National Guidance for Clinical Academic Research Careers for Nursing, Midwifery and Allied Health Professions in Scotland
Introduction

This document presents national guidance to support the development of Nursing, Midwifery and Allied Health Professions [NMAHP] clinical academic research careers. This national approach, comprising a Clinical Academic Research Career (CARC) Framework and accompanying Principles, aims to provide a sustainable and consistent structure to guide NMAHP clinical research collaborations and role development for the mutual benefit of service users and quality improvement in research in the university sector and the NHS.
In Scotland, engagement between NMAHP practitioners and researchers within academic institutions has been supported through a number of different initiatives and funding models.

Since NMAHP education in Scotland moved into Higher Education Institutions a research and evidence based culture has been promoted. This enabled NMAHP Schools to engage with the creation of knowledge through research as well as the transmission of knowledge through undergraduate teaching and postgraduate programmes at Masters and Doctoral level specifically designed for practitioners.

The Nursing Research Initiative for Scotland was set up in 1994 with a remit to ‘involve nurses and other relevant health professionals in its research activity’. This pattern of practitioner involvement and leadership in research through clinical academic research engagement has continued into its current configuration as the NMAHP Research Unit.

The publication of key policy documents for NMAHP research - ‘Choices and Challenges: the strategy for research and development in nursing and midwifery in Scotland’ (Scottish Executive Health Department 2002) and the ‘Allied Health Professions Research and Development Action Plan’ (Scottish Executive Health Department 2004) - renewed the focus on developing capacity and capability through the creation of partnerships between academic and clinical researchers. Two separate but related initiatives were set up in response to recommendations from these policies.

In 2003 the NMAHP Research Training Scheme (NMAHP RTS) was launched, involving a funding collaboration between NHS Education for Scotland (NES); the then, Scottish Executive Health Department (SEHD) and The Health Foundation. The aim of this Scheme was to support six PhD studentships and six post-doctoral fellowships for NMAHP practitioners who continued to work for the NHS one day a week. Evaluation has shown that the quality of
individuals awarded the studentships/fellowships was high and that they contributed significantly to the development of a cohort of clinical researchers. However, many of those who benefited from the scheme are now employed by the university sector, rather than working in a clinical academic research post.

The Research Training Scheme was followed by a Strategic Research Development Grant targeted at developing the infrastructure for capacity and capability building for NMAHP Research. From this investment three regional consortia of Higher Education Institutions and their NHS Board partners were established with one of the original aims being to create opportunities for strengthening NMAHP clinical academic careers. The consortia, funded over a five year period were: Alliance for Self Care Research (ASCR), covering the north and north east of Scotland; the Centre for Integrated Health Research (CIHR) covering the south and south east of Scotland and HealthQWest covering the West of Scotland. Each consortium has developed capacity and capability within areas of relevance to NMAHP policy and practice. Over 35 full time equivalent research posts have been funded through the initiative, approximately a third held by Nursing and Midwifery professionals, a third by Allied Health Professionals (AHPs), and the remainder by other disciplines (psychology, statistics, and biomedical scientists).

These significant investments in capacity and capability building for NMAHP research sit within a wider context which includes the Chief Scientist Office (CSO) Personal Award Schemes which extend from PhD studentships, through to PhD, post doctoral and career scientist level schemes. These schemes are not specifically targeted at NMAHPs but have been a vital source of funding for clinical and academic NMAHP researchers at PhD and post-doctoral levels. All of these developments contributed to the success of NMAHP research in Scotland in the 2008 Research Assessment Exercise (RAE), a system to assess the quality of research. Three submissions were in the top 10 in their category in the UK. The RAE received submissions from Higher Education Institutions, not from the NHS, so it is difficult to gauge the contribution made by clinical academics to these results. In 2014 a different system for the assessment of research outputs will be in place. This will be known as the Research Excellence Framework (REF).

Shortly before the 2008 RAE was conducted the UK Clinical Research Collaboration published a report (UKCRC 2007) containing a series of recommendations on the development of nursing research career pathways. Following a consultation exercise it was agreed that these also substantially applied to Allied Health Professionals. In Scotland, many of the key messages from the report have already been introduced through the initiatives undertaken since 2003.
In 2009, the CSO launched the Scottish Academic Health Sciences Collaboration (SAHSC), a national clinical research platform for patient-oriented research which builds on the existing partnerships between NHS Boards and their university partners (Scottish Government 2009a). The collaboration is aligned to the four university medical schools of Aberdeen, Dundee, Edinburgh and Glasgow. The key aims of the SAHSC are to create a world leading platform to attract research funds, facilitate leadership of an evidence base culture, and to generate new posts to support clinical research (Scottish Government 2009a).

