna be another big barrier for you and your clinical academic career progressing [...] It's through kind of all the things that I've done that I've kind of then been able to sort of network with other people and other organisations that have led to me doing, you know, working, say on a research trial. But I guess that's kind of rather opportunistic, if I hadn't had those opportunities, I wouldn't have been able to, you know, meet those people and develop those relationships to kind of get them to support me with, say something else that I might be interested in. And I just think that lots of people probably might not have that opportunity. It's just not equitable (40)

Accordingly, there was substantial concern with how to make these careers more equitable across organisations and professions.

7 Discussion and summary of key findings

7.1 Key demographics

This study captured the career interests in and experiences of research and teaching of 174 NMAHP clinicians working in the North West region, together with their perceptions of the enablers and barriers to pursuing a career in these areas.

Key demographics from the study are captured below in Table 13.

Demographic variable	Dominant demographic characteristic	Proportion of respondents (%)
Profession	Nurses, Physiotherapists, Midwives	39%; 20%; 10% (Total AHPs = 45%)
Years Qualified	Qualified for over 20 years	40%
Pay Band	NHS Pay Band 6/7	61%
Ethnicity	White- English, Welsh, Scottish, Northern Irish or British	80%
Gender	Female	87%
Age	40-49	42%
Sexual orientation	Heterosexual	89%
Disabilities	No disabilities	86%
Type of employing organisation	NHS Acute Trust	75%
University and/or teaching hospital status	Holds university and/or teaching hospital status	76%
Region	Greater Manchester	49%

Table 13

This study aimed to understand NW NMAHP clinicians':

1. qualifications, experience, knowledge and skills in research and/or teaching and learning;
2. career aspirations, preferred role descriptors and employment contracts in research and/or teaching and learning;
3. enablers and barriers to pursuing a research and/or teaching-related career;
4. how HEIs and NHS organisations can work more effectively together to address shared workforce challenges

The main findings from the study against each of the key study objectives are presented below. Relevant literature that aligns to the key findings is also highlighted.

7.2 Study objective 1: Qualifications, experience, knowledge and skills

7.2.1 Qualifications

The study has identified a pool of NMAHP clinicians who hold/undertaking a higher degree (N= 114). Only a small proportion hold a PhD (N=18) meaning that few currently have the necessary qualifications to join the HEI academic workforce if a doctoral-level degree is an essential requirement. However, a significant proportion hold or are undertaking master's qualifications that could lead onto further academic study and demonstrates an advanced level of knowledge and skills potentially applicable to roles within HE. Although the survey did not capture interest in further study, a group of clinicians have been identified that are in the process of applying for and/or have withdrawn or been unsuccessful in applying for higher degrees.

7.2.2 Experience

67% of respondents had teaching and learning in their job descriptions and 49% had job descriptions that include research. Although the majority of respondents had been engaged in research and/or teaching in the last year, most had spent less than 25% of their time on these activities. This is likely to reflect that the majority of participants had job titles describing a clinical role, but also may evidence the lack of protected time that NMAHP clinicians have to engage in these activities (see 7.4.3). In addition, nurses and midwives were more likely to spend a greater proportion of their time engaging in research, which is likely due to a higher number of these professionals holding research-related job titles compared to AHPs. A high proportion of clinicians across the professions reported experience of a range of research and

teaching activities that are relevant and applicable to taking up academic/clinical academic positions in research and/or teaching and learning. However, it is important to note that “research” and “teaching” were used in the survey to cover a wide range of related activities, with similar numbers of AHPs, nurses and midwives indicating experience of undertaking research activity such as data collection and analysis or writing a research protocol.

7.2.3 Knowledge, skills and confidence

The highest number of respondents rated their knowledge and skills as “good” in research and teaching, with a slightly higher average rating in teaching and learning. Survey respondents most frequently indicated being “somewhat confident” in research and “confident” in teaching and learning. Nurses and midwives tended to rate their knowledge, skills and confidence in research higher than AHPs, which is again likely to reflect differences in the time spent on research between these professional groups. Overall, confidence ratings showed a broader spread than those for knowledge and skills. More work is needed to unpick any specific gaps in knowledge and skills and develop targeted initiatives to address these in readiness for pursuing a clinical academic/academic career, as well as to understand the factors contributing to lower confidence levels amongst some NMAHPs. The interviews suggest that NMAHPs might benefit from training and development that target specific research skills such as presenting and publishing research, as well as initiatives that help to address the perception that research is not part of the NMAHP professional identity (see 7.4.3-7.4.4).

7.3 Study objective 2: Career aspirations, preferred role descriptors and employment contracts in research and/or teaching and learning

7.3.1 A preference for combined clinical and research roles

The survey identified a pool of nearly 150 NMAHP clinicians within NW England that are interested/very interested in pursuing a career in research and/or teaching and learning. 75% of respondents expressed an interest in a research career and 65% in a teaching and learning career.

