



**Clinical researchers
in the United Kingdom:**
Reversing the decline to improve population
health and promote economic growth



Overview

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Clinical researchers in the United Kingdom: Overview

Commissioned by the Office for the Strategic Co-ordination of Health Research for urgent consideration by the Department for Science Innovation and Technology (DSIT), Department of Health and Social Care (DHSC), and equivalent Departments of the Devolved Nations.

Foreword

Clinical researchers deliver world-leading biomedical and health research in the UK. They enable an NHS fit for the future, with research active hospitals consistently delivering better patient outcomes, and kickstart economic growth: every £1 invested in medical research delivers a further ~25p return for every year thereafter¹.

However, future clinical research is under threat due to a clearly documented decline in clinical research staff, both in absolute numbers and - more strikingly - in proportion to the expanding NHS workforce. As highlighted by Lord Darzi², clinical research drives innovation to make the NHS more sustainable and deliver better outcomes for all, but the UK is currently not growing its clinical research capacity and capability in parallel with expansion of the NHS and increasing need. To address this, the UK

needs an ambitious and joined up approach across all stakeholders to underpin the future health of the nation and grow the economy.

This report was commissioned to evaluate the current situation, determine underlying causes and define necessary actions. Specific actions to reverse the decline in clinical researchers and enable growth are set out in parallel reports tailored to different groups of clinical researchers. These actions should be considered carefully as a matter of urgency by the stakeholder groups that would be responsible for implementation, with specific individuals taking responsibility to deliver the outcomes in a defined time period. Taking action now is critical to securing the UK's position as a global leader in the life sciences sector.



The Rt Hon. the Lord Kakkar KG KBE
Chair of the Office for Strategic
Coordination of Health Research



Professor Patrick Chinnery FRS
FMedSci FRCPath FRCP
Executive Chair, Medical Research Council
Chair, OSCHR Task and Finish Group

1. Medical Research: What's it worth? (acmedsci.ac.uk)
2. [Independent Investigation of the National Health Service in England \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/428482/independent-investigation-of-the-national-health-service-in-england.pdf)

Background

1. Clinical research has underpinned the high quality of care provided to the UK population by the National Health Service (NHS) since its establishment in 1947 and has made an increasingly important contribution to the UK economy. Both aspects depend on clinically trained staff who contribute to the national research endeavour, but there is clear evidence that this professional group is in decline. Addressing this decline is critically important for the future of the NHS, allowing patients early access to life-saving medical innovation and ensuring the UK remains at the forefront of biomedical science globally. This will enable the sector to accelerate economic growth.
2. The Office for the Strategic Co-ordination of Health Research (OSCHR) commissioned the Medical Research Council (MRC) to convene a broad stakeholder group to evaluate the current situation, determine the underlying cause, and define the actions necessary to reverse the decline (OSCHR – Clinical Academic Training Task and Finish Group).
3. This report builds on recommendations made by the UK Clinical Research Collaboration nearly 20 years ago³, but also includes new data and new actions which address changes in the landscape that have emerged in the last five years, including those facing the NHS overall as outlined by Lord Darzi's recent Independent Investigation of the National Health Service². It also benefits from data captured and analysed by several independent groups including the UK Medical Schools Council⁴ and the Academy of Medical Sciences⁵.
4. Stakeholder groups have been identified who should take responsibility for delivering the specific actions.
5. Many clinical research staff also play a key role in training health professionals and researchers of the future. Although not the focus of this report, this activity is crucial for the current and future operation of the NHS.
6. Clinical research staff also provide leadership within the NHS, shaping services locally and nationally. Many also contribute to and lead on national bodies crucial for biomedical research in the UK including the National Institute for Health and Care Excellence (NICE), the Medicines and Healthcare Regulatory Agency (MHRA), the Human Tissue Authority (HTA), professional and regulatory bodies including the medical royal colleges and General Medical Council (GMC), and within government as Chief Medical Officers and Chief Scientific Advisors for Health.

Who employs clinically trained research staff and who trains them?

8. Clinically trained research staff are usually employed by the NHS, Universities, Research Institutes, and the Life Sciences industrial sector. There is also an increasingly important group of clinical and biomedical data scientists within the public sector and tech industries.
9. Universities and the NHS are particularly important because they host the majority of the clinical education and training of clinical research staff and are in the public sector.
10. Training is delivered in partnership with national organisations including NHS England & devolved equivalents, medical and nursing royal colleges, national professional organisations and academies.
11. Research funding organisations play a pivotal role in research training, including the UKRI/MRC, National Institute for Health and Care Research, Chief Scientist Office Scotland, Health and Care Research Wales, Health and Social Care in Northern Ireland, Wellcome, Cancer Research UK, the British Heart Foundation and other medical charities by providing fellowship funding and grant support through the host organisations listed above.

Who are clinically trained research staff and what do they do?

5. Clinically trained research staff are individuals who carry out research aimed at improving human health as part of their professional role. They include a wide range of different professionals, including medical, dental, public health, nursing, midwives and other allied health care professionals.

3. [Medically and Dentally-qualified Academic Staff Report.pdf](#)

4. [Clinical academic survey \(medschools.ac.uk\)](#)

5. [Future-proofing UK Health Research – full report](#)

Importance of clinically trained research staff in the UK

12. The UK has a global reputation for research in biomedical science and its applications to improving health. Traditionally the UK has made a greater contribution to the global biomedical knowledge base than most other countries (see Figure 1) and does this at a lower cost⁶.

Clinically trained research staff are central to this by:

12.1 Driving discovery and innovation which improves human health through:

- prevention strategies
 - early diagnosis
 - new treatments and interventions
- This improves health outcomes, with research active hospitals showing lower mortality rates⁷.

12.2 Driving the UK economy through growth across the life sciences sector^{8,9,10}:

- By attracting major inward investment from global industries who chose to base their biomedical research base in the UK, including GSK, AstraZeneca, MSD, Moderna, Google, Microsoft and others.
- As an engine for new spin-outs and SMEs in pharma, data science and tech¹¹.
- By training world-leading researchers for academia and the commercial sector.

13. The decline in clinical researchers comes at a time when we need to embrace new disciplines and technologies to accelerate progress and promote the UK as a global leader.

14. Sustained investment in the research carried out by clinically trained teams enabled a rapid response to COVID19 in the UK which was widely regarded as being the most effective in the world

