

*Developing people
for health and
healthcare*

**Clinical Academic Careers
Framework:
A framework for optimising
clinical academic careers
across healthcare professions**



Health Education England

Background and Context

1. The NHS works at the limits of cutting edge science, bringing together the highest levels of knowledge and skills to save lives and improve health (*The NHS Constitution*, DH, 2012). The opportunities to introduce the advances and innovation in medical science, diagnostics and treatment spanning all areas of healthcare including biology, physics, engineering and physiology for the benefit of patients and healthcare services have never been greater. The need to bring a modernised approach to training, education and careers in clinical and healthcare research is therefore critical.
2. The Mandate from the Government to HEE: April 2013-March 2015 sets us a clear objective to 'develop a more flexible workforce that is able to respond to the changing patterns of service and embraces research and innovation to enable it to adapt to the changing demands of public health, healthcare and care services'. Specifically, we have an objective to 'support clinical academic careers for health professionals and also to seek to increase numbers of staff across all clinical and public health professions with a proper understanding of research and its role in improving health outcomes, including an ability to participate in and utilise the results of research'. Indications are that the Mandate for 2015/16 (due to be published in January 2015) will continue with this requirement.
3. HEE's recently published 15 year Strategic Framework¹ (Framework 15) sets out the context for the future development of the workforce in health. The professional healthcare workforce needs to be flexible, adaptable and responsive to meet the challenges of an ageing population with co-morbidities, greater expectations of a longer and good quality of life, new models of service provision, and a continued focus on quality improvement, innovation, productivity and prevention. This is especially the case since all professions play a central role in safe and effective patient care across *all* pathways of care from health and wellbeing to end of life. Patients, as co-producers of care, will also be involved in the development of the healthcare workforce.
4. The way in which care is delivered is also changing, with new models of integrated care emerging in different care settings. The roles and ways of working of the healthcare workforce need to reflect and respond to these changes. Education, training and careers in health therefore need to continually change and evolve in order to equip staff with the right knowledge, skills, values and behaviours for 21st century care as it unfolds to meet the changing demands of patients and healthcare services.
5. The new Health Education England (HEE) Research and Innovation Strategy published in September 2014² sets the context for developing careers that span, with flexibility and synergy, the clinical and research interface. It identifies the need for a clear and transparent clinical academic career pathway for *all* healthcare professions in England.
6. The HEE Research & Innovation Strategy links closely to Framework 15 which is based on three pillars:
 - the key drivers of change in health and healthcare;
 - the impact these drivers are likely to have on people and patients of the future; and
 - the characteristics of the future workforce that will be needed in order to meet the anticipated needs of people and patients.
7. This Clinical Academic Careers Framework will support the delivery of both the Research and Innovation Strategy and Framework 15 by ensuring that the whole of the healthcare workforce has the research and innovation capability required to meet both the current and

¹ Health Education England's Strategic Framework 2014 – 2029, (Framework 15) June 2014

² Health Education England (HEE) Research and Innovation Strategy, September 2014

future needs of patients. Improving access to clinical academic careers, and using the outputs of this research is an important part of creating an evidence base and an informed workforce. For example, we know that in the future, knowledge and understanding of the personal DNA code (genome) will lead to better and earlier diagnosis and personalised care. We also know that the population is becoming more active in its own care processes, meaning that HEE will need to develop an evidence base to inform how we educate and train patients and carers for this changing role.

Purpose of this Framework

8. The White Paper on the NHS in England “Equity and Excellence: Liberating the NHS” [2] indicates that *“Research is vital in providing the new knowledge needed to improve health outcomes and reduce inequalities. Research is even more important when resources are under pressure – it identifies new ways of preventing, diagnosing and treating disease. It is essential if we are to increase the quality and productivity of the NHS, and to support growth in the economy. A thriving life sciences industry is critical to the ability of the NHS to deliver world-class health outcomes.”* The important interdependencies of research, education and patient care, when delivered through strategic healthcare provider-university-industry partnerships are also recognised, as is the need to place quality at the heart of the NHS whilst increasing productivity and promoting research and innovation are core to the work of the NHS workforce.
9. This framework aims to bring together previous funding and collaborative initiatives in order to streamline the approach to developing clinical academic careers. Whilst recognising that each of the healthcare professions has its own clinical training pathway, with specific vocational, academic, registration and regulatory arrangements, this strategy presents the opportunity to identify common approaches to capacity and capability training to support clinical academic careers across all the healthcare professions.
10. As indicated in HEE’s Research and Innovation Strategy, planning and supporting an integrated clinical academic career structure for the healthcare professions which develops both capability and capacity is required so that:
 - the identity and value of all healthcare professions are widely understood, respected and harnessed for the material benefit of healthcare delivery and public health;
 - there is recognition of the contribution of all healthcare professionals to the academic sector in both research and education, and vice versa; and
 - clinical academic careers are developed and sustained by healthcare providers and universities working together (and where appropriate, with industry partners) proactively to provide flexible and integrated clinical academic training and careers for the healthcare professions.
11. This framework sets out the plans for the development of a formal academic career pathway for all those in the healthcare professions in England who have the talent and passion to pursue a formal clinical and research career. Whilst some schemes, along with designated funding to support have existed in the past,^{3,4,5} a more strategic, consistent and