The most popular role descriptor was a “combined clinical and research role”, followed by a “clinical, research and teaching” role on full-time employment contracts. The third most popular position was “research only”, with a part-time contract being preferable in this regard. Teaching only roles were of least interest in the survey responses, with a strong preference for a part-time teaching contract. There was some interest in fixed-term, secondment and internship contracts, with secondments of most interest overall

The preference for combined clinical and research-focused roles and limited interest in teaching and learning was a dominant theme in the interviews, the latter being of more interest as a part-time or more “informal” position (see 14 and 18 in terms of the value of sessional contracts in supporting clinical academic careers).

7.3.2 Underlying factors for relatively limited interest in teaching

The modest amount of interest in teaching careers, particularly amongst the interviewees, is likely to stem from the commitment to and focus on research amongst study participants. As a result, many had not given much consideration to taking up a teaching position and/or were concerned that teaching-focused roles would not include adequate protected time to engage in research (see below).

Whereas many clinicians articulated their reasons for wanting to combine research and clinical activities (see 7.3.3), there was little reflection on potential motivators for getting into teaching. If anything, teaching was primarily viewed as a kind of “moral obligation” and/or a necessary part of taking up a research role within an HEI setting, but was not something of particular interest. Some interviewees also noted that they would only be interested in taking up an academic teaching role if it was in their area of clinical interest or focused on research. The preference for part-time teaching positions is likely to reflect the dominant interest in research as well as the desire to retain a clinical role (see 7.3.3).

In addition, the lack of interest in teaching is perhaps partially reflective of limited exposure to and experience of university lecturing, which in turn, may contribute to a degree of trepidation in taking up this kind of role (see 7.4.5). In this regard, part-time or more informal opportunities to participate in HEI-based teaching are of interest to gain experience and gauge interest in an academic teaching career. Relatedly, interaction with people in teaching positions, engaging in teaching activities and/or positive experiences and encouragement during undergraduate/postgraduate study have been identified as ways in which interest had been sparked in this area (7.4.6). Importantly, the survey highlighted fewer clinicians had received careers advice in teaching compared to research.

It is important to note that the relatively limited interest in teaching may be partly due to the research focus of the distribution channels used to disseminate the survey. It may also reflect the backgrounding of teaching and learning in the broader discourse around clinical academic careers in the literature (see 3.1).

7.3.3 Remaining clinical

A key finding from this study was the desire for a *combined* clinical and research role. The strong desire to retain a clinical role is reflected in the majority of participants wishing to be based in an NHS trust/healthcare organisation and/or hold a joint appointment between HEI and NHS/healthcare setting as well as the preference for part-time research-only and teaching-only roles. Participants variously used the term “clinical academic” to refer to combined research-focused roles within NHS organisations and those spanning the university and healthcare environment. A preference for NHS-based clinical academic roles was also identified in a recently published study (40).

Motivations for retaining a clinical component were illuminated in the interviews. A key theme was that participants did not want to lose contact with patients, which was, in turn, linked to their enjoyment and sense of vocation of working as a clinician. Undertaking research informed by and informing clinical practice to generate clinically credible and relevant research findings that could be more successfully translated into practice was another key motivator in retaining a clinical element to any research role. Accordingly, there was a desire to keep “up-to-date” with clinical practice, with the concern that academic roles are too isolated from the clinical setting (see also 27). Keeping abreast of the “realities” of clinical practice was also considered particularly important in the context of academic teaching roles.

7.3.4 Practice-based combined roles

There was some interest in practice-based combined roles within the healthcare setting. Research-delivery positions offered an appealing opportunity for some participants to combine clinical and research work, particularly as an “entry-level” role (see 7.4.5). However, there were concerns regarding career progression opportunities particularly with regards to following an academic trajectory that would enable clinicians to undertake their own research (see 7.4.1).

Advanced clinical practitioner and consultant roles were also of interest as a means of combining clinical and research/teaching activities, as well as opening up a career progression pathway outside of the traditional managerial route. Again, however, there were concerns as to the degree to which these roles prioritised and protected sufficient time for clinicians to undertake and lead their own research. Further work is needed to identify barriers to undertaking research and/or education in ACP and consultant roles. Job titles collected through the survey suggest that at least 8 respondents are currently working in ACP roles, with a further 8 in consultant roles. 1 ACP and 2 consultant NMAHPs were interviewed.

7.3.5 A “true” clinical academic position – working across the NHS and HE sector

A significant number of interviewees were interested in a combined clinical and research role that spanned the HEI and healthcare setting. For some, this was seen as a way of protecting time to undertake their own research outside the pressures and demands of the clinical environment as well as accessing academic support.

There was some confusion over the contractual arrangements required to work across both sectors, particularly with regards to what a “joint appointment” might look like. However, this employment model was viewed by many as an attractive mechanism for combining clinical and academic research. Most participants expressed a preference for the joint appointment to be weighted towards the clinical environment with the university holding the honorary contract, although it was unclear what role the clinician would undertake within the HEI in this arrangement. For some, a joint appointment was simply seen as a good way of managing the workload and conflicting demands of working across two sectors. In contrast, others felt that their workload would be better managed through two, separate contracts (see 12, 19 and 21 on work-life balance as an issue in clinical academic roles).