The development of clinical academic research was further informed by the Chief Scientist Office’s (CSO’s) research strategy which emphasises the importance of research translation ‘for patient and population benefit’ (Scottish Government, 2009b). The strategy recognises the need to ‘increase the opportunities for the non-medical professions to pursue roles that mix clinical and academic responsibilities’ and supports ‘the development and retention of skilled health researchers’ through a hierarchy of mechanisms from CSO’s core funded research units, strategic initiatives, personal awards and visiting fellowships.

Through the preceding developments a range of NMAHP clinical academic research roles (including career opportunities for clinical research nurses) and strategic collaborations have been established. However it was recognised that there was a lack of consistency, and a limited clear career pathway for those who had completed NMAHP fellowships. In order to establish a sustainable and progressive approach to developing future NMAHP research leadership, and to create a consistent and transferable approach to role development across the NHS career framework, it is acknowledged that a more national approach is required.

The remainder of this document describes the process of development of this national approach and presents the NMAHP Clinical Academic Research Career Framework and set of Principles.
Process of Engagement and Development of National Approach to Clinical Academic Research Careers

The National Framework and Principles were developed in Scotland over 2009/10 through a series of engagement events with NHS Boards, academic partners and professional organisations. A shortlife working group (Appendix 1) progressed the initial thinking on the framework and Principles (Appendix 2). Further refinement was undertaken through wider consultation with the national reference group, Scottish Executive Nurse Directors, Scottish Allied Health Professions Leads and Directors Group, and NMAHP Consultants.
Definition of Clinical Academic Research Careers

A Clinical Academic Research Career (CARC) enables NMAHP practitioners working in a range of clinical and academic environments to establish a single integrated career route that combines clinical practice and research rather than having to choose a career in one or the other.

Under a single contract of employment the integrated roles and responsibilities attached to a CARC position are clearly defined, and the required research qualifications and/or training element are specified. While remaining clinically-focused, the CARC individual is formally linked to a University or Academic Research Centre to enable and support the research component.
Clinical Academic Research Career Framework

The framework was developed with the aim of providing a flexible and sustainable infrastructure to support early, mid and late Clinical Academic Research Career (CARC) pathways that combine research and clinical practice.

Broad spheres of responsibility and examples of research knowledge and skills are articulated from levels 5 to 9. Implicit across all Clinical Academic Research Careers is the role of individuals in supporting quality improvement through helping to demonstrate impact and value of the contributions made by NMAHPs to patient care and service user experience. Key to success is the provision of mentor support at each level of the career framework.

Student practitioner level is also included as the pre-registration education of this group is seen as crucial in developing core research knowledge and in ensuring the workforce of the future is fit for purpose in supporting the implementation of research and evidence into practice. In addition it was recognised that early clinical academic career potential could be identified during undergraduate programmes of NMAHP education.
### Nursing, Midwifery and Allied Health Professions Clinical Academic Research Career Framework