³ *Report of the Academic Careers Committee of Modernising Medical Careers and the UK Clinical Research Collaboration. Medically-and dentally-qualified academic staff: Recommendations for training the researchers and educators of the future.* London: 2005.
http://www.nihrtcc.nhs.uk/intetacatrain/copy_of_Medically_and_Dentallyqualified_Academic_Staff_Report.pdf

⁴ *Developing the Role of the Clinical Academic Researcher in the Nursing, Midwifery and Allied Health Professions,* London: 2012
http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_133094.pdf

⁵ *Developing the best research professionals - Qualified graduate nurses: recommendations for preparing and supporting clinical academic nurses of the future. Report of the UKCRC Subcommittee for Nurses in Clinical Research (Workforce).* 2007 [Dame Janet Finch]

equitable approach across the professions is essential so that patients and the wider society can derive optimal benefit.

Clinical Academic Careers Framework

12. Diagram 1 below depicts the framework which pulls together in one place the approach to clinical academic careers across all professions. The NIHR Integrated Academic Training (IAT) programme for medics and dentists is the responsibility of the DH, whilst HEE is accountable for all other professions. NIHR manages the process for both programmes. With the exception of the internships, individuals can apply for and participate in any programme for which they are eligible, without necessarily going through earlier parts of the framework.