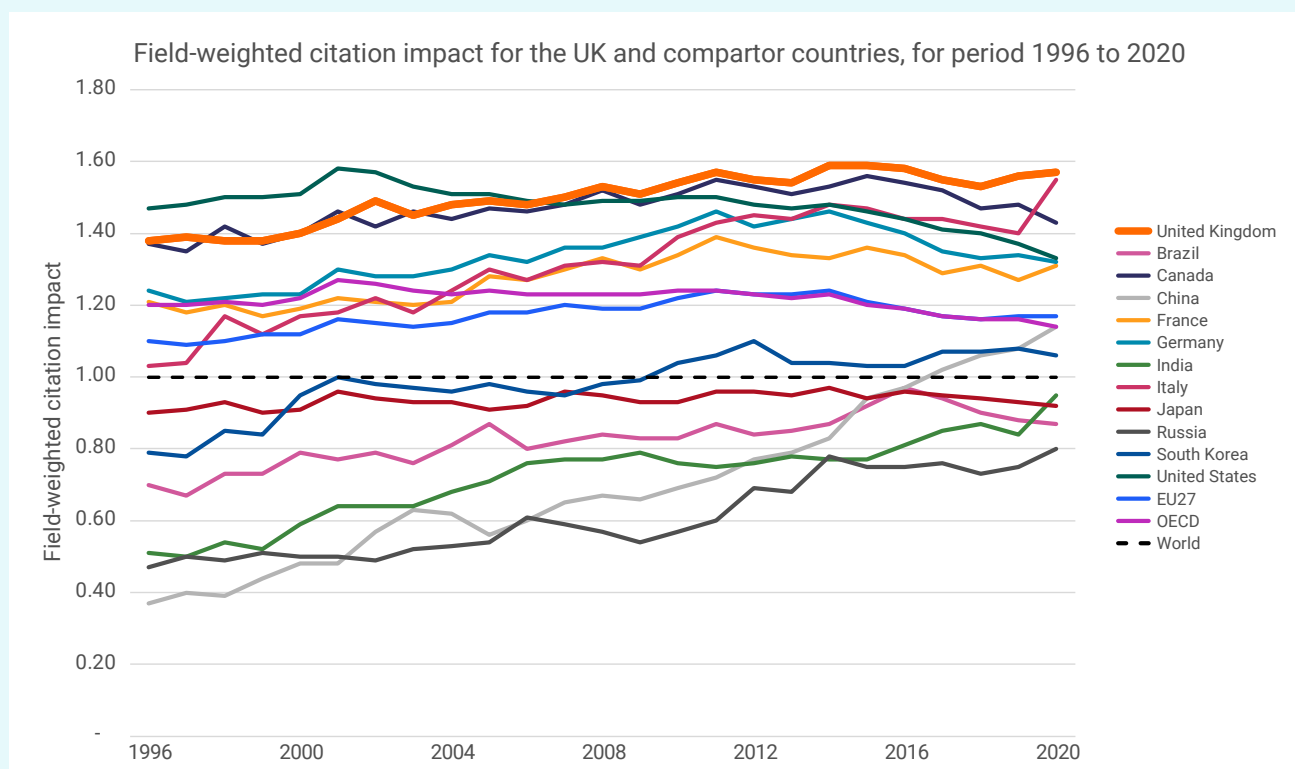


Figure 1: Field-weighted citation impact, which measures the number of citations received by a published article divided by the expected number of citations for similar articles, is shown for the UK and comparator countries for the Period 1996 to 2020. This indicates that the UK has outperformed comparator countries on this metric for more than a decade. Source: *International comparison of the UK research base, 2022 Department for Science, Innovation and Technology (DSIT)*

6. [International comparison of the UK research base, 2022: accompanying note \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

7. [Jonker L, Fisher J \(2017\) The correlation between National Health Service trusts' clinical trial activity and both mortality rates and care quality commission ratings: a retrospective cross-sectional study – PubMed \(nih.gov\)](https://pubmed.ncbi.nlm.nih.gov/)

8. [Commercial clinical trials in the UK: the Lord O'Shaughnessy review – GOV.UK \(www.gov.uk\)](https://www.gov.uk)

9. [Medical Research: What's it worth? \(ukri.org\)](https://ukri.org)

10. [Medical Research: What's it worth? \(acmedsci.ac.uk\)](https://acmedsci.ac.uk)

11. [Independent Review of University Spin-out Companies \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

Clinically trained research staff are in decline

15. The decline in clinically trained research staff has been noted by several independent organisations including the UK Medical Schools Council, Academy of Medical Sciences, the Clinical Academic Training Forum, and by a House of Lords Science and Technology Committee inquiry¹² in 2022.
16. The decline in medically trained research staff is well documented¹³, showing a decline in absolute terms (6% fewer in 2022 than 2012, with 24% fewer at senior lecturer level). Demographic data shows that this will get worse over the next decade. The decline is even starker as a proportion of the workforce, with the UK not growing its clinical research capacity and capability in parallel with expansion of the NHS (see Figure 2).
17. While it is currently not possible to look across all clinically trained research staff because of limited data¹⁴, the decline seen in medically trained research staff is likely to be mirrored across all clinical researchers.
18. Thus, the UK has not grown its clinical research capacity and capability in parallel with expansion of the NHS. This means we cannot deliver more research despite the greater need.
19. The NHS Long term Workforce Plan¹⁵ aims to double the supply of clinicians, with no current provision for increasing the academic workforce.

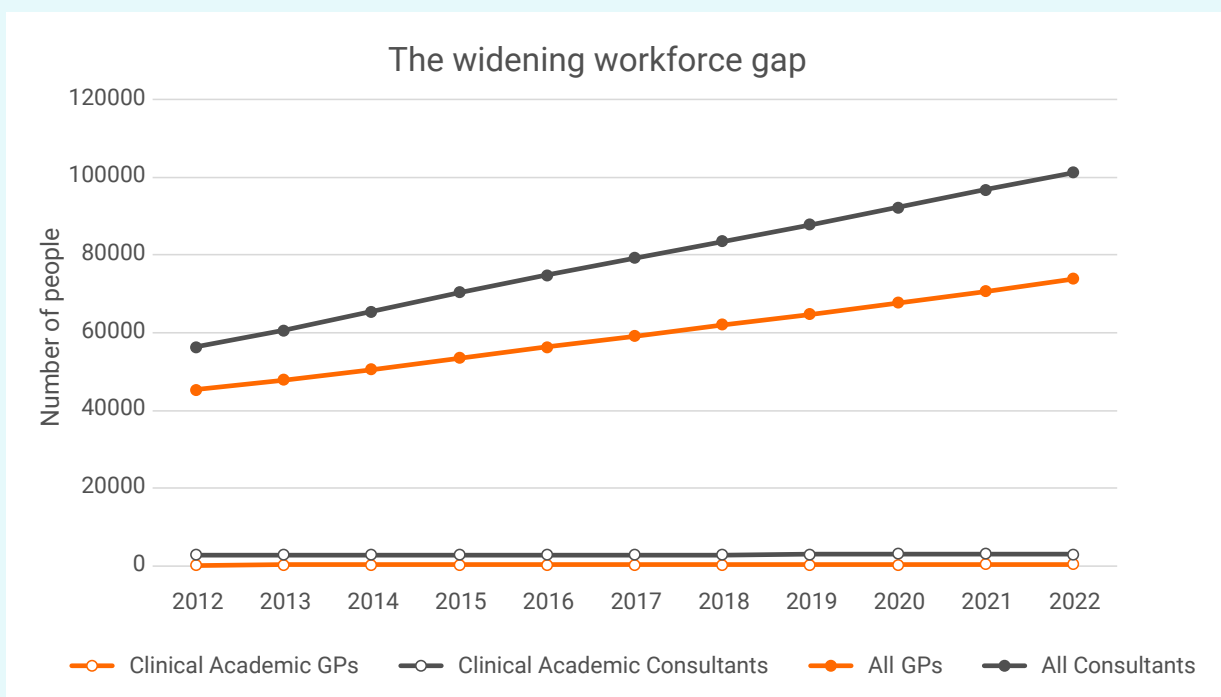


Figure 2: Demonstrating the widening workforce gap by showing the change in overall number of consultants and general practitioners (GPs) (top) compared to near static numbers of those who are clinically research active (bottom) over a 10-year period. *Source data: MSC Clinical Academic Survey & GMC Register*

12. [Committee launches inquiry into clinical academics in the NHS – Committees – UK Parliament](#)

