Mapping research capacity activities in the CLAHRC community

Supporting non-medical professionals

Executive summary

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Foreword from NIHR

NIHR has, since its inception, recognised the need for a strong scientific research base in the allied health professions, in particular to inform service planning and decision-making.

NMAHPs work across a range of clinical and non-clinical environments within the NHS. Each allied health profession has a unique clinical focus and some, such as nutrition and dietetics, have developed a critical mass of research active professionals. However, not all NMAHPs are at the same stage of research capacity development.

Despite this diversity, allied health professions share similar challenges in building research capacity. Some knowledge-related – the lack of quality and generalisability of research evidence – and some practical problems - the lack of time, skills and resources. With the right support and guidance, it is possible for those NMAHPs who are interested in research, to establish a career that combines this interest with patient care and service delivery.

To achieve this aim, the NIHR has developed a number of research training opportunities to support the career pathways of NMAHPs alongside clinical activity. Although pathways to an integrated clinical and research career are well established for medical staff, comparable opportunities are not well defined for NMAHPs and often clinicians who are interested in becoming involved in research do not know where to begin.

NIHR CLAHRCs are making an important contribution to NIHR’s challenge of research capacity building for NMAHPs and this report that sets out what has been done across the CLAHRCs to achieve this aim. Brief case studies in the report illustrate the best examples of how capacity building for NMAHPs have been achieved. I welcome this report and hope that the information of what the NIHR CLAHRCs offer will assist NMAHPs and NHS managers to make the most of opportunities that will ultimately bring direct benefits to patients and the public.

Dr Louise Wood
Director of Research and Development
Department of Health
Foreword from NIHR CLAHRCs

Whilst integrated clinical and research career pathways exist for medical professionals, comparable opportunities are not well defined for Nurses, Midwives and Allied Health Professionals (NMAHPs), yet they form the vast majority of the clinical workforce which provides care to patients.

This report maps the role of the NIHR Collaborations for Leadership in Applied Health Research and Care (CLAHRCs) in England as they seek to support, develop and sustain NMAHPs as clinical academics and provides insight into successful models of capacity building and recommendations for further development.

The NIHR CLAHRCs were created to help ensure research evidence is used to improve health services and patient care. They bring together local NHS providers and commissioners with academics, other relevant local organisations, industry partners and health research infrastructures including Academic Health Science Networks (AHSNs).

The CLAHRCs have three distinct pillars of work: firstly, they undertake high quality applied research, and secondly they undertake evidence based implementations that are responsive to and in partnership with their collaborating organisations, patients, carers and the public. The third pillar of the CLAHRCs and the focus of this report is a requirement to increase the country’s capacity and capability to conduct high quality applied health research, whilst also understanding implementation and improvement science thereby creating pathways to impact.

The report describes via a mapping exercise and case studies, the variety of CLAHRC interventions to support NMAHP research capacity. These range from ‘Learning by Doing’ through to more formal courses such as Improvement Science MScs or doctoral programmes. Evaluation of the impact of these interventions indicates the importance of a continuing CLAHRC role in this space.

Professor Sue Mawson
Director NIHR CLAHRC Yorkshire & Humber

Professor Derek Bell
Director NIHR CLAHRC North West London

1. In 2013, following the success of the 9 pilot CLAHRCs, the NIHR funded a second wave of 13 CLAHRCs for a five year period commencing 1 January 2014.
1. Introduction

CLAHRCs 2014/2018 funded by the NIHR, have a requirement to increase the country’s capacity to conduct high quality applied health research. Supporting all professional groups to do this is an important element of this objective.

Pathways to develop an integrated clinical and research career are well established for medical professionals, but comparable opportunities are not well defined for NMAHPs, yet they form the vast majority of the clinical workforce which provides care to patients.

Building capacity in these groups supports a principle of coproduction that is imperative for applied health research and service reconfiguration, and the core business of CLAHRCs.

The ‘Shape of Caring’ (2015), known as the Willis Report, highlights the need to generate a research culture in nursing, and provide the foundation architecture to make change necessary. CLAHRCs are named as key players in this endeavour.