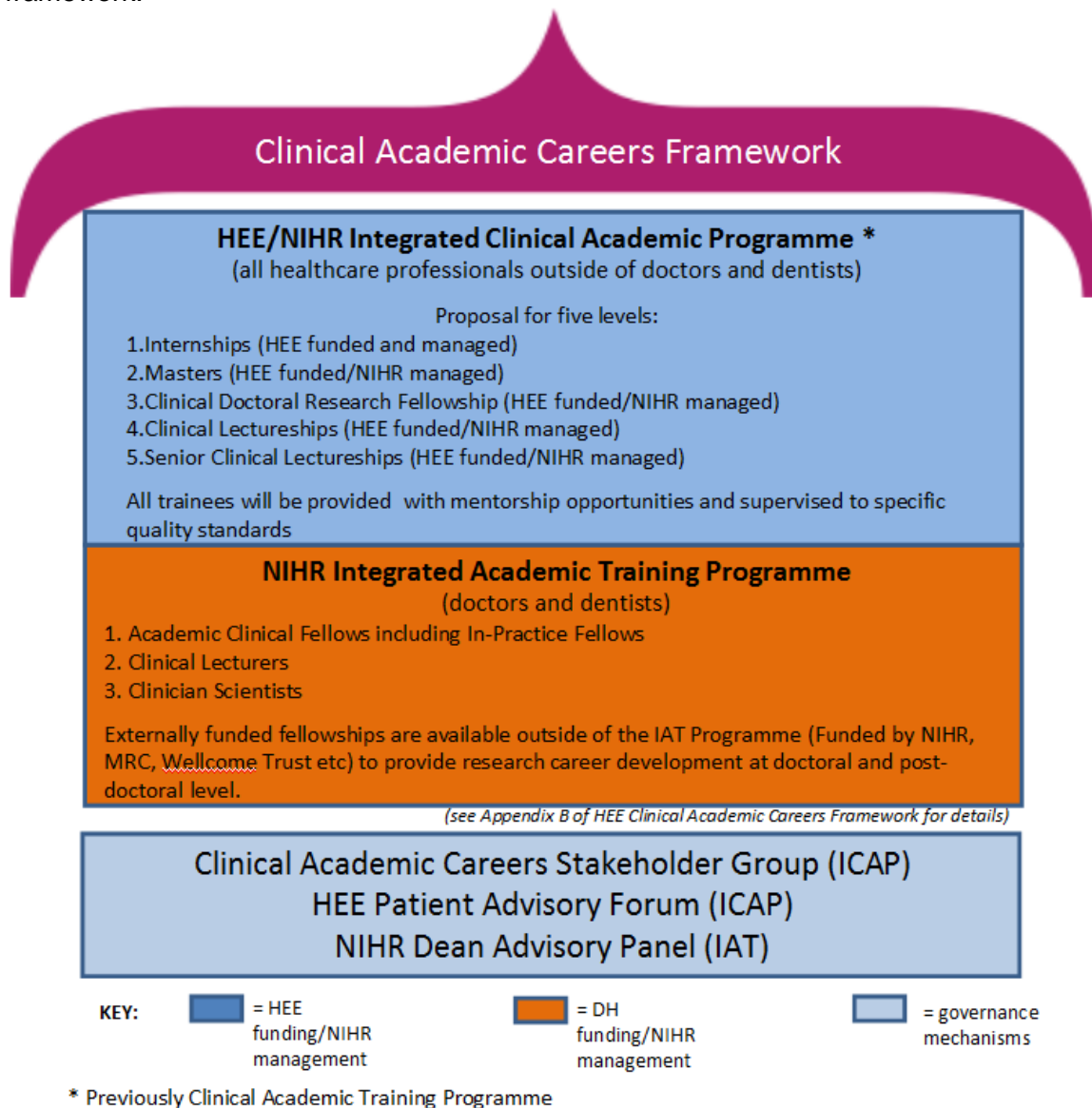


Diagram 1

The context for creating a common and comprehensive programme for clinical academic training for the healthcare professions

13. Whilst there are arrangements in place for those in medicine and dentistry through the NIHR IAT Programme, a common clinical academic pathway across other regulated and registered professions, including nursing, midwifery, healthcare science, and the professions allied to medicine (hereafter all called “the healthcare professions”) is required. A programme that will support multi-professional research and transparent career structures for these professional groups is necessary to ensure that research aimed at improving patient outcomes becomes a cornerstone of NHS practice. This document, *Health Education England’s Clinical Academic Careers Framework: a framework for securing clinical academic careers across the healthcare professions*, will present an inclusive and comprehensive approach for securing clinical academic careers across all the healthcare professions.
14. This framework describes an over-arching process and aligned programme for the clinical academic workforce across medicine and dentistry and other healthcare professions. It is aimed at individuals in the healthcare professions, universities, healthcare providers/employers and industry, many of whom will come together as partners within Academic Health Science Centres (AHSC) and Academic Health Science Networks (AHSN). This framework will help to provide clarity for AHSCs/AHSNs, industry and universities to encourage the development of partnerships in research and will further support a clear and explicit approach for the development of clinical academic careers in health aimed at supporting improved patient outcomes.

The vision for clinical academic careers for the healthcare professions

15. The vision set out in this report is based on the fundamental principle that members of the healthcare professions with the academic talent and skills to innovate, research and educate have the potential to provide solutions to national and global health challenges. Its scope covers professionals who already have sufficient academic skills to pursue independent research at doctoral and post-doctoral level, but it also acknowledges the need to develop sufficient clinical academic opportunities to deliver effective academic training for those who have, as yet, had little or limited experience of research or training in it.
16. Implementation of this framework must be flexible enough to enable new areas of endeavour such as genomics, informatics and tissue engineering to be developed and supported. Responsibility for implementation of the clinical academic pathway will inevitably be shared between healthcare employers and higher education institutions, with the end goal being to create a vibrant and effective healthcare workforce delivering innovative and cost effective world leading diagnostics, therapies and care to benefit patients and healthcare and public health services.

Aims of the Clinical Academic Careers Framework

17. The specific aims of this framework are to establish and set out the intention for a dedicated and funded integrated clinical academic career programme for the healthcare professions (outside of medicine and dentistry) by:
 - a. providing an overview of the current provision and evidence for developing additional clinical academic capacity;
 - b. presenting a model and structure for an integrated clinical academic career pathway for the healthcare professions to enhance understanding and planning by individuals seeking a clinical academic career in research and education (including educational research); and
 - c. clarifying how the programme will be funded and implemented.