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<thead>
<tr>
<th>Career Framework for Health Clinical Academic Research Career (CARC)</th>
<th>Examples of Research Knowledge and Skills</th>
<th>Recommended Education and Preparation</th>
<th>Broad Spheres of Responsibility</th>
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<tbody>
<tr>
<td>More Senior Staff Level 9 and above</td>
<td>High level research methodology expertise and governance, Research leadership, Organisational and research management skills</td>
<td>CARC Senior Research Fellow&lt;br&gt;- PhD and post-graduate certificate in research supervision&lt;br&gt;- Accredited leadership training&lt;br&gt;- Extensive postdoctoral research experience</td>
<td>Strategic lead for NMAHP research delivery and implementation plan&lt;br&gt;Contribute to Research Excellence Framework (REF) through providing strategic leadership for programme of national/ international research&lt;br&gt;Responsible for model of doctoral supervision and mentorship of CARC students and fellows. At least 30% in practice or research, but calibrated according to level in career framework</td>
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<td>LATE CARC</td>
<td>Research methodology expertise and governance, Clinical expertise appropriate to area of practice, Research leadership skills, Mentoring skills, Project management skills</td>
<td>CARC Senior Research Fellow&lt;br&gt;- PhD and post-graduate certificate in research supervision&lt;br&gt;- Accredited leadership training&lt;br&gt;- Proven track record of postdoctoral research experience</td>
<td>Lead for identifying research priorities and implementation, delivery and evaluation of findings into practice&lt;br&gt;Lead/contribute to research programme at local/national level&lt;br&gt;Member of supervisory team and mentor for research-active practitioners At least 30% in practice or research, but calibrated according to level in career framework</td>
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<tr>
<td>Consultant Practitioner Level 8</td>
<td>Developing expertise of different research methodologies and governance, Clinical knowledge and skills related to area of practice, Mentoring skills, Project management skills</td>
<td>CARC Post-doctoral Fellow&lt;br&gt;- PhD and/or Post-doctoral experience&lt;br&gt;- Preliminary supervision training</td>
<td>Identify research themes relevant to practice area and investigator on programme of research&lt;br&gt;Co-lead for established research group or network&lt;br&gt;Mentor early CARCs and contribute to research development of wider workforce and undergraduate and postgraduate teaching education At least 30% in practice or research, but calibrated according to level in career framework</td>
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<tr>
<td>LATE CARC</td>
<td>Research knowledge and skills taught within NMAHP pre-registration programme, Understanding of evidence based practice, improvement, evaluation and audit approaches</td>
<td>CARC PhD Training Fellow&lt;br&gt;- PhD or PhD training scheme&lt;br&gt;- Mentor preparation</td>
<td>Co-investigator on clinical service research project/s&lt;br&gt;Work with clinical team to appraise and support implementation of evidence based approach to practice&lt;br&gt;Contribute to established research group or network&lt;br&gt;Contribute to research development of wider workforce and undergraduate and postgraduate education At least 30% in practice or research, but calibrated according to level in career framework</td>
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<tr>
<td>Advanced Practitioner Level 7</td>
<td>Developing knowledge of different research methodologies and governance, Clinical knowledge and skills development, Mentoring skills, Writing for publication</td>
<td>CARC Early Career Training Fellow&lt;br&gt;- MResearch/MClinical Research or PhD training scheme&lt;br&gt;- Flying Start and Mentor preparation</td>
<td>Co-investigator on clinical service research project/s&lt;br&gt;Work with clinical team to appraise and support implementation of evidence based approach to practice&lt;br&gt;Contribute to established research group or network&lt;br&gt;Contribute to research development of wider workforce and undergraduate and postgraduate education At least 30% in practice or research, but calibrated according to level in career framework</td>
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<tr>
<td>MID CARC</td>
<td>Research methodology and governance, Consolidating and developing clinical knowledge and skills, Critical appraisal skills and engaging with research literature, Understanding of organisation research and development strategy</td>
<td>Students with CARC potential selected for research orientated Honours programme with placements in research-intensive clinical areas&lt;br&gt;- Undergraduate degree</td>
<td>Involvement (under supervision) in a research project&lt;br&gt;Support research projects in own clinical area (e.g. to facilitate recruitment);&lt;br&gt;Contribute to established research groups/networks&lt;br&gt;Contribute to undergraduate teaching and support implementation of research into practice At least 30% in practice or research, but calibrated according to level in career framework</td>
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</tbody>
</table>
| Senior Practitioner Level 6 | Developing knowledge of different research methodologies and governance, Clinical knowledge and skills development, Mentoring skills, Writing for publication | CARC Early Career Training Fellow<br>- MResearch/MClinical Research or PhD training scheme<br>- Flying Start and Mentor preparation | |}

1. CARC individuals will have a role in implementing evidence into practice to facilitate quality improvement to enhance care delivery.
2. A key element of the CARC function will be to demonstrate impact and value of the contribution made by NMAHPS to patient and service user experience.
3. There will be mentor support at all levels of the CARC Framework.
The national Principles (Appendix 2) were viewed as being broadly in line with approaches developed in other UK countries to strengthen NMAHP research capacity and capability. They reflect the requirement to provide an integrated career route combining clinical practice and research with a single contract for the individual and with strong NHS Board/University Academic Research Centre partnerships. Where possible CARCS will be connected to established research programmes or groups, with time commitment to the research and practice components of a CARC position clearly identified and agreed.