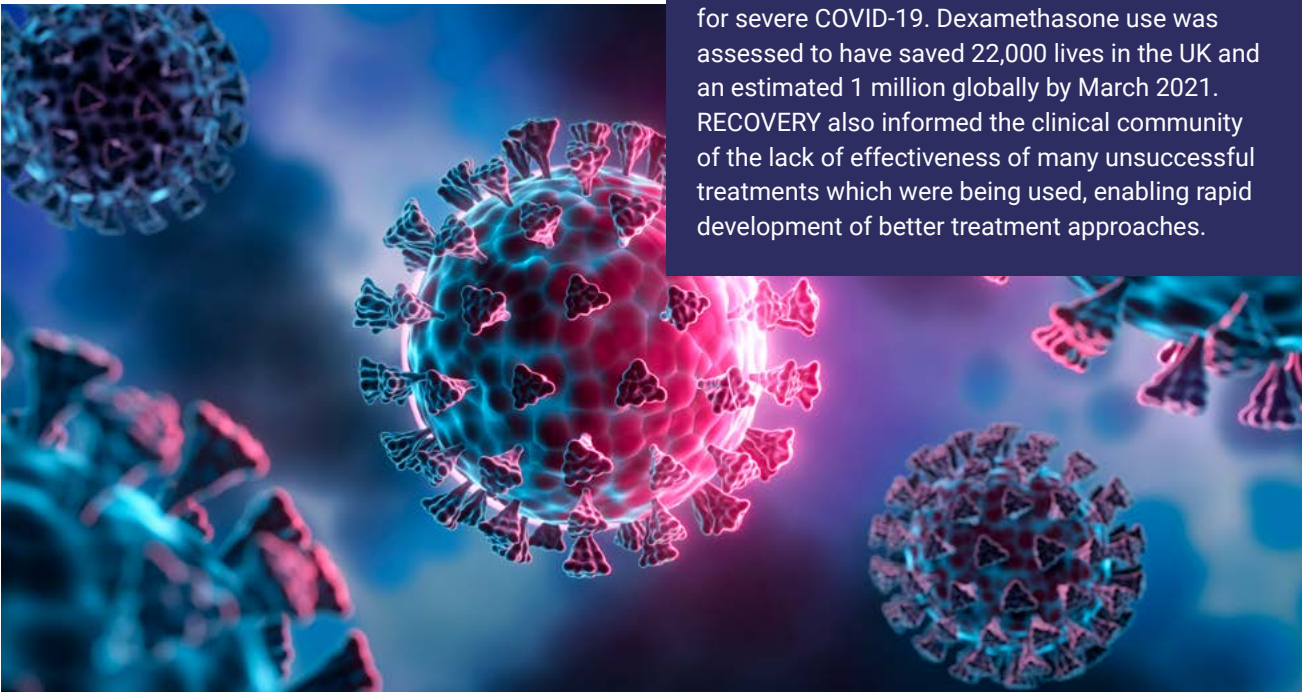
13. See parallel report on medically qualified researchers

14. Initiatives such as the [Clinical Academic Roles Implementation Network \(CARIN\)](#) seek to address this

15. [NHS Longterm Workforce Plan](#)

Clinical researchers enabled rapid pandemic response

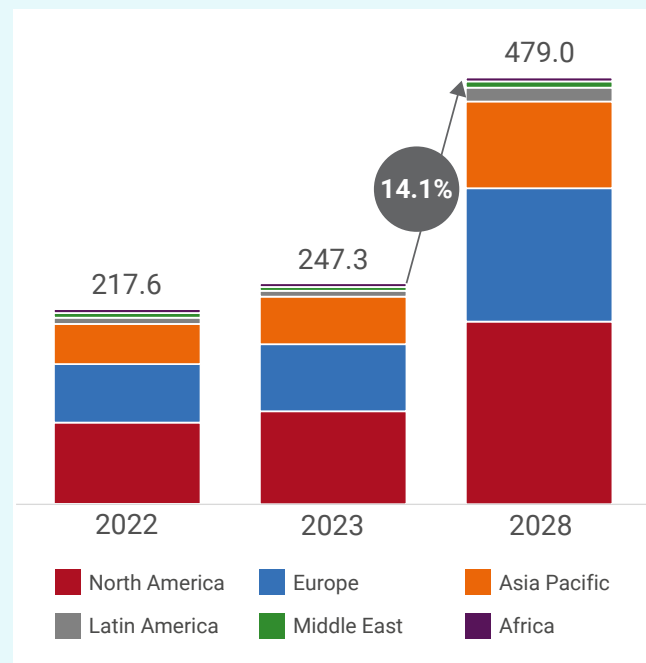
The rapid establishment of the UK's RECOVERY trial, led by clinical researchers, was the result of pandemic planning and sustained investment over the previous decade. The RECOVERY trial enabled identification of the first effective treatment for severe COVID-19. Dexamethasone use was assessed to have saved 22,000 lives in the UK and an estimated 1 million globally by March 2021. RECOVERY also informed the clinical community of the lack of effectiveness of many unsuccessful treatments which were being used, enabling rapid development of better treatment approaches.



UK Biomedical science improves health and drives economic growth

The therapeutic use of monoclonal antibodies provides a clear example of discovery, development and innovation driving both human health and economic growth. From early Nobel winning monoclonal antibody studies in mice at the MRC Laboratory of Molecular Biology and subsequent development to humanize them, it is an industry estimated to be worth USD247.3bn globally, providing precision therapy for cancer and immune disorders and even contributing to the fight against COVID-19 as neutralising monoclonal antibodies.

Growth over the next 5 years is predicted to push market value towards USD479bn, which underlines the critical importance of a vibrant clinically trained research staff in the UK. This development was critically dependent on UK clinical researchers who identified the key clinical applications and led research which showed their impact in many disease areas.



Source: *Antibody Therapeutics Market Size, Share, Trends and Revenue Forecast (latest)* ([marketsandmarket.com](https://www.marketsandmarkets.com))

Rationale for the Clinical Academic Training Task and Finish group

20. New challenges have emerged since the issue was last considered at a national level nearly 20 years ago¹⁶. There is therefore a pressing need to identify practical solutions to address the decline.
21. Given lag due to training time, failure to act now will likely lead to an irreversible decline from which the UK will not recover within a generation.
22. The UK clinical research workforce is particularly vulnerable given new limitations on clinical practice for European clinical researchers post Brexit. Thus, the UK must 'grow its own' clinical researchers aligned to the needs of the NHS.

Distinct needs for different disciplines have not been previously addressed

23. There are some shared issues across the different clinical disciplines which require integrated approaches, however each of them has specific, and singular, challenges that will require bespoke solutions that will need to be led and delivered by different stakeholder groups.

24. These are being tackled by separate working groups assembled from the different disciplines:
 - Medically qualified staff
 - Nursing and midwifery and other allied health professionals
 - Dental staff
 - Public health professionals
25. These working groups are not comprehensive. For example, health care scientists have distinct training needs which will need to be incorporated in a comprehensive UK-wide plan for the sector.
26. It is recognised that research career pathways for medically qualified staff are more structured than for other clinical professional groups, having benefitted from previous recommendations two decades ago¹⁵. This provides an opportunity to build on lessons learned to accelerate the development of similar pathways for professional groups engaged in clinical research.
27. This overview sets the scene for deeper analyses focussed on each professional group. Parallel reports will conclude with action plans incorporating a timeline and specific deliverables owned by named stakeholders.