Over 100 respondents described their areas of interest which might usefully be matched with research and/or teaching and learning interests and specialisms within HEIs in the NW.

7.4 Study objective 3: Enablers and barriers to pursuing research and/or teaching-related career

7.4.1 A desirable range of employment contracts/posts

A more desirable range of employment contracts/posts was the second most commonly identified enabler to pursuing a career in research and/or teaching, but the lack of such positions emerged as the number one barrier. The interviews were then able to shine some light on what a more “desirable” range of contracts and posts might look like.

Lack of clinical academic posts

One of the most predominant themes in the interviews was the insufficient number of “clinical academic” posts available to combine clinical and research work within the NHS or as a joint appointment with an HEI. This is also a dominant theme in the literature and an area of ongoing strategic focus (3-4, 8-9, 12, 14-16, 24, 27, 32, 35-36, 38). For example, increasing the numbers of “clinical academics” is recognised as an important part of supporting education expansion and reform in the NHS Long Term Workforce Plan (1) and is a key feature of recent profession-specific research strategies (3-4).

The strong desire to integrate clinical and research and/or teaching activities is likely to have been a key contributory factor to “not wanting to change employers” and “not wanting to reduce contact with patients” emerging as the third and fifth most commonly selected barriers respectively. In addition, retaining clinical competency is likely to have contributed to “more support/opportunities in research and/or teaching roles” being the third most frequently chosen enabler.

Lack of clear career pathways

In the surveys, 51% of the respondents indicated that research career pathways were “clear/very unclear”, with teaching and learning pathways rated slightly clearer overall. “Unclear career path” also emerged as the fifth most commonly identified barrier and sixth most frequently selected enabler. Nurses and midwives were slightly more likely than AHPs to perceive clearer career pathways in research and teaching, which might reflect more career opportunities for nurses and midwives within these areas. Recent NMHAP research strategies have called for an increase in NMHAP clinical academic, research and teaching posts and clearer career pathways (3-4).

Within the interviews, the lack of a clear clinical academic career pathway was a dominant theme, mirroring its predominance in the wider literature (9, 12, 14-15, 18-19, 24, 32, 35-36). There was felt to be no clear career pathway to match the development pathway available through the NIHR ICA programme, with a lack of clinical academic positions at early-, mid- and late career stages (see also 12, 18, 24, 26) in contrast to the clearer, and more “linear” clinical career pathways available within the NHS (8-9, 41).

In particular, concerns were raised with regards to long-term career progression and the limited number of senior “clinical academic” roles available that adequately reflect the level of research knowledge and skills acquired through further academic study and development (see 7.4.2.1; see also 12, 18, 21). As a result, some participants queried the benefits of pursuing academic study particularly given the challenges of accessing these opportunities and the attendant financial implications (see 7.4.2.1; see also 18, 24). Others described having to choose between pursuing their research ambitions in the HE sector or remaining in a clinical role within the NHS. Interviewees reflected on the need to “carve” out these pathways for themselves, requiring significant perseverance and resilience (see also 3, 24) as well as a degree of “luck” (see 7.4.4; see also 9 on “serendipitous” career progression)

Lack of research opportunities within HEIs

Some participants felt that there were insufficient research-focused roles available for NMAHP clinicians within the HE sector, with a sense that HEIs prioritised teaching over research. There were concerns regarding the degree of protected time for research within HEI-based teaching positions (see also 4, 41) linked to perceptions of a high teaching workload and associated apprehension over “burnout” and work/life balance (see also 7, 8, 41, 44). Limited support to complete a PhD whilst undertaking an academic role is also a potential disincentive. For some, however, there was also a degree of anxiety over the REF and pressures associated with undertaking and publishing academic research within the university environment (see 41). These various concerns are likely to have contributed to “more support/opportunities in research and/or teaching roles” being identified as a key enabler in the survey.

7.4.2 Financial support, incentives and penalties to pursuing a research and/or teaching career

Increasing financial support and incentives to pursuing research and/or teaching careers emerged as the top enabler in the survey, whilst concern over potential financial penalties was the second most commonly selected barrier. Again, the interviews were used to develop a more in-depth understanding of the specific financial enablers and barriers.

Salaries and career progression

A key concern regarding taking up a joint appointment or university contract was the perception of lower HE salaries compared to the NHS (see also 8-9, 18, 24, 27), with this being a particularly acute issue for those working at a more senior clinical level. As noted above, there were also financial concerns in relation to limited opportunities for career progression in research and/or teaching relative to a clinical trajectory and the impact that taking time out of the clinical role might have on clinical career progression. The financial implications of self-funding academic study and/or reducing hours to undertake training were also raised as potential barriers.

Pensions

A preference for remaining in NHS employment or the healthcare organisation holding the substantive contract in the case of a joint appointment partially reflected the importance placed on retaining NHS terms and conditions, particularly with regards to pensions. Pensions were flagged as a potential barrier to taking up a HEI-based research and/or teaching role in both the surveys and the interviews, with a number of interviewees indicating that retaining their NHS pension would be a key factor in deciding whether to take up a joint post (see also 8-9, 12, 18, 24, 27). Some specifically cited issues with the terms and conditions of HEI pensions compared to those within the NHS.