As an example of a local application, the embedded model in Lothian is a strategic collaboration between NHS Lothian, University of Edinburgh, Edinburgh Napier University and Queen Margaret University and is supported by NHS Education for Scotland. The five year implementation programme is consistent with the national approach to Clinical Academic Research Careers and provides funding to support six integrated NMAHP posts (senior practitioner and advanced practitioner) aligned to existing programmes of research.
Feedback from stakeholders

During the consultation process feedback was sought from stakeholders on the potential benefits of Clinical Academic Research Careers. In general it was felt that this integrated clinical and academic approach could:

- complement existing research being undertaken by academic partners.
- prepare individuals to inform, undertake and support the implementation of research and evidence to improve patient care and service user experience.
- contribute to the implementation of quality dimensions for example using research skills to analyse data sets for improvement in areas of priority such as person centred care.
- support CSO strategy for research by helping to develop the skills of the wider NMAHP workforce in promoting the use of evidence based practice.
- enable the gathering of evidence on the value of NMAHP research to service users, NHS Boards and academic institutions.

The value of an integrated approach to clinical academic careers was summarised in the following comment from one NMAHP colleague:

“I find myself in the position of having two part-time posts with separate employers which I feel dilutes the inter-relationship of research and clinical work...With a career structure such as that suggested in the framework, I feel that both would be given rightly equal status and that one would inform the other in an iterative manner.”
Conclusion

Throughout the process of engagement there was a strong message of support for clinical and research collaborations at local, regional and national levels. The national Framework and Principles builds on the strong foundation of previous work to build capacity and capability of NMAHP research, by providing a platform to support future collaborative partnerships in research in the short, medium and long term.

Our aspiration is that this national approach, enacted though local application, provides an opportunity for Scotland to build, over time, a critical mass of NMAHP clinical academic research individuals at every level of the career framework and a cadre of research leaders.
APPENDIX 1
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APPENDIX 2

NMAHP Clinical Academic Careers National Principles

Purpose
The purpose of creating a national approach to NMAHP clinical academic research careers (CARC) is to strengthen research capacity and capability across NHS Board/University/Research Academic Centre partnerships through the generation and translation of research for population and patient benefit.

Working Definition
A Clinical Academic Research Career (CARC) enables NMAHP practitioners working in a range of clinical and academic environments to establish a single integrated career route that combines clinical practice and research1 rather than having to choose a career in one or the other. Under a single contract of employment the integrated roles and responsibilities attached to a CARC position are clearly defined, and the required research qualifications and/or training element are specified. While remaining clinically-focused, the CARC individual is formally linked to a University or Academic Research Centre to enable and support the research component.

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1In the context of Clinical Academic Research Careers – clinical work encompasses a wide range of activities that support patient care. Examples include direct patient care, providing strategic direction for clinical care based on robust evidence, gathering clinical data, supporting education and development of the clinical team's research skills.
Key Principles

1. CARC pathways and associated education and training will be developed in Scotland broadly in line with other UK countries.

2. CARC developments in Scotland, although requiring local contextualisation, will be guided by an overall national framework in order to ensure consistency and parity.

3. CARC developments require fully supported strong NHS-university partnerships which capitalise on established multi-disciplinary collaborations, for example the NMAHP Research Unit and other Government funded initiatives.

4. Clinical academic research career opportunities will be open to all NMAHPs, subject to suitability, working anywhere in the NHS in Scotland.

5. CARC pathways will be aligned with the NHS Career Framework Model and will take account of the Knowledge and Skills (KSF) framework.

6. The responsibilities attached to a CARC position – clinical practice and research - will be exercised concurrently. The percentage time commitment to the research and practice components of a CARC position must be clearly identified and agreed, but should be at least 30%. This is a minimum standard which will reflect the required outputs at different levels of the career framework.

7. The role must be clinically-relevant (and practice focused). The purpose of the research should be negotiated and agreed between the post-holder, NHS Board and University / Academic Research Centre.

8. A CARC post-holder will have support from a designated mentor and where appropriate an academic supervisor in the University or Academic Research Centre within an established research programme or group.

9. A CARC position must have a single contract of employment. This contract will be drawn up jointly by the NHS Board and collaborating University/Academic Research Centre, with the clinical and research responsibilities clearly defined, and with an annual joint review.

10. CARC should be built into NHS Board/University/Research Academic Centre research and development strategic plan and be facilitated by education and training and an organisational infrastructure to support career progression.