The Directors of the CLAHRCs agreed in July 2015 to support a joint piece of work on articulating the role that CLAHRCs play in supporting non-medical clinicians. This report describes this work.

This is an executive summary of the full report and summarises key messages from it. The full report has more detail of services and initiatives that will be useful to those interested in building capacity in NMAHPs. www.clahrcreports.co.uk

The objectives of the project

1. Identify activities that the CLAHRC community has deployed in supporting NMAHP’s engagement in research
2. Highlight stories of impact on career pathways of NMAHP
3. Develop case studies of impact that this capacity building work has had on services, patients and service users.
2. What do we mean by research capacity building?

Undertaking a conceptual review of the literature, Condell and Bagley (2007) define research capacity development (RCD), as “a funded, dynamic intervention operationalised through a range of foci and levels to augment ability to carry out research or achieve objectives in the field of research over the long-term, with aspects of social change as an ultimate outcome” (p273).

CLAHRCS have the means (resources, partnership working, academic links and influence at a number of structural levels), and the motivation to do this. Producing positive changes in research cultures in order to ‘make a difference’ to clinical practice is fundamental to the CLAHRCS’ role.

Who are non-medical clinicians or NMAPS and why are they important in research?

Non-medical practitioners include nurses, midwives and Allied Health Professionals, which are 12 distinct professions including Prosthetists and Orthotists, Orthoptists, Drama Therapists and Art and Music therapists, Dieticians, Chiropodists/Podiatrists, Speech and Language Therapists, Paramedics, Radiographers, Physiotherapists and Occupational Therapists. They form the vast majority of the clinical workforce in the NHS.

3. The method of the mapping exercise

This mapping exercise was completed in the last six months of 2015.

Sources of data used included the training sections of the 2014/15 annual report for each CLAHRC, and consultation with the training leads and programme managers. Data was summarised using the tables that appear in the appendices (3-7) of the main report. This information was fed back to each CLAHRC for verification. Seven brief case studies are included, written by a member of the CLAHRC who developed the initiative. The exercise was undertaken in three parts, which forms the structure of the report (sections 2-5).
4. Activities for supporting NMAHPs engagement in research in the CLAHRC community

NMAHP capacity activity is provided by CLAHRCs in two ways: activities shaped and delivered specifically for NMAHPs, and activities designed for all professional groups, but which NMAHPs have access to, and use.

These activities provided by CLAHRCs are extensive, and details are included in the appendices of the main report. They include:

- **Learning by doing** activities designed to provide experiential learning. They ensure protected time away from clinical pressures to gain skills and experience. They do not contribute to formal training or qualifications, but are aimed at enhancing research CVs, and extending expertise. These ‘learning by doing’ activities primarily focus on research skills development, but some also focus on knowledge mobilisation and research implementation.

- **Formal Training** (PhD/MSc). Some provision for PhD and Masters qualifications in clinical research programmes are specifically aimed at clinicians and NMAHPs.

- **Implementation Science Support**. Two CLAHRCs have developed a Masters programme focussing on implementation science. These programmes are provided for multi-professional groups, and have a strong emphasis on experiential learning, undertaking project work alongside patients and carers. The NIHR CLAHRC West Midlands has also developed a Massive Online Open Course (MOOC) and blended learning MSc on implementation science which will be available shortly.

- **Research Training/Short Courses/Workshops**. These examples illustrate training for short periods of time, and aim to increase skills in a particular area.

- **Miscellaneous Activity**. Examples include learning sets, mentorship and coaching to support research capacity, communities of practice and peer to peer support.

Full details of these activities by the CLAHRCs are provided in the appendices of the main report, which is intended to be a resource to enhance connections and share information across the CLAHRC community.
5. The Impact of Pilot CLAHRCs on Early Research Career Pathways for NMAHPS

This part of the mapping exercise was undertaken to explore how non-medical healthcare professionals have progressed through career pathways linked to CLAHRC activity in order to:

- Determine the mechanisms and activities that support career progression.
- Explore how developing NMAHPs in this way could have impact on the clinical environment.