Fixed-term contracts and job security

A key barrier to pursuing an academic or clinical academic career was concern over job security due to the preponderance of fixed-term contracts, particularly within HEI-based research positions. This situation was particularly

acute for those with dependents and caring commitments and was contrasted with the more secure, permanent clinical contracts in the NHS (see also 8, 41). Certainly, there was very little interest in fixed term-contracts in the survey and a number of comments flagged job security as an important concern.

7.4.3 Support from host employer

Although not in the top three most commonly selected enablers, “more support from my host employer for NMAHP research and/or teaching career development” was chosen by over 50 respondents, with 40 participants indicating that this was an important barrier (see also 18, 21-22). This was also the most prominent topic in the open survey comments as well as a key theme emerging in the interviews.

Organisational and professional healthcare cultures and infrastructure

Many of the interviews highlighted issues with a lack of embedded NMAHP-led **research cultures** within healthcare organisations and professions resulting in a lack of investment in combined roles and limited access to and funding for related training and development (see 7.4.5; see also 9, 17, 29, 33, 38). The latter was also flagged as an issue in relation to teaching and learning opportunities. Similarly, NMAHP leads rated the support, resources and opportunities available for NMAHPs in research and teaching on average as “not good” and “not good-fair” respectively. In particular, there was felt to be a lack of understanding and recognition of the value and benefit of NMAHP-led research in relation to organisational aims and objectives, for example, retaining and recruiting staff and improving patient care (see 7.4.3.2.).

There was also a sense that organisational and professional cultures did not recognise research, and to some extent teaching, as part of the identity and role of an NMAHP clinician, with clinical work always taking priority. Some participants also pointed to issues with the value placed on NMAHP professional development more widely. Overall, the NMAHP leads rated their organisations as only “slightly-somewhat aware” of NMAHP workforce capabilities, interests and aspirations.

These organisational barriers are linked to ongoing problems of increasing clinical workload and staffing shortages (see also 12, 20) as well as to feelings of guilt for taking time out of clinical work to focus on research and/or teaching. In turn, these issues result in challenges to clinicians being released from clinical duties to access relevant training and development opportunities (see 7.4.3.3).

Nurturing organisational and professional research cultures has been a central feature of recent profession-specific research strategies (3-5) and ICS-related guidance (2).

Senior strategic leadership and commitment

Building the organisational culture and infrastructure to better support NMAHP career development in research and/or teaching was tied to the need for greater strategic leadership and commitment that recognises the value and benefits of NMAHP clinical academic and academic careers (see also 10, 12, 19-22, 30, 32, 35, 39). In the NMAHP leads survey, a lack of strategic commitment and support was identified as a key barrier. Some interviewees indicated that even where senior-level commitment did exist, this was yet to translate into organisational objectives and outcomes measures supporting NMAHP development in these areas (see also 37).

Managerial support and prioritisation of clinical work

A lack of middle management support was a key theme in the survey comments, interviews and in the literature (10, 18, 35-36). This issue was variously linked to a lack of understanding regarding the opportunities and benefits of NMAHP-led research (see also 10, 12, 18, 30, 34, 36) and the prioritisation of clinical work in the face of high clinical demand and staffing pressures (see also 10, 26, 35-37). As a result, a number of participants described having to “battle” to be released from clinical duties to access relevant training and development opportunities, with study leave often refused (see 7.4.5; see also 19). In particular, a lack of support for early career clinicians to access training and development in research and/or teaching was highlighted.

Issues with managerial support might be linked to a lack of advice or guidance available regards to supporting NMAHP careers in these areas, or awareness thereof, as indicated in the NMAHP leads survey, with current workload also suggested to be limiting managers’ capacity to offer the necessary support.

Initiatives and support targeted at middle managers is recognised as a key enabler in the literature (10; see also 18, 35-36). There is also currently a strategic focus on the importance of line managers holding conversations focused on development and career progression (1).

Lack of protected time

Another key theme with regards to host support was the lack of protected time for NMAHPs to undertake research and/or teaching activities or access related development opportunities in their clinical roles (see also 7, 9, 34). The lack of allocated time for NMAHPs to be involved in research and/or teaching was also the most frequently selected barrier to

supporting NMAHP careers in these areas. Some interviewees pointed to protected time in NMAHP job plans as a key enabler (see also 23).

Difficulties in being released from clinical duties meant that a number of interviewees described having to use their “own time” to engage in research and/or teaching activities, training or development risking a sustainable work/life balance. More recently, protected time for training and engaging in research has been recognised as playing a key role in improving healthcare staff retention (1-2; see also 7 in relation to teaching).

As discussed above, there was also felt to be a lack of protected time within HE-based teaching roles to undertake research and/or access training and development opportunities (see 7.4.5)

Equitable opportunities

A key theme in the interviews was the perception of inequalities within and between organisations, regions and/or professions in terms of the availability and/or accessibility of academic development and career opportunities, contributing to a sense of “luck” to successfully pursuing a career in research and/or teaching (see also 3, 18). In particular, those working outside of geographical ‘hotspots’ for research in their profession/specialism and/or working outside large acute trusts were felt to have far fewer opportunities in this regard. Regional disparities in funding and infrastructure impacting on the availability of training and development opportunities is also flagged in the literature (24). Furthermore, interviewees pointed out inter- and intra-organisational variation in the degree of managerial support.