Key benefits of the framework

	Patients	NHS Providers	Universities
Research and innovation	<ul style="list-style-type: none"> • optimises and brings the latest research in science and technological advances to clinical pathways and public health services • through research, developing and introducing new diagnostic tools and treatments, improving the quality, efficiency and value of public health and patient care and meeting the challenges of an ageing population 	<ul style="list-style-type: none"> • supports both the introduction of technology and scientific advances, enabling improved methods of delivering high quality patient centred care and public health services 	<ul style="list-style-type: none"> • provides a critical cohort of healthcare professionals to bring together research, education and clinical practice • contribute to the generation of grant income, research metrics and enhance the status of UK universities as research leaders on the international stage • provides an important focus for healthcare scientists in AHSC and AHSN
Cost effectiveness	<ul style="list-style-type: none"> • enables science and technology to be applied to diagnostic and therapeutic services, so that the most efficient and cost effective approaches can be used and redundant practice which has been overtaken by such advances can be stopped 	<ul style="list-style-type: none"> • provides opportunities for innovation to be implemented directly into clinical practice and for the workforce to be trained and re-profiled, so that the introduction of new developments are managed in the most appropriate way • enables out of date, less effective diagnostic, therapeutic or healthcare delivery methods to be stopped 	<ul style="list-style-type: none"> • creates opportunities for universities to focus research gains in important and related areas of science and health • ensures that provider educators are developed, optimising workplace based training and integration with academic programmes
Educational excellence	<ul style="list-style-type: none"> • supports a professional, well-trained and up-to-date healthcare workforce 	<ul style="list-style-type: none"> • develops relationships between NHS healthcare providers/public health organisations and academia, ensuring that HEE's strategy for research, education & innovation are at the forefront of clinical services • provides clarity and definition of the training and education clinical academic pathways for employers 	<ul style="list-style-type: none"> • ensures that an <i>educational</i> workforce in health is developed to support academic programmes in healthcare at all levels across the professions
Clinical academic leadership	<ul style="list-style-type: none"> • enables the development of clinical academic leaders who help focus research and innovation on patient and service needs 	<ul style="list-style-type: none"> • supports multi-professional clinical teams within healthcare providers to ensure that there is a clinical scientific perspective in making strategic and operational decisions 	<ul style="list-style-type: none"> • supports the development of academic leadership in to provide a clinical focus in determining the direction of research and innovation

The present situation: Overview

19. Diagram 2 shows the current availability and arrangements of research opportunities that are funded and managed through the NIHR and/or HEE across all healthcare professional groups, including doctors and dentists.