Examples were sought of NMAHPs who have shown academic career progression within five pilot CLAHRCs (2008/13). Eight individuals were put forward from four CLAHRCs; one occupational therapist, three physiotherapists, two nurses, one dietician and one pharmacist. The majority were novices when they made initial contact with the CLAHRC (pre-Masters). All are currently active in research. Five of the respondents work in research full-time (although have some limited clinical contact time), three maintain clinical work with time brought out through successful applications for funding.

Mechanism and activities that supported capacity building in this group of practitioners include:

- **The NIHR Integrated Clinical Academic Training pathway.** Examples include the use of internships, Masters in Research, and Doctoral Fellowships. The CLAHRCs were fundamental in supporting these applications, and maximising learning opportunities they can provide.

- **CLAHRC fellowship preparation award.** A small pot of funds supported one individual to successfully prepare for a PhD fellowship application.

- **Secondment opportunities** into a CLAHRC were strongly associated with consolidation of research skills, and enabled opportunities to develop the ‘research craft’ through experience within CLAHRC projects. They were also used in support of successful funding applications as a ‘next step’ in the career pathway. Secondments were often planned around the post-masters period.

- **Mentorship and supervision.** CLAHRCs provided supervision and mentorship for aspiring clinical academics.

Examples were provided of how the aspiring, and/or successful clinical academic had an impact on their clinical environment. This included impact on:

- **Capacity building** in others, by enabling and supporting other clinical staff to undertake research, or make applications for funding.

- **Research culture in the clinical environment:** by developing research plans in a clinical area; increasing the level of audit and evaluation in the clinical department due to skills learnt in CLAHRC; and applying knowledge of Public and Patient Involvement (PPI) in evaluation, service development and clinical practice.

- **Research implementation:** by developing a business case for a clinical change based on research and evidence; supporting change in training of clinical skills, and influencing local clinical protocols based on research evidence.

- **Professional reputation:** Research activity through CLAHRCs have raised the academic profile of NMAHP professions in a clinical area. Examples were given of further invitations to become involved in grant submissions because of an increased research profile. One practitioner was able to get more involved with a professional body as a result of their clinical academic career progression.

- **Clinical academic integration:** Links to CLAHRCs provided access to resources and academic assets into the clinical area, and the aspiring clinical academic could provide a ‘different resource’ of research information to other staff, understanding the NIHR infrastructure because of this experience.

### Securing time for research from clinical duties and support from the clinical manager

There was some experience that managers could be supportive when implementing backfill arrangements, but some practitioners had poor, inconsistent or no support from clinical managers. There was also some experience that fellow colleagues found backfill arrangements unsatisfactory.

Making research a ‘mainstream’ activity was described as challenging, and support from managers could be mixed in this regard. Practitioners in clinical posts often used their own time to do research. Research activity that linked to patient recruitment was often difficult to fund separately from clinical time, and therefore increased clinical pressures were experienced by practitioners and clinical teams.
6. Research Capacity Development in NMAPS: Case studies

Seven case studies were presented as a ‘deeper dive’ into the types of work CLAHRCs are delivering to promote research capacity development.

Case studies were selected using purposive sampling to provide a full and balanced picture that takes account of:
- NMAHP specific as well as multi-professional provision, and to include NHS managers and PPI
- activities aimed at different stages of the career pathway (early to mid-career)
- ‘very early’ career pathway options promoted by the Willis Report (2012) in order to learn and prepare for this.

The table below describes the case studies that are included in the scoping report.