Variation between and within NMAHP professions was also commented upon, for example, physiotherapy was understood to be markedly more “research-active” than the other professions (see 19 with regards to their relative success with fellowship applications). Although likely reflective of the relatively small size of some AHP professions, limited/no representation for some AHP groups in this study may point to a lack of support and engagement with research and/or teaching in these professional groups. Outside nursing, nurses were perceived to have more development and career opportunities in research, for example, through access to research delivery positions, although mental health nurses felt that they had less access to these opportunities. However, nurses and midwives submit fewer fellowship applications and have a lower success rate compared to AHPs (21).

Some of these comments were borne out in the survey findings with nurses and midwives more likely to have a research-related job and spend more time working in research compared to AHPs (see 7.2). Key enablers and barriers were also spread over a wider range of factors for nurses and midwives compared to AHPs, with nearly three-quarters of AHPs identifying “increased financial support” as a key enabler compared to 50% of nurses and midwives and 60% of AHPs selecting “a more desirable range of contracts/posts” compared to 37% of nurses and midwives

Equitable support and opportunities for career progression has also been a feature of recent profession-specific research strategies with an emphasis on addressing under-represented groups and protected characteristics (3-5). To this end, the demographic data collected in this study can be built upon and compared to NHS workforce demographics and other relevant datasets (18, 36) to inform future enquiry into potential equality, diversity and inclusion barriers to career progression in research and/or teaching and learning and to develop appropriately targeted initiatives.

7.4.4 Training and development opportunities

Over 50 survey respondents indicated that “a lack of suitable research and/or teaching training and development opportunities” was a key barrier to pursuing a career in these fields. More specifically, the availability of funded academic study was highlighted as a limiting factor with calls for more funded opportunities at a regional, local and organisational level (see also 12, 18). Self-funding and the associated financial impact were a disincentive from pursuing further academic study, particularly when combined with limited career progression opportunities (see 7.4.2). A lack of clinical academic training and development opportunities is also highlighted in the recent literature (20, 23), with an increase in research and/or education-related training and development a central feature of current NHS workforce strategies (1, 7; 2 in context of ICSs).

Accessibility

Overall, it was the accessibility rather than the availability of training and development opportunities that was the key barrier, particularly with regards to being released from clinical duties (see 7.4.3). The feasibility and risk to work/life balance was also flagged as an issue when studies were undertaken on top of a full-time clinical role. In addition, some participants raised concerns as to whether there would be a “job to come back to” after taking a career break to undertake an academic qualification. The difficulties of navigating and understanding the available options (see 7.4.6) as well as the high eligibility criteria and complex application process for the NIHR ICA programme were also cited as potential barriers (see also 20, 24)

For a small sub-set of participants, age was felt to be a barrier to undertaking further training and development either in terms of the time elapsed since their last period of study and/or that they were too near retirement age. As noted above,

there is also an issue with a lack of support for early career clinicians to access training and development in research and/or teaching.

Entry-level opportunities

A key sub-theme with regards to increasing the accessibility of training and development opportunities was a call for more informal, “entry-level” research-related interventions such as one-off workshops, stand-alone modules and opportunities to take part in research delivery. These kinds of initiatives were felt to offer a chance to develop research skills and knowledge and gauge interest in a research role without having to commit to a longer-term academic study. In addition, these kinds of “stepping stones” were felt to be less intimidating for those with limited prior experience and/or confidence in pursuing further academic development as well as opening up opportunities for those without academic qualifications. The need for more accessible and inclusive training pathways is highlighted in the literature (18), with a recent strategic emphasis on addressing the development needs of people from different specialisms and backgrounds (see 7.4.5; see also 3)

Although there were generally felt to be more options for informal development in teaching and learning within the NHS, some concerns were raised regarding insufficient training and support for practice-based educators as well as those who had recently taken up HEI-based lecturing roles (see also 42-43). As noted above, there was also a call for more informal opportunities to engage in HEI lecturing (see 7.4.5)

Pre-registration opportunities

Although increasing research and/or teaching opportunities in healthcare education did not emerge as a key enabler in the survey, interviewees called for greater inclusion of research and academic careers in NMAHP undergraduate curricula as a way of helping to “normalise” these as part of NMHAP professional identities. This is a key theme within the literature (12, 18-19, 24-26, 37) and a core feature of recent profession-specific research strategies (3-5). The NIHR is currently working with HEIs to develop initiatives aimed at pre-registration nursing and midwifery students including resources providing information about clinical research delivery roles and developing hybrid research placements (48).

7.4.5 Careers advice, support and guidance

A key finding in the survey was that nearly half of the respondents had received no career advice in relation to research and/or teaching, with over half indicating that they did not know/were not sure where to go for advice in future. The relatively low proportion of respondents having received careers advice in relation to teaching is perhaps a contributing factor to participants expressing a relative lack of interest in this field compared to research (see 7.3). Although careers advice, support and guidance was not identified as a top enabler in the survey, it emerged as an important theme in the interviews and survey comments (see also 12, 18).