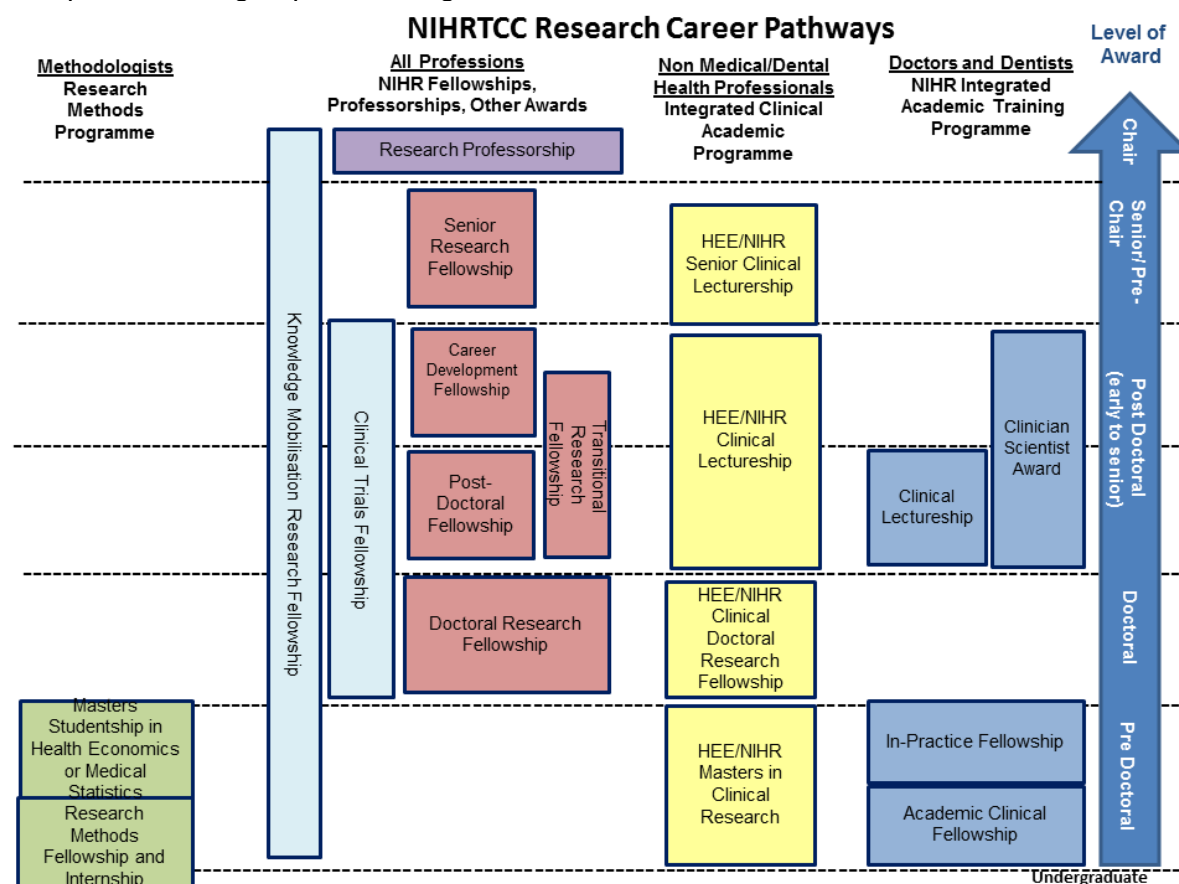


Diagram 2⁶

20. As the diagram demonstrates, the NIHR supports four schemes as part of the Department of Health Integrated Academic Training programme for doctors and dentists (the blue boxes above). HEE and NIHR previously jointly supported seven clinical academic training schemes in total for the healthcare professions – four for nurses, midwives and allied health professionals and three for healthcare scientists through the Clinical Academic Training programme and Healthcare Science Research Fellowship programme. The new HEE/NIHR Clinical Academic Programme (set out in paragraph 30 onwards) will have the four schemes in yellow above, plus internships which HEE will run via our local teams. Those healthcare professionals eligible to apply for the programmes have been further expanded following a review of the programme and stakeholder feedback. The list of eligible professions is available at Appendix A.

Key aspects of the programmes

Academic training for those in medicine and dentistry

21. NIHR supports four schemes for doctors and dentists via the NIHR Integrated Academic Training Programme which were developed largely as a result of a report published in 2005, *Medically and dentally qualified academic staff: Recommendations for training the researchers and educators of the future* (see reference 3 on page 3). Newly qualified doctors and dentists can also apply to undertake Academic Foundation Training

⁶ Diagram etc. on medical/dental integrated academic training from NIHR <http://www.nihr.ac.uk/funding/training> programmes.htm

programmes, which are available very early in medical training and are described in more detail below.

- 22. Academic Foundation Training programme:** entry to these programmes is very competitive. They are appointed to at the same time that the National Foundation School appoints to foundation training posts. There are however, many fewer academic foundation programmes per foundation school compared to the number of foundation programmes i.e. approximately 450 foundation academic posts which is some 5% of the total number of foundation posts overall. These academic programmes are designed for those medical school graduates who achieve very high academic outcomes in their medical degree and would like to pursue a career as an academic at university.
- 23.** Broadly, academic foundation programmes (AFPs) help foundation doctors develop research skills, and or teaching skill and/or medical leadership and management capabilities. Although there is great variety between AFPs, with some focusing on traditional academic pathways such as research and teaching, while others focus on different areas such as leadership and management, quality improvement and even health informatics, all programmes have the same common purpose; they enable foundation doctors to develop their clinical skills whilst simultaneously supporting the development of key skills in other areas of medicine.
- 24.** Whilst AFPs vary significantly between foundation schools, most of their dedicated academic time will be during the second year of foundation training (F2). Trainees may have a four-month academic placement in F2, day-release throughout the year, or a combination of the two. In addition, most foundation doctors organise a project for their academic placement that forms the main focus of the AFP and provides the opportunity to develop and demonstrate academic competences. AFP doctors have a dedicated academic supervisor to oversee academic work and to support the academic project being undertaken.
- 25. Post-foundation integrated academic training programmes - NIHR Academic Clinical Fellowships (ACFs)** allow medical and dental trainees to undertake 25% research and 75% clinical training over 3 years (4 years for GPs) and **Clinical Lectureships (CLs)** allow trainees to undertake 50% research and 50% clinical training over 4 years.
- 26.** The posts are allocated to institutional partnerships of universities and NHS organisations/trusts. Academic trainees are recruited by HEE (in partnership with medical schools) through open competition via a nationally developed process for academic recruitment run by the NIHR Trainees Coordinating Centre (NIHR TCC).
- 27.** The programme is broken down as follows: **Institutional Awards**
 - NIHR Academic Clinical Fellowships (ACFs)
 - NIHR Clinical Lectureships (CLs)
- 28.** NIHR ACFs and CLs are appointed through selected academic programmes. These programmes have been awarded to university/NHS trust/LETB partnerships via formula allocation and rounds of competition. Approximately 250 NIHR ACFs and 100 NIHR CLs are available annually for medics and a further 22 NIHR ACFs and 10 NIHR CLs are available annually for dentists.
- 29. Personal Awards**
 - NIHR In-Practice Fellowships (IPFs) – these offer academic training to fully-qualified General Practitioners, General Dental Practitioners and Community Dentists who may have already spent some time in NHS practice and who have had little formal academic training at this point in their careers.