16. [UKCRC Report with MMC 15 April.cdr \(stackstaging.com\)](#)

Task and Finish Group Members

Name	Job Title	Representing
Professor Patrick Chinnery	Executive Chair, Medical Research Council (MRC)	Medical Research Council (Chair of the Task and Finish Group)
Professor Sir John Bell	President of Ellison Institute of Technology, Oxford	UK Government Life Sciences Champion
Professor Monica Busse	Director Health and Care Research Wales Faculty	Welsh Devolved Administration Perspectives
Professor Lucy Chappell	DHSC Chief Scientific Adviser NIHR Chief Executive Officer	Department of Health and Social Care (DHSC) and National Institute of Health Research (NIHR)
Professor Dame Jessica Corner	Executive Chair, Research England	Research England
Professor Waljit Dhillon	Dean of the NIHR Academy Chair of CATF	NIHR Academy and The Clinical Academic Training Forum (CATF)
Professor Dame Anna Dominiczak	Regius Chair of Medicine, University of Glasgow and Chief Scientist (Health) Scottish Government	Scottish Devolved Administration Perspectives
Professor Sadaf Farooqi	Professor of Metabolism and Medicine, Wellcome Trust-MRC Institute of Metabolic Science, University of Cambridge	The Royal Society
Professor Simon Hollingsworth	MRC Council Member & Vice President and Global Franchise Head for IO Biospecifics at AstraZeneca	Industry Perspectives
Professor Patrick Maxwell	Regius Professor of Physic and Head of the School of Clinical Medicine at the University of Cambridge.	Medical Schools Council
Nicola Perrin	Chief Executive AMRC	Association of Medical Research Charities
Professor Sir Stephen Powis	National Medical Director of NHS England	NHS (England)
Dr John-Arne Røttingen	Chief Executive Officer, Wellcome	Wellcome Trust
Professor Rosalind Smyth	Vice Dean (Research), UCL Faculty of Population Health Sciences Chair MRC TCG Vice President Academy of Medical Science	Medical Research Council Training and Careers Group (MRC TCG) Academy of Medical Sciences
Professor Charles Swanton	Chief Clinician CRUK	Cancer Research UK
Professor Irene Tracey	Vice-Chancellor of the University of Oxford	Medical Research Council University Perspective
Dr Teresa Tsakok	AZ-MRC Industry Partnership Fellow NIHR Clinical Lecturer in Dermatology	Clinical Fellowship Perspective
Professor Bryan Williams	Chief Scientific and Medical Officer British Heart Foundation, Chair of Medicine at University College London and Professor at UCL Institute of Cardiovascular Sciences	British Heart Foundation
Professor Ian Young	Chief Scientific Advisor, Director of Research for Health and Social Care (NI)	Northern Irish Devolved Administration Perspectives

Sub-report: Medically qualified researchers

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Medically qualified researchers

Commissioned by the Office for the Strategic Co-ordination of Health Research for urgent consideration by the Department for Science Innovation and Technology (DSIT), Department of Health and Social Care (DHSC), and equivalent Departments of the Devolved Nations.

Summary

The UK medically qualified research workforce has been decreasing for more than ten years and will decline further unless there is corrective action. This threatens our capacity for innovation in the NHS and our ability to grow the economy through the life sciences sector. The reasons for the decline are complex and include

many disincentives, both at systemic and individual level, requiring a coordinated and system-wide solution. Having analysed the causes, this report presents an action plan owned by a defined stakeholder group which will reverse the decline over the next five years.



Background

1. This report was commissioned by the Office for the Strategic Co-ordination of Health Research (OSCHR) to identify potential solutions to the observed decline in the clinical academic workforce.
2. It is one of a series of reports produced by task and finish groups working with specific professional groupings. This report focuses on medically qualified researchers.

Decline in medically qualified researchers over last decade

3. Medically qualified researchers are individuals with a medical degree registered with the General Medical Council (GMC). They include hospital specialities including physicians, surgeons, anaesthetists and laboratory groups such as histopathologists. They also include general practitioners and some public health professionals.
4. The term 'clinical academic' is often used to describe people with a medical degree who carry out research and are employed by Universities or in research institutes. These individuals are the focus of this report, as opposed to researchers who are

wholly employed by the NHS, or staff employed by Universities to teach.

5. The decline in medically trained research staff is apparent in absolute terms – In 2022 there were 6% fewer medically trained research staff than there were in 2012. This is even more pronounced at senior lecturer level (the university equivalent to an NHS consultant) where there were 24% fewer medically trained research staff in 2022 than there were in 2012 (Fig. 1).
6. The 2023 Medical Schools Council Clinical Academic Survey returned the highest proportion of vacant posts since 2007, with 295.1 Full Time Equivalent (FTE) vacant posts representing a 71% increase in the last 10 years.
7. The decline is even more striking in relative terms due to the expansion of the NHS workforce, as highlighted in a recent Academy of Medical Sciences report¹. Medical Schools Council survey data (Fig. 2) shows the decline of clinical academic consultants as a proportion of the total senior clinical workforce has almost halved to just 3% in 2022, with clinical academic GPs remaining at low levels over time.

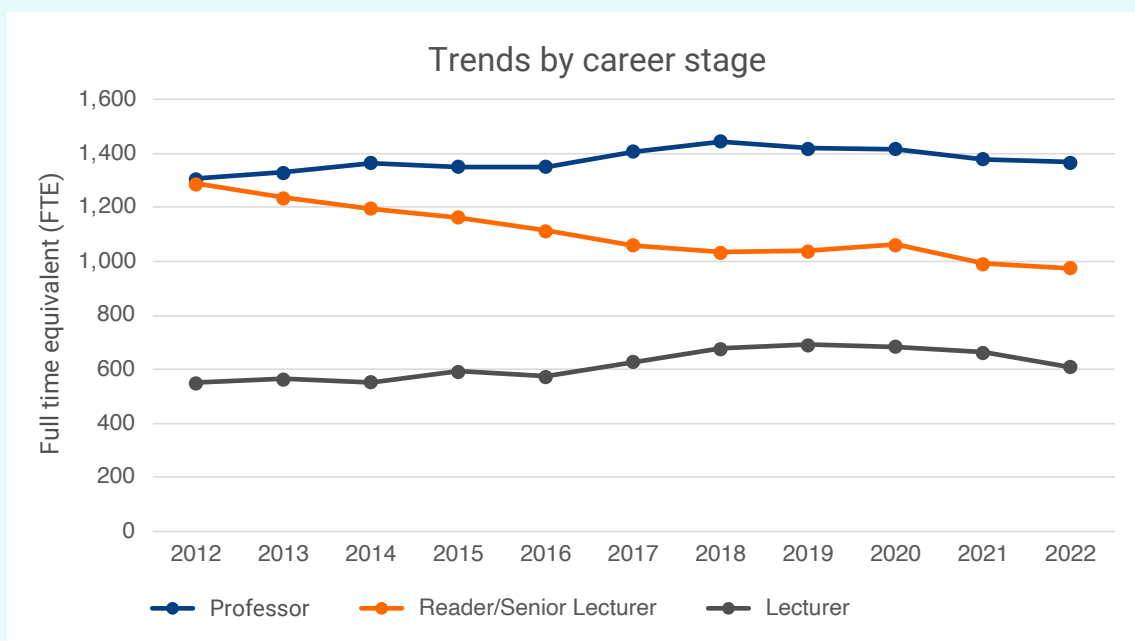


Figure 1: Trends by career stage, showing the change in full time equivalent (FTE) numbers over a 10-year period (2012 and 2022) for professor, reader/senior lecturer and lecturer level staff. Over this time, there was a reduction of 189 FTE across all three levels (a 6% decrease). While FTE numbers increased slightly at lecturer (+60 FTE) and professor (+62 FTE) level, there was a reduction of 311 FTE at reader/senior lecturer level (decrease of 24%).
 Source data: Medical Schools Council Clinical Academic Survey