<table>
<thead>
<tr>
<th>Activity Description</th>
<th>Why this is important</th>
<th>CLAHRC Case Study Main Author and Contact Details</th>
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</table>
| 1. Post Masters Internships | • Learning by Doing  
• Early career, specific to NMAHPs  
• Infrastructure joint work (CLAHRC/ BRU/ HTC)  
• Links with industry | Yorkshire and Humber  
Jo Cooke  
Jo.cooke@sth.nhs.uk |
| 2. Clinical Doctorate Research Fellowships | • Integrated clinical training  
• PhD early- middle career development  
• Multi-professional learning  
• Longevity and track record | Wessex  
Dr Greta Westwood  
Greta.westwood@porthosp.nhs.uk |
| 3. Research Capacity Dementia Care Programme | • NIHR PhD and CLAHRC specific call  
• Dementia Care  
• Early career researchers matching the Willis (2012) recommendations | Southwest  
Dr Vicki Goodwin  
v.goodwin@exeter.ac.uk |
| 4. Improvement Leader Fellowship Scheme for Doctors, Nurses, AHP’s, Managers, Academics Patients and Carers | • PhD Learning by Doing  
• PPI involvement  
• Multi-professional involvement | NW London  
Dr Rowan Myron  
r.myron@imperial.ac.uk |
| 5. HE NCEL CLAHRC Research Fellowship Scheme | • Learning by Doing  
• HE NCEL and NHS organisation joint funded secondment. NMAHP’s only  
• Aim to prepare an application for funding e.g. PhD fellowship as an outcome | North Thames  
Prof Naomi Fulop  
n.fulop@ucl.ac.uk  
Dr Helen Barratt  
h.barratt@ucl.ac.uk |
| 6. CLAHRC Fellowships for Clinicians, Health and Social Care Practitioners and Managers | • Learning by Doing  
• Includes health and social care practitioners, managers and NMAHPs | East of England  
Dr Christine Hill  
Cmh86@medschl.cam.ac.uk |
| 7. Developing and supporting research midwives in the West Midlands through a Research Midwives Forum | • Learning by Doing  
• Early career researchers matching the Willis (2012) recommendations  
• Infrastructure joint working (CLAHRC & CRN)  
• Supporting implementation of evidence in to practice | West Midlands  
Dr Sara Kenyon  
s.kenyon@bham.ac.uk |
7. Conclusions and Reflections

This mapping exercise demonstrates that CLAHRCs are undertaking extensive activity to build research capacity in the non-medical clinical professions. It provides evidence that CLAHRCs are able to contribute to establishing a research culture in these groups, and can be an effective part of the architecture to make change necessary.

Strengths that CLAHRCs can demonstrate in building capacity in NMAHPs

Diversity of funding sources and access to other resources: The CLAHRCs have identified and utilised a number of funding sources, as well as harnessing other resources to undertake capacity building activity including:

- CLAHRC training budgets
- research Capacity Funds
- matched funding from diverse partners including the NHS, Higher Education Institutes and Industry
- partnership work particularly with Health Education England (HEE) and NIHR, and accessing funds through applications for further funding to support this
- access to high quality clinical and academic expertise through matched funding
- networking and developing trusted relationships with partners.

Funding backfill and protected time: Financial resources, in the form of matched funds from health and social care partners, have been used to fund protected time away from clinical responsibilities through backfill arrangements. This was described as an ‘essential’ requirement for success. However, difficulties still can occur in releasing practitioners from clinical time even when funding is provided.
Multiple, and diverse activities to support research capacity building: A diverse range of activities to build research capacity is described in the report. These activities often have multiple components to them, which promote the development of research skills, as well as support confidence building and leadership, and enhance reflection and action back into the clinical setting. Sequential provision linked to career planning and progression has proved helpful. Some CLAHRCs and the NIHR ICAT pathway supports this approach, but the missing link is the post Masters, pre-doctorial steppingstone. Such opportunities are offered through internships and CLAHRC fellowships in some CLAHRCs. Other CLAHRCs should consider providing this.

Some CLAHRCs provide activities specifically for NAMHPs, whilst others provide activities for all professional groups. Given the limited career opportunities currently in mainstream services, activities specifically designed for NMAHPs should continue, but these professionals should also make best use of generic opportunities. Some real benefits for interdisciplinary working have been identified in this mapping exercise. Such activities should be woven into activities specifically aimed at NMAHPs.

Secondment posts into CLAHRCs are helpful for career progression. CLAHRCs should invest in these.