Information and communication

Over 50 respondents in the survey indicated that “limited knowledge/understanding of the research and/or teaching and learning opportunities available” was a key barrier, with comments pointing to the need for clearer information and “signposting” of opportunities in these areas (see also 12, 18). Similar issues were raised in the interviews with some participants describing “not knowing where to look” for training, development and jobs, and the information often proving difficult to find. Issues of limited communication and dissemination of these opportunities within healthcare organisations was also raised (see 7.4.3; see also 34-35). In addition, the available information was felt to be difficult to navigate and understand given the use of unfamiliar terms and the breadth of the different options available. In particular, some participants expressed confusion over how different qualifications and development opportunities “fit together” and map to a potential career pathway (see 7.4.3; 7.4.1). A central resource that explains and clarifies the available options and links to relevant research and teaching jobs was suggested.

Sources of careers guidance and support

Clinical colleagues working in research and/or teaching and learning, senior clinical academics, peers and mentors were identified as the most common sources of careers advice in the survey, highlighting the important role that *people* play in this regard. Similarly, interactions with people in teaching/research positions most commonly sparked an interest in these careers.

Mentoring

Mentorship was highlighted as a key enabler in the interviews, survey comments and in the literature (12, 16, 18, 21, 23-24, 27), particularly in terms of helping to navigate potential development and career pathways and supporting clinicians with the onerous process of making funding applications (see 7.4.5; 12, 18). This support is especially valuable given the lack of a clear clinical academic career pathway. There was a preference for a mentor with a similar career trajectory and professional background (see also 18), with a degree of overlap between the idea of a mentor and a role model.

Mentorship is also likely to be an important part of helping clinicians develop the resilience required to pursue a research and/or teaching career in the face of myriad challenges and barriers (see 7.4.6.5 see also 31 in relation to supporting the transition into academia). Yet, the interviews suggest that people often struggle to know where to find a mentor, with a

considerable degree of “luck” in finding the right person (see 7.4.4). The literature also points to a lack of adequate academic mentorship for clinical academics (9, 32, 34).

Role models

Visible role models were identified in the interviews and survey comments as an enabler to pursuing careers in research and/or teaching, particularly in terms of mapping out a potential career pathway and making these trajectories feel “possible” (see also 3, 12, 18). However, given the limited numbers of NMAHPs working as “clinical academics” in healthcare organisations and universities, the issue was not so much a lack of visibility, but the fact that they didn’t yet exist (see 12, 32). Those participants seeking to pursue a clinical academic career were actively taking on the responsibility of becoming a role model for the next generation by trying to build a career pathway that others might follow.

The importance of visible role models is reflected in 30 of the survey respondents indicating that being “unaware of anyone with a similar background to me having a successful career in research and/or teaching” is a barrier to pursuing a career in these areas.

Peer support networks and resilience

Given the many challenges and barriers faced by NMAHP clinicians in seeking to pursue an academic or clinical academic career, the interviews highlighted the high levels of dedication, self-sacrifice and resilience required to persevere with this trajectory. Although not a dominant theme in the survey or interviews, access to peer support networks were also cited as important enablers in this regard (see also 18), together with access to mentors and role models.

7.5 Study objective 4: How HEIs and NHS organisations can work more effectively together to address shared workforce challenges

Participants pointed to the importance of senior leadership commitment across HEIs and NHS organisations to strengthen cross-sector partnerships and collaborative working to support clinical academic careers, particularly with regards to setting up joint appointments and clearer career pathways (see 8, 12, 16, 18-19, 23, 37). The literature also points to the importance of setting up a joint clinical academic pay scale (12, 24) as well as adapting medical clinical academic practices and principles (18). Creating a shared vision and strategy based on common goals and challenges is perceived to be an important part of developing these more collaborative relationships, with an emphasis on articulating the mutual value and benefits of clinical academic roles to address shared workforce recruitment and retention issues.

There was a sense, however, that foundational work was first needed to “bridge” real and perceived divide between HEIs and the NHS, especially in terms of tensions in existing relationships supporting student placements. The literature also highlights incompatibilities between the infrastructures and culture of these two sectors (9, 18, 27, 37), with a lack of integration recognised as a barrier to supporting NMAHP clinical academic careers (18). Other areas for collaboration and reciprocal benefit were highlighted as a means of bringing the two sectors closer together, for example opening up opportunities for clinicians to participate in and contribute to HE courses and strengthening connections between clinical practice and academic research. Sharing resources, initiatives and expertise between NHS institutions and HEIs was seen as a vital part of moving towards a sense of being “one workforce” (see 23).

8 Recommendations

The findings from this study point to key areas of focus needed in a regional strategy to better prepare, support and grow the NMAHP academic workforce.

Recommendations

“Growing” the NMAHP academic workforce.