1. [Future-proofing UK Health Research – full report](#)

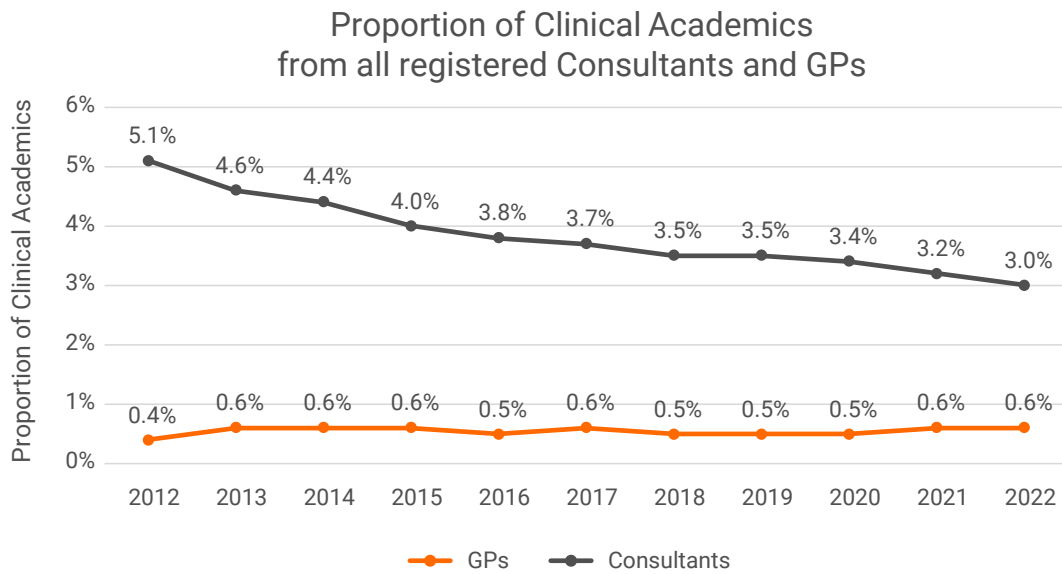


Figure 2: Change in the percentage of clinical academics as a proportion of all registered consultants and general practitioners (GPs) over a 10-year period from 2012 to 2022. *Source data: MSC Clinical Academic Survey & GMC Register*

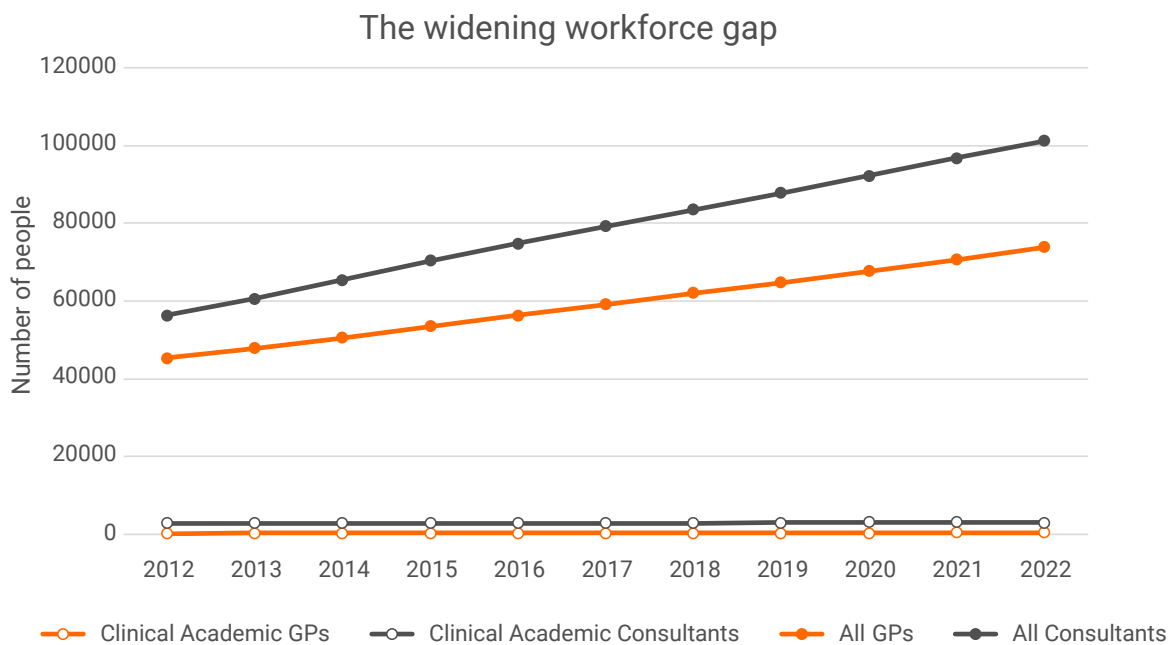


Figure 3: Demonstrating the widening workforce gap by showing the change in overall number of consultants and general practitioners (GPs) (top) within the NHS workforce compared to near static numbers of those who are clinically research active (bottom) over a 10-year period. *Source data: MSC Clinical Academic Survey & GMC Register*

8. The medical research workforce has not increased in line with the more than 50% rise in NHS consultants over the last 20 years² (See Figure 3). Thus, the research workforce has not matched the NHS need.
9. These figures highlight the situation up to 2022. However, an analysis of available demographic data shows that the situation will get worse over the next decade as the decline is not even across different age groups.
10. Overall, the data predict a further decline in clinical research capacity. Individuals 66 years and older are not matched in number by those in the under 36-year-old cohort entering clinical academia (Fig. 4). In short, the clinical research workforce is ageing and not being replaced at a rate that will maintain even the current position, leading to a further decline over the next decade.
11. In the last two years, for the first time, the number of people aged 66 years and older have exceeded those in the < 36-year-old cohort by 72.5 FTE in 2022 and 43.9 FTE in 2023³. This shows a likely deficit of those leaving and entering clinical research. This deficit does not account for any additional attrition to the < 36 cohort throughout their career.
12. This deficit does not include existing vacant posts nor account for any other attrition

(e.g., due to changing pension regulations), and critically, it also does not allow any growth ambition.

Emerging threat to the future workforce

13. In parallel, a survey (Fig. 5) of over 2000 medically qualified research staff showed that less than 50% of trainees are confident that they will continue their research training.
14. Although this a national issue, data from the General Medical Council shows variability in research training confidence across the UK⁴.
15. Together, these data indicate that:
 - The medically qualified research workforce is insufficient for the current needs of the NHS.
 - The future needs of the NHS will not be met by the current clinical research training programme.
16. An inevitable consequence will be a decrease in the patient benefit the NHS is able to provide and a reduction in the capacity of the UK to contribute to economic growth through the life sciences sector.
17. This gap will widen further given the ambitions set out in the NHS Long term Workforce Plan⁵ to double the number of doctors that are produced, without providing for expansion of clinical academics required to train them.