The CLAHRC Health Services Research programme provides impactful clinical academic experiences for learners: The flexibility of the CLAHRCs, and inherent nature of the work undertaken in them provides opportunities for novice and developing clinical academics alike, to gain experience of cross boundary working in research and implementation projects. CLAHRCs have a remit for further grant capture. This report has highlighted that engaging NMAHPs as co-applicants on bids supports career progression, and this should be part of the capacity building function of CLAHRCs.

Capacity building for implementation and implementation science training: CLAHRC Fellowships and ‘learning by doing’ activities provide opportunities to develop skills and abilities for implementation. Based on the evidence submitted to this report, more formal training, linked to the CLAHRCs (at Masters level) seems limited to a small number of CLAHRCs.

Capacity building and impact on the clinical research culture: There are some early signs that integrated research careers for individual NMAHPs can have an impact on the clinical environment. Limited examples were provided of impact on patients and on services. CLAHRCs should systematically collect such examples.

Opportunities for improvement

This report has highlighted some areas for improvement. Managerial and organisational support for career development: NMAHP managers have little experience of supporting clinical academic pathways. The NHS career structures for clinical academic posts are inconsistent at best, and none existent as the norm. This report continues to find that some practitioners had poor, shifting, or no support from clinical managers. Examples for good support were reported however.

Many CLAHRCs have aimed to engage with managers to secure backfill arrangements and enable benefits to the clinical environment. These activities have mixed results, but with some positive outcomes. This is an area that needs some consideration, and would benefit from problem solving together, with exchange of best practice. CLAHRCs may have a role at supporting organisational change in this respect.

Mapping career pathways in NMAHPs: We have identified that there is a considerable number of NMAHPs being supported by CLAHRCs to develop clinical-academic careers. These individuals may also impact on the clinical environment and services to patients. CLAHRCs should explore a way to maintain contact with these individuals, and to collect examples of career progression, and impact on services and research activity.

Differences and inconsistencies in capacity provision: The evidence submitted to this mapping exercise highlights that there are differences in capacity provision across the CLAHRC community. This includes links with the NIHR Masters in Research Programme, variable amounts of partnership work, and access to HEE and Academic Health Science Networks (AHSN) resources. Formal Masters in implementation science level training is limited to a small number of CLAHRCs.

‘Learning by doing’ schemes vary considerably across the country on the amount of protected time offered, and there is no consistency in the use of title for them. This can be confusing as what is offered under the same title can be markedly different across the network. It may be worth suggesting an agreed language/ titles for the length and type of provision on offer.
Further partnerships: Organisational partnership work with NMAHPs professional bodies was not reported within the project and might be considered.

Potential area for joint working as a CLAHRC community

The report has highlighted potential synergies and possibilities for joint working across the CLAHRC community that the directors and training leads might consider.

Placement and cross CLAHRC secondment opportunities: Many of the CLAHRCs offer ‘learning by doing’ opportunities. One CLAHRC has successfully worked across the NIHR infrastructure (BRU and HTC) to extend learning opportunities. It might be worth exploring cross CLAHRC placements in a similar way. The NIHR also offers exchange placements for doctoral students. The CLAHRC community could also provide such exchanges for NMAHPs, but not necessarily linked to doctoral study.

Developing linkages between CLAHRC community research outputs and implementation capacity developments: Many of the CLAHRC implementation activities feature project work into services. There may be some benefit in making research outputs and ‘actionable tools’ developed from the national CLAHRC activity available for such project work. In this way research evidence can spread into services.

Collaborations around evaluation: Many of the CLAHRCs report they are undertaking evaluation of capacity building initiatives. There may be some willingness and advantage for joining up these activities.

Sharing what works, and learning together: There is great diversity across the CLAHRC community in how capacity is being developed. There are also ‘wicked’ problems that continue to persist, for example enabling managerial support for academic career progression. Sharing results of what works, as well as developing solutions together to tackle problems could be helpful.

Develop a network of clinical academic NMAHPs: As clinical academic careers are relatively limited and new for this group of practitioners, they may feel isolated. It may be beneficial to enable national networking opportunities to explore synergies between these individuals.

Sequential provision linked to career planning and progression has proved helpful.