- NIHR Clinician Scientist Awards - is a post-doctoral research training fellowship of up to 5 years, designed to provide personal support for the applicant through buying out their salary costs and meeting the cost of a research project.

Developing the Clinical Academic Pathway for the healthcare professions

30. Diagram 3 below sets out an overview of the five levels in the HEE/NIHR Integrated Clinical Academic Programme (ICAP) for developing clinical academic *capacity and capability* in the healthcare professions, outside of medicine and dentistry. All aspects of this clinical academic career pathway will involve integrated and concurrent clinical and academic training and roles.

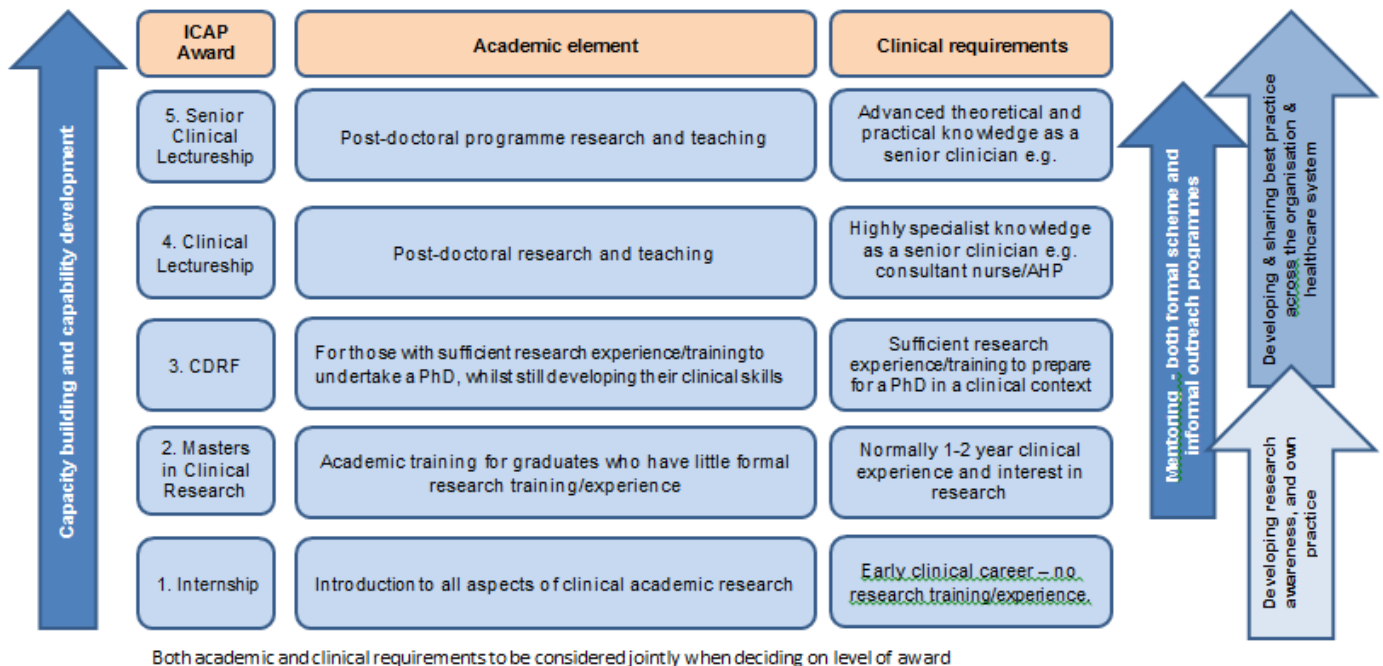


Diagram 3 - Career progression as a Clinical Academic

Academic training developments for the healthcare professions – developing capacity