- The HE sector needs to create more sustainable opportunities for NMAHP clinicians to integrate clinical and academic work through collaboration with NHS organisations to set up joint clinical academic posts (see below on partnership working). Increasing the number of clinical academic posts is recognised as an important enabler to supporting education expansion and reform in the recently published NHS Long Term Workforce Plan.
- Adopting and adapting medical clinical academic practices and the Follett principles as well as sourcing model contracts and job templates is likely to aid the process of setting up joint posts.
- It is recommended that NHS organisations and HEIs develop joint long-term funding models to support these posts.
- Creating sustainable part-time research and/or teaching posts within the HE sector may also be attractive to NMAHP clinicians who wish to retain a clinical role.
- Working together to develop a clear clinical academic career pathway that tracks the ICA development trajectory will help to identify posts at early-, mid- and later career stages supported by joint workforce planning.
- In particular, senior level posts are required that enable clinicians to maintain and apply research skills acquired during doctorate and post-doctorate training.
- More “flexible” career pathways are also needed to allow clinicians to transition from practice-based roles such as research delivery practitioner, ACP and consultant roles into more academic career trajectories.
- Part-time HE contracts and joint appointments will need to find ways of addressing concerns regarding pension portability and the current incommensurability of salaries between NHS organisations and HEIs. Establishing a joint clinical academic pay scale is also recommended.
- Creating roles that combine clinical, research and teaching activity and/or ensuring more protected time for research within HEI-based teaching positions is likely to be an incentive to taking up teaching responsibilities. For example, ‘academic internships’ could be made available to educators working in the HE setting to develop their research expertise by joining existing research teams and/or becoming involved in other research-related activities such as research ethics committees. These opportunities would not need to exactly match the clinicians’ profession/specialism, reflecting the increasingly multi-disciplinary approach to clinical practice and research.
- Widening the eligibility requirements for academic positions to accept master’s qualifications without a PhD would increase the pool of potentially eligible applicants.

“Preparing” the NMAHP academic workforce

- HEIs and NHS organisations need to work together to identify ways to increase the availability of funded training and development opportunities at a regional, local and organisational level.
- Identify ways for NMAHPs in the academic workforce to undertake a higher qualification.
- Enhancing the research content and exposure to research and/or teaching careers during pre-registration programmes is recommended. Capitalising on clinicians’ interest in teaching about research may be helpful in this regard as well as building on existing NIHR initiatives.
- Introductory workshops and initiatives to promote and encourage NMAHP clinicians who had not previously considered a career in research/teaching.
- Developing more flexible and “informal” opportunities for NMAHPs to engage in training and development opportunities such as one-off workshops, stand-alone modules and experience of research delivery settings.
- Further work to unpick gaps in research and teaching knowledge, skills and confidence to inform the development of targeted interventions, such as research skills training in presenting and publishing research
- Clearer information, signposting and guidance to support clinicians to navigate development and career opportunities.
- Increasing mentorship availability and accessibility, including academic and career mentorship.
- Matching research and/or teaching interests of NMAHP clinicians with those of academics working in the North West.
- Enhancing access to peer support networks.
- Targeted support to help NMAHP clinicians build networks and develop their resilience to persevere in research and/or teaching.
- Increasing the visibility of clinical academic and academic role models particularly with regards to mapping out potential development and career pathways.
- More visible promotion of HEI teaching careers, enhanced careers advice and guidance and informal opportunities to engage in HE-based teaching and learning activities may help to increase interest in teaching careers.
- More work is needed to understand specific career progression barriers for under-represented groups including those related to protected characteristics building on the demographic data collected in this study and existing datasets.

“Supporting” the NMAHP academic workforce

- Closer partnership working between HEIs and the NHS is required to develop joint posts, build a clinical academic career pathway and more closely align academic and clinical career trajectories.
- Interventions are needed to help build strategic, cross-sector, senior-level support for clinical academic careers, with a focus on identifying and articulating the mutual benefits of clinical academic roles in relation to shared recruitment and retention challenges. Developing shared strategies aligned to the current national, regional and organisational research, education and workforce strategic landscape will be an important part of this process.
- Support for HEIs and NHS organisations to identify common goals and challenges and nurture collaborative relationships with the goal of moving towards a sense of being “one workforce”.
- Work to address existing tensions and differences between the culture and infrastructure of the two sectors, particularly in the context of student placements and connectivity to academic research projects.
- Identify potential opportunities for HEIs and NHS organisations to share resources and expertise.
- Connect into and share learning from existing centres and networks focused on building NMAHP clinical academic workforce such as the Manchester Clinical Academic Centre (MCAC) and The Healthcare Professionals Clinical Academic Roles and Career Pathways Implementation Network (CARIN).
- HEI and NHS organisations in the region need to come together to address inequalities in opportunities dependent upon where a clinician works and/or their professional background.
- Opening up research delivery positions to a wider array of professions may help to address some of the real and perceived inequalities between nurses and AHPs, building on work by the NIHR in this area.
- Working with healthcare organisations to create protected time within job plans for NMAHP clinicians to engage in research and/or teaching activities and related CPD opportunities. In particular, further work is needed to identify barriers to undertaking research and/or education in ACP and consultant roles.
- Developing mechanisms for protecting work/life balance for clinicians working across HEI and NHS. In particular, real and perceived issues regarding high teaching workloads and “burnout” within HEI-based teaching positions needs to be addressed.
- Support to complete academic qualifications whilst working within the university and/or additional training and development to support the transition into academia is likely to increase the appeal of HEI-teaching roles.
- Initiatives to support healthcare middle managers to recognise the value and benefit of supporting NMAHP clinical academic and academic careers, increase their knowledge of available opportunities and ways to enable release from clinical duties.
- Support for early career clinicians to access training and development opportunities in research and/or teaching.