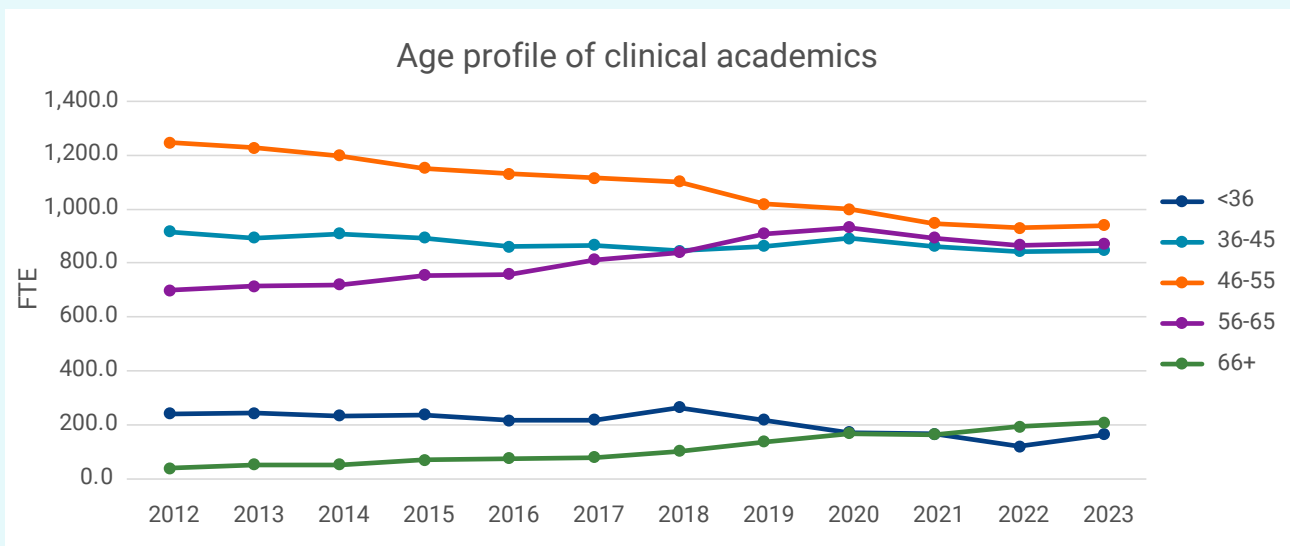


Figure 4: Trends of full time equivalent clinical academics by age group.
Source data: MSC Clinical Academic Survey

2. Register summary over time – GDE (gmc-uk.org)
3. Clinical academic survey (medschools.ac.uk) – Demographic trends over time tab
4. Academic – EDT (gmc-uk.org)
5. NHS Longterm Workforce Plan

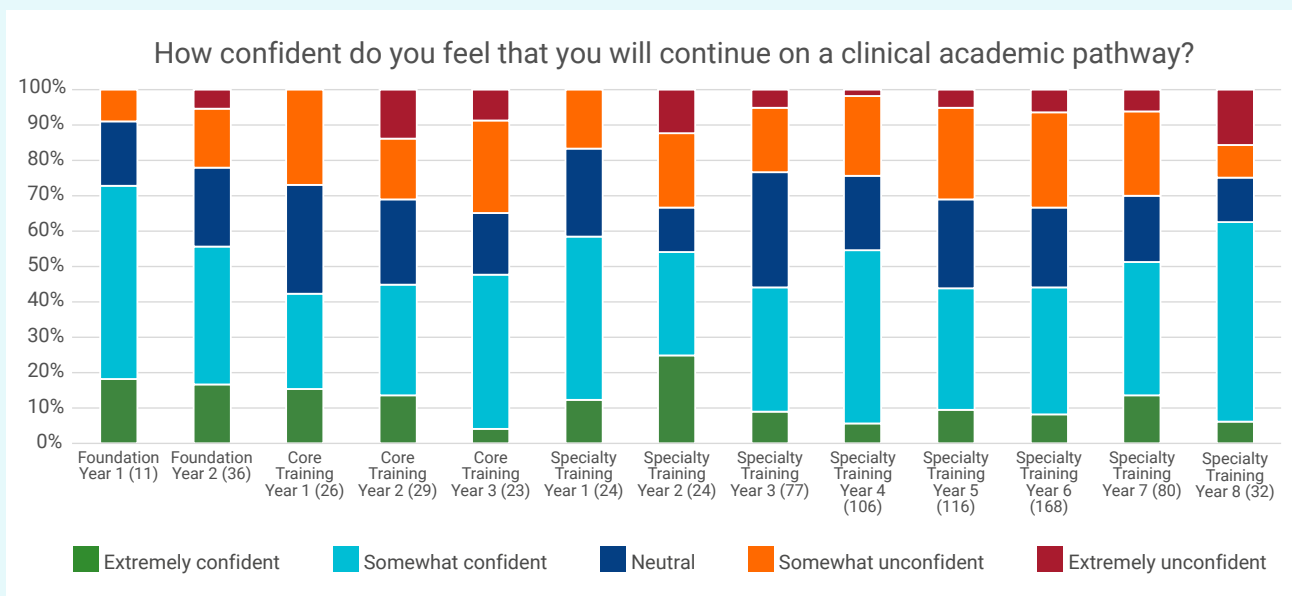


Figure 5: A survey conducted in early 2024 received 2042 responses from medically qualified research staff in the UK. Of the 752 currently research active trainees who responded, less than 50% were confident or somewhat confident that they would continue in a research career. Results are shown by respondents grouped into the stage of their training, with number of respondents shown in brackets. Confidence was lowest during core training and in the middle of specialty training. *MRC Clinical Academic Pathways – Insight Survey (barriers to progression / potential solutions)*

Reasons for the decline in medically qualified research capacity

18. There are systemic drivers in addition to well-recognised and completely new disincentives that make clinical research careers less appealing now than at any other time in living memory.
19. Systemic drivers of the decline in capacity include:
 - A reduction in medically qualified staff in universities driven by incentives set out in previous Research Evaluation Frameworks (REF) and its predecessors.
 - Financial pressure on universities limiting the recruitment of higher paid medically qualified staff.
 - NHS service pressures leading to a reduction in protected time for research in NHS job plans.
20. Well-recognised disincentives for individuals considering clinical academic careers include:
 - The challenge of developing two distinct professional skillsets in parallel: clinical practice and research. This is particularly difficult for surgical and other ‘craft’ specialties which require time and energy to learn difficult practical procedures, and for any speciality requiring routine out of hours clinical activity affecting productivity the following day.
 - The duration of specialist clinical training in the UK, which is substantially longer than in the United States or Europe.
 - A lack of flexibility in balancing research and clinical training which exacerbates the personal challenge, particularly around geographic mobility (which may be international for research training).
 - Shortage of tenured posts on completing training (see above), and local barriers to moving between clinical and research activity during a career.
21. New or more prominent disincentives include:
 - Change in personal finances linked to student debt. This increases pressure on individuals to complete their training as soon as possible to maximise their salary.
 - Uncertainty about future salary and pensions. In England this has been recently exacerbated by changes to the clinical impact scheme which places less emphasis on, and is perceived as undervaluing research excellence and delivery and is of substantially lower financial value to individuals than the previous clinical excellence award scheme.
 - Career uncertainty. Unlike a clinical career, research training and a subsequent career

involves multiple jeopardies. The current model requires success at sequential national fellowship competitions, with a particularly vulnerable time being the immediate post-doctoral period ('valley of death') when most aspiring medically qualified researchers leave the research training pathway. There are limited opportunities for secure research positions at the point where clinicians are offered secure NHS consultant posts.

- Changes in medical training. Recent increase in requirements for 'dual' accreditation in general medicine applies to many more specialties, creating additional time pressure and desire to 'get through' clinical training as soon as possible. Although dual accreditation has long been the case for some specialties (e.g., haematology), the out-of-hours commitment required in general medicine now shared across many medical disciplines is a major disincentive voiced by staff in training. Moreover, having completed their training, clinical academics are unlikely to have time to pursue a successful research career alongside both their speciality and general medicine clinical commitments.
- Change in demographics of medically qualified staff. An increasing proportion of those with caring responsibilities presents additional challenge and

the need for flexibility. The challenge of additional research training places an even greater burden on these individuals.