31. In some of the healthcare professions there will be those who did not have the opportunity to develop their academic talents during their early training, but who may still wish to develop an academic career in teaching and research. This framework therefore includes the development of **HEE Research Development Internships**, which provide a means of encouraging and supporting those in the healthcare professions into clinical academic research. This introduction will offer early experience and training in order to position those undertaking internships the opportunity to apply for a Masters in Clinical Research (MRes). It is also open to individuals who may have undertaken a Masters degree which is not an M Res. The internship programme will offer an introduction to all aspects and roles across clinical academic research from trial design, data management through to undertaking practical research in a clinical environment. In the future, this may lead to a formal qualification, for example a postgraduate certificate [PGCert] (QAA level 6), but pending further consideration of this possibility, HEE will issue a Certificate of Completion, indicating that the internship programme has been satisfactorily completed. In due course, if the PGCert becomes available, it is anticipated that HEE's Certificate will be recognised for purposes of being awarded the PGCert. National criteria for entry into these programmes will be set, but the schemes will be managed locally, with funding allocated to LETBs from HEE directly on an annual basis.

32. The **Clinical Research Masters (M Res)** will represent the second level of the Programme. It is aimed at raising awareness of research and preparing for the next step in the academic career and is designed for graduates who have at least 1 year of experience

in clinical practice since graduation from their initial degree, but who have little formal research experience or training. The training will be available 1 year full-time or 2 years part-time. Funding will be made available through a competitive tender to universities that already have an established Masters course that delivers the required training or which will have an appropriate Masters course that will be validated in time to accept students. Universities will be responsible for selecting students to the courses that will run annually.

33. Level three of the programme is the **Clinical Doctoral Research Fellowship (C-DRF)** scheme aimed at postgraduate health professionals who have at least 1 year of experience of clinical practice since graduating, have had sufficient research experience or research training to prepare them to undertake a PhD, and who wish to obtain a PhD by research whilst still developing their clinical skills. The C-DRF is an individual training award and offers funding to cover the salary costs of the award holder, their PhD tuition fees, and the costs of an appropriate research project and training and development programme. A C-DRF award will require that the individual have a contract of employment with the host employer for the duration of the Fellowship.

Capacity building

34. Individuals applying for any of the above programmes or for clinical or senior clinical lectureships need not move through the various programmes sequentially, but can apply for any programme for which they have the necessary experience and qualifications, e.g. those applying for clinical or senior clinical lectureships must have a PhD in order to be eligible to apply for either of these programmes.
35. The fourth level of the scheme is the **Clinical Lectureship (CL)** that represents the early post-doctoral element of the programme. Applicants will need the support from both an English NHS healthcare organisation **and** an English higher education institution, and should propose to divide their time equally between their clinical and academic commitments. A Clinical Lectureship should enable the award holder to make a significant contribution to clinical practice whilst supporting their development as a potential clinical academic leader. Posts are co-funded by the employing organisations, which will provide at least 50% of the Clinical Lecturer's salary. The award, which is funded by HEE, will meet the remaining portion of salary, research and training/development costs.
36. The **Senior Clinical Lectureship (SCL)** scheme represents the fifth and most senior level of the HEE/NIHR ICA Programme. SCL awards are intended to support outstanding individuals who are currently independent researchers and can demonstrate the potential to become academic and research leaders within five years. Applicants will need support from both an English NHS healthcare organisation **and** an English higher education institution, and should propose to divide their time equally between their clinical and academic commitments. A SCL is expected to enhance existing career opportunities for both the award holder and others in health related research, and to support the development of collaborative partnerships within and between HEIs and the NHS. Posts are co-funded by the employing organisations, which will provide at least 50% of the Senior Clinical Lecturer's salary. The award, which is funded by HEE, will meet the remaining portion of salary, research and training/development costs.