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10 Appendix 1

Focus Group Summary

Context/challenge

NHS

- Workforce vacancies, recruitment and retention challenges, time pressures
- Financial pressures
- Although ICSs are supporting connection between HEIs and healthcare, HEIs are often not viewed as part of the healthcare system
- Despite increasing focus on research in NHS, especially within aspirant university teaching hospitals:
 - University Hospital Association requirements (20 joint consultant-level posts) exclude small hospitals, HEIs and NMAHPs
 - Limited NMHAP workforce transformation in past 35 years
 - Small number of clinicians with research qualifications/experience
- Organisational culture
 - Insufficient emphasis on developing NMHAP research skills in clinical practice
 - Insufficient awareness and understanding of what research is, where it happens and relevance to clinical practice
 - Insufficient awareness of academic teaching and/or research careers
 - NMAHPs often don't see academic careers as a possibility
 - Research often viewed as 'peripheral' to NMAHP profession and practice
 - Issues of systemic structural racism limiting BAME progression, promotion and aspirations

HEI

- Workforce vacancies, recruitment challenges e.g. linked to ageing workforce and previous reductions in commissioned training places
 - Specific recruitment challenges in smaller professions/specialisms
 - Pressure on staff to cover vacancies
 - Pressure to increase student numbers
- Financial pressures
 - Salary and pension discrepancy between HEIs and NHS
- Competition within HEI-dense NW region
- Job insecurity and practical implications (e.g., mortgage eligibility) of fixed term contracts
- Myths/misperceptions of the CV/profile requirements for academic posts
- Insufficient research experience/qualifications to meet post/university requirements
 - International clinicians often have necessary research experience, but insufficient clinical experience
- Lack of development time in some HEI research positions
- Ethical dilemma of 'poaching' staff from NHS
- Lack of visibility of research culture within teaching-intensive HEIs
- HEI workforce not reflective of diversity of student population

NMAHP professional development

- No standard clinical academic career framework, development pathway, structure and pay scale
- Difficulties with accessing development opportunities
 - Limited opportunities and funding
 - Difficulties of securing NIHR funding
 - Applications require extensive support
- Low uptake of NIHR and other research-development opportunities
- Insufficient exposure to research in undergraduate (UG) study
 - Research placements sometimes not seen as equally valid option
- Lack of an aspirational narrative of the value and need for dedicated NMAHP research resourcing to address e.g., long term conditions

- Pressure for rapid workforce recruitment 'squeezing out' research and challenging need for NMAHP careers as graduate professions

Potential opportunities/solutions

- Need for radically different approach
- HEIs to be part of enabling cultural change within NHS
 - Build on ICS system-working to nurture connections between HEIs and healthcare system
 - Highlighting role of HEIs as central to addressing recruitment and retention challenges:
 - Recognition of HEIs as workforce providers
 - HEI role in nurturing aspirational disciplines and supporting NHS as excellent graduate employer
 - Work with NHS senior leads and middle managers to help raise expectations/aspirations and support increased awareness and understanding of research and development of research skills and careers (especially at early career stage)
 - Build on shared agenda between HEIs and hospitals (especially those aspiring towards University Teaching Status):
 - Lobby for change in University Hospital Association requirements
 - Develop collaborative partnerships and opportunities that link practice and research to build interest e.g.:
 - 'Rapid Conversion of Evidence Summaries (RaCES) at UCLAN
 - Involving established clinicians in SIM Never Events
 - Co-designed monthly seminars
 - Engagement with race equality programmes
- Increase flexibility of teaching and research posts
 - Increase number of joint posts
 - Part time options
 - Reduce reliance on fixed term contracts; offer salaried positions on more generic contracts
 - Offer an increased range of options:
 - Teaching and scholarship (T&S), teaching and research (T&R), teaching/research only
 - Visiting lecturer, associate lecturers to provide specialist input
 - Greater flexibility in post requirements e.g.:
 - T&R posts not requiring clinical registration, T&S posts not requiring PhD
 - 'Demystify' academic career requirements
 - International HE academy offering salaried staff options to teach modules in other universities
- Increase (flexibility of) development opportunities to develop research skills/mindset
 - Internships
 - Practice-based projects
 - Secondments
 - Informal development opportunities e.g., outside working day
 - Research development opportunities for teaching only lecturers
- Development of a NMAHP research career framework with a salary scale agreed across HEIs
 - Explore possibilities for funding
 - Research development opportunities for newly qualified NMAHPs
- Increase number and validity of UG research placements
 - Provision of case studies