- Proposals to introduce four year undergraduate medical education courses, limiting research exposure and the opportunity to begin research training at an early age (e.g. through an intercalated science degree, which may only be available through some medical schools).
- The recent plans to introduce random allocation methods to match applicants to specialised foundation programme posts (Preference Informed Allocation) has been voiced as a major disincentive by trainees. These methods do not take into account any prior research experience or evidence of research commitment and thus devalue early engagement with research, including intercalated research degrees and any optional extracurricular research activity. They also do not consider the need for clinical academics to be based close to their research infrastructure during clinical training.
- Some of the new issues apply to public sector clinical careers in general, but the focus of this report is on the distinctive challenges of medically qualified research careers.

Recommended actions

22. There is an immediate need to remove the disincentives and pro-actively value and promote clinical research careers to avoid a further decline in the medically qualified clinical researcher workforce.
23. Immediate action does not require major new investment – some of the systems and structures are in place but are not being implemented as intended.
24. Further targeted investment will be required to reverse the decline in medically qualified researchers. This is essential to ensure the UK remains globally competitive in biomedical research to drive economic growth.
25. The financial underpinning should not be exclusively public funding. Further investment should be a public-private partnership with government, charity and industry support. This could be organised and coordinated at a national or regional level, and promote innovative bespoke flexible job plans

for individuals drawing resource from different stakeholders.

26. This report lists a small number of interventions designed to have the greatest impact to build a sustainable clinical research workforce for the future.

Action 1. Establish a common national clinical research career framework

27. The UK needs to train the world's leading clinical researchers who are capable of competing on an international stage. To achieve this the training must be selective. However, to attract the best talent we must present a more secure and appealing integrated career pathway where the likelihood of success is explicit.
28. This would be achieved by embedding a common national training framework, termed: 'Research Clinician Track' spanning 5 phases of a clinical research career.

29. The phases would be as follows:
- Phase 1 = Internships during undergraduate studies and/or a research degree (intercalated or before medical school), Specialised Foundation Programmes and Academic Clinical Fellowships
 - Phase 2 = PhD or MD
 - Phase 3 = Early post-doctoral research
 - Phase 4 = Late post-doctoral (towards independence)
 - Phase 5 = Independent researcher
30. Flexibility in the training programme is absolutely critical for success. Trainees must be able to move in and out of the clinical and research training at different times, depending on their individual needs, with support from their Deaneries.
31. Phase 1 is desirable but not essential, and the duration of each stage will differ between trainees depending on their individual needs.
32. The common national pathway requires funders to align the names and the definition of fellowship opportunities at each stage, allowing easy movement between funders. This will ensure all funding opportunities are presented as a coherent UK-wide offer, emphasising the expectation that people will seamlessly move between funders during their career as appropriate.
33. New national initiatives for Phases 1 & 2 would ensure 'reach' to provide the opportunity for the widest diversity of talented junior doctors across the country to enter the clinical research training pathway. One opportunity would be formal partnering between new and long-established medical schools.
34. Competitive funded internships and intercalated degrees for Phase 1 should cover all fees including any maintenance and course fees which reflect the national minimum wage to enable wider participation and break the link between background and success. Without this, these research opportunities will be unappealing in the context of significant student debt related to the primary medical degree course and this will further drive current inequalities in the system.
35. Funding rates at each stage should seek to support all high-quality applications which reflect the candidate, their proposed research project, the chosen research environment and associated supervisory team.

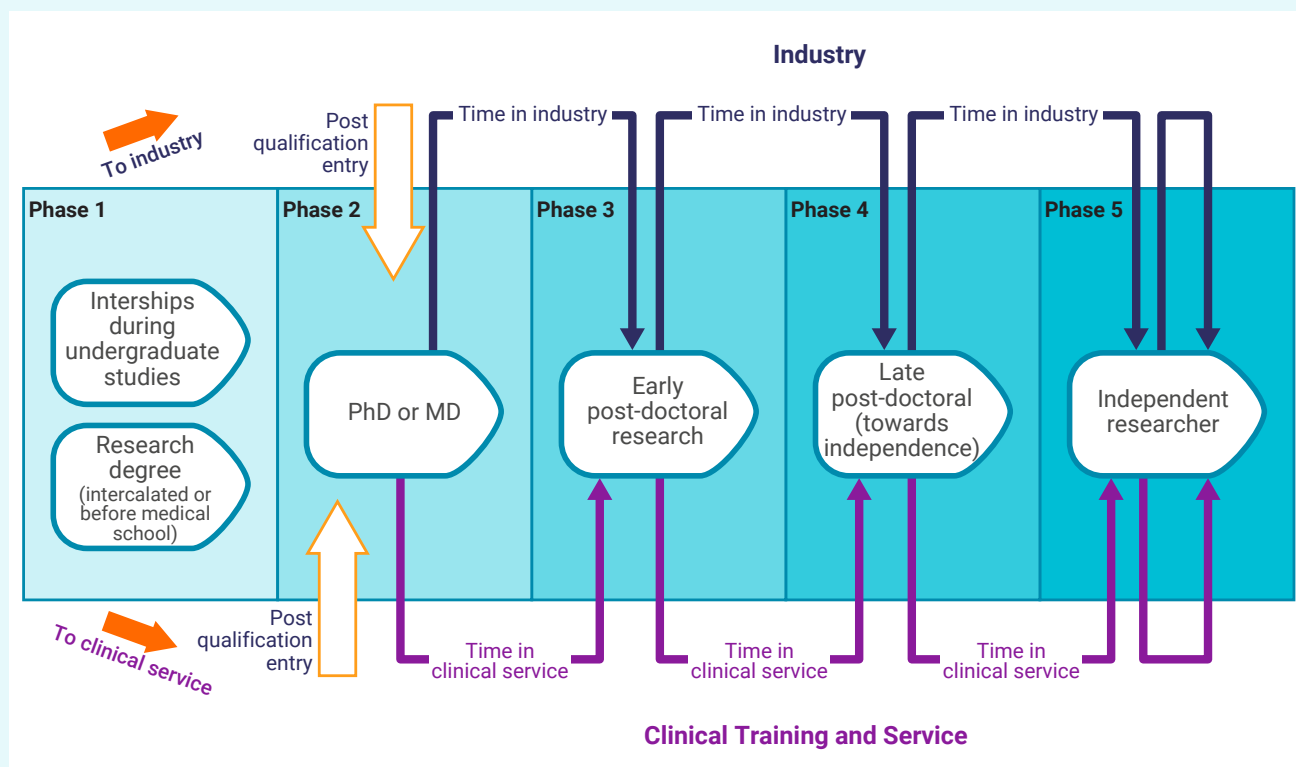


Figure 6: Indicative schematic of phases and career mobility

36. Opportunities for 're-entry' programmes in research should be available at all stages – not only during training but throughout a career. This will promote porosity allowing researchers to move between academic research, clinical practice and industry at different stages.
37. Training opportunities need to be mirrored by an expansion of tenured research positions in universities / the NHS. This should include:
 - National expansion of senior roles is needed to meet the research needs of the NHS and industry.
 - Remove drivers in the REF that disadvantage medically qualified clinical researchers by only counting their research time in the denominator of REF returns.
 - National funds for dual NHS-University funded/ based posts.
 - Include inbuilt flexibility in NHS/University relative salary contributions which could evolve (or be proactively managed) as a career evolves (European Academic Medical Center model)
 - Jointly funded positions where part of the salary is met by Universities, the NHS and industry.
 - It is essential that when there are changes to the Consultant contract these automatically apply to Honorary consultant contract holders, and that when these have funding implications the funding for honorary contract holders is agreed as part of the negotiations.