Career opportunities as a Clinical Academic

37. It is important for those who temporarily leave their clinical posts to undertake academic training, especially in the early stages of the framework e.g. PhDs, to be assured that when they are ready to return to their clinical role it will be available to them, or have equal opportunities for roles in the event of a restructure. This should be a clear condition and commitment from employers when an offer to undertake one of the framework opportunities is accepted, since the aim of the programme is support research and innovation in the NHS.

38. For those who are successful in achieving their academic ambitions HEE would encourage HEIs and employers to work to develop and support clinical academic careers through the development of senior academic posts, including professorships. Academic Health Science Networks/Centres and LETBs are in an ideal position to offer advice on such developments.

Implementing the framework

39. Overall funding for the HEE/NIHR ICAP remains the responsibility of HEE, governed ultimately by the HEE Executive Team.
40. Through its Clinical Academic Careers Stakeholder Group (CACSG), HEE will develop a methodology for allocation of specific funding for the HEE/NIHR ICAP at each level, which will be available to all of the professions eligible to apply for the programme. Clinical institutions hosting awards must demonstrate that they can provide and support the required clinical training of the profession as part of the application process. Successful trainees will be awarded through a national competition with applications being reviewed by an independent HEE/NIHR panel.
41. The CACSG will also take account of progress on the IAT programme administered by the NIHR.
42. Existing strategic partnerships, including those between AHSC and others, and those that emerge in the future will need to ensure that the full range of healthcare professionals are included in their plans to develop clinical academic capacity. Healthcare providers and universities must capitalise on existing relationships and work even more closely to develop partnerships between healthcare professionals, employers and the university sector. This will ultimately deliver greater innovation through the application of basic science to health and patient care.

Conclusions

43. HEE's integrated Clinical Academic Framework provides a strategic approach for the development of talented, research focussed and expert healthcare professionals who will bring these skills into the NHS for the benefit of patients. This framework presents the options available for a clinical academic career for all healthcare professionals; both via the NIHR IAT programme for doctors and dentists and for a coherent and new HEE/NIHR ICA programme for the remaining eligible healthcare professions.
44. HEE's Clinical Academic Careers Framework will:
- present an inclusive and comprehensive approach for securing clinical academic careers across all healthcare professions;
 - ensure continuing efforts to build and sustain academic *capacity* within the healthcare professional workforce, using levels 1, 2 and 3 of the ICAP;
 - ensure effort is focussed on the development of *capability* through levels 4 and 5 of the programme in order to optimise the contribution that this programme offers through the leadership provided by HEE working with its partners; and
 - encourage providers, HEIs, Academic Health Science Centres/Networks and industry to continue to work together to develop more senior academic posts to secure the future of the whole clinical academic workforce.

Eligible professions for the HEE Integrated Clinical Academic Programme

Healthcare Science professions

Healthcare scientists who are either statutory regulated by the Health and Care Professions Council or with recognised voluntary regulatory arrangements via the Academy for Healthcare Science in the following broad areas of practice covering over 45 different professional specialisms :

- Life Sciences/Clinical Laboratory Sciences;
- Physiological Sciences ;
- Clinical Bioinformatics; and
- Physical Sciences (incorporating Medical Physics) and Clinical Engineering.

These include clinical scientists, biomedical scientists, clinical physiologists and clinical technologists.

AHP Professions

Art therapist

Podiatrist

Dietician

Occupational therapist

Orthoptist

Orthotist and Prosthetist

Paramedic

Physiotherapist

Radiographer (diagnostic and therapeutic)

Speech and language therapist

Dramatherapist

Music therapist

Nurse/Midwife

Nurse

Midwife

Health Visitor

Wider Dental team Professions

Dental hygienist

Dental nurse

Dental therapist

Operating department practitioners

Clinical Psychologist

Pharmacy professions

Pharmacist

Pharmacy technician

We will accept other applications on a case by case basis as long as you:

- belong to a statutorily registered profession;
- are a graduate (or have equivalent experience); and
- provide NHS services in England.

For roles supporting mental health, please be aware that these may be covered under the remit of the above professions e.g. psychiatric nursing.

If you have any queries, please email HEE.RI@nhs.net

NIHR Integrated Academic Training Path for Doctors and Dentists

Reproduced from *Report of the Academic Careers Committee of Modernising Medical Careers and the UK Clinical Research Collaboration. Medically-and dentally-qualified academic staff: Recommendations for training the researchers and educators of the future.* London: 2005

Integrated academic training pathway for researchers.