Action 2. Ensure the national training pathway is flexible and fast

What needs to be achieved?

38. Multiple entry-exit routes into the training programme. Make it clear that the 'integrated academic pathway' is not the only pathway to develop a successful medical researcher.
39. Focus on actual competency in clinical training. Competency based training is already in the gold guide for clinical training but at Annual Reviews of Competence Progression (ARCPs) the numbers of clinics and procedures are often used to measure competency rather than whether the trainee is competent. Actual competency should be the focus of ARCPs rather than a focus on numbers. This must be specified and monitored by NHS training authorities UK-wide.
40. Enable formal research training to begin after clinical training is complete, as is often the case for GPs & dentists, albeit not the currently preferred option for many hospital specialists.

41. Flexible timescale for clinical training including clinical training breaks to develop research competencies.
42. NHS-University-Industry porosity and recognition by ensuring traditional academic metrics are not the only way of measuring performance.
43. Both UK & international opportunities for research training (with a UK base for clinical training).
44. Career re-entry mechanisms after extended career breaks.

How can this be delivered?

45. Universities and the NHS should take joint responsibility for training medically qualified clinical researchers, with the NHS providing flexibility to enable research and provision of a supportive research environment.
46. The General Medical Council (GMC) should limit the need for multiple clinical accreditations. There should be joint university and NHS accreditation in a single clinical specialty plus research only. This will be more appealing, lead to strong competition, and put research training on an equal footing/status with clinical training. It is also compatible with sub-speciality GMC registration.
47. Research training positions (or the research time allocation) must be supernumerary to the clinical service need. This will prevent regional NHS service requirements competing with research time and enable national/international mobility during research training.
48. Clinical training programmes should enable trainees to acquire accredited competency-based training 'credits' whilst in a largely research role, accelerating overall training and providing added value to the NHS. NHS and university partnerships are best placed to provide this.

Action 3. Visible leadership and mentorship delivered by established researchers

49. Established researchers must inspire future clinical researchers from an early age – this is a responsibility for all.
50. Mentorship and training the next generation of researchers should be included in annual appraisals and rewarded through career progression and linked pay awards.

51. Research performance of an NHS organisation should become a key performance metric at board level. This will encourage a culture of recognition of the importance of research and better nurture those who deliver it.
52. Emphasise that 'success' does not only mean becoming a university professor. Success can be within the NHS and industry, and include other diverse career outcomes (e.g., government)⁶.
53. Research-inspired undergraduate teaching is essential, emphasising the role and impact of research:
 - Begin with medical school admissions
 - Embed throughout undergraduate teaching
 - Increase research exposure through student selected study modules
 - Actively promote intercalated degrees
54. There is a need for sector-wide commitment to career-long mentorship – both forward and reverse. This will nurture progression and advance understanding of the evolving challenges by the research leadership.

Action 4. Equitable rates of pay and pay opportunities

55. Establish transparent opportunities for salary progression based on the delivery of excellent research at a national and international level including within devolved administrations. The current systems are largely based on clinical impact or are delivered by universities on an ad hoc basis.

This is a serious disincentive for the most ambitious and able trainees and established researchers, especially when placed in the context of private practice opportunities and industry remuneration.

56. Ensure there is pay parity, with revisions to NHS Terms and Conditions also considering aligned revisions for clinical researchers in the University sector, with funding arrangements agreed in advance.
57. Incentivise 'portfolio' careers which bridge university- and NHS-based research with industry, enabling salary enhancement through commercial income that complements public sector salaries, embracing spin outs and larger companies.

Action 5. Robust context-specific performance evaluation

58. Joint NHS/University appraisal must be linked to the needs of funding partner organisations enabling a change in role/salary support which reflects research and clinical performance. This should involve a complete and comprehensive review every 5 years linked to revalidation, enabling a change in work plans. This should undergo a 'light touch' review annually.

Action 6. Monitor of the impact of these actions

59. OSCHR should evaluate the impact of these actions in 5 years using the metrics specified above and whether each action has been delivered across all four nations.

6. [REF 2029](#)

Deliverables to monitor progress

#	Deliverables by action	Lead stakeholder group	Suggested deadline
1.1	Create a common and visible national clinical research career pathway across funders to provide a visible coherent UK offer: the 'Research Clinician Track'	Funders	April 2025
1.2	Identify and address gaps in support, with new national initiatives and additional support for early phases of the pathway and career re-entry	Funders	Mid 2025
1.3	Establish national scheme to enable early research experience, e.g. through fully-funded intercalated degree bursaries and internships	Funders	Mid 2025
1.4	Increase number of tenured research posts by at least 40 a year to reverse the decline of 189 posts since 2012 within 5 years, with commitment to continue this trajectory	Universities & NHS	Mid 2026
2.1	National audit of Annual Reviews of Competence and Progression (ARCPs) to implement actual competency rather than proxy metrics	NHS training authority & postgraduate deans	Mid 2025
2.2	Funders to increase flexibility of schemes to enable formal research training to begin after clinical training is completed	Funders	Mid 2025
2.3	Establish a streamlined, low bureaucracy joint university and NHS accreditation in a single clinical speciality when pursuing a 'Research Clinician Track'	Multiple	End 2025
3.1	Embed delivery of mentorship and training within annualised job plans and appraisals	Universities/NHS	Mid 2026
3.2	Allocation to Specialised (academic) Foundation Programmes must retain selection criteria which takes account of experience in research, aptitude, motivation and enthusiasm for an academic career	NHS	Mid 2025
3.3	Embed research as a KPI in all NHS Trusts at Board level	NHS	2025
4.1	Include an expansion of university-employed medically qualified research staff as an objective in REF 2029 guidance	Research England	2026
4.2	Develop and publish national transparent salary progression system for clinically qualified researchers employed by Universities, with inbuilt flexibility to combine core roles with additional portfolio of activity. ⁷	Universities	Mid 2026
5.1	Implement 5-yearly joint NHS-university comprehensive reviews of job plans/portfolios linked to GMC revalidation within two years	NHS and Universities	2026
6.1	Continue providing and enhancing baseline data of clinical academic numbers to measure progress and impact of above actions	Medical Schools Council	April 2025
6.2	OSCHR to review progress against the above annually and enhance and refresh deliverables to progress in line with actions of the report	OSCHR	Annually until 2029

7. Building on established [Follett Principles](#) and [Principles and Obligations for UK clinical academic training](#)

Task and Finish Group Members

Name	Job Title	Representing
Professor Patrick Chinnery	Executive Chair, Medical Research Council (MRC)	Medical Research Council (Chair of the Task and Finish Group)
Professor Sir John Bell	President of Ellison Institute of Technology, Oxford	UK Government Life Sciences Champion
Professor Monica Busse	Director Health and Care Research Wales Faculty	Welsh Devolved Administration Perspectives
Professor Lucy Chappell	DHSC Chief Scientific Adviser NIHR Chief Executive Officer	Department of Health and Social Care (DHSC) and National Institute of Health Research (NIHR)
Professor Dame Jessica Corner	Executive Chair, Research England	Research England
Professor Waljit Dhillon	Dean of the NIHR Academy Chair of CATF	NIHR Academy and The Clinical Academic Training Forum (CATF)
Professor Dame Anna Dominiczak	Regius Chair of Medicine, University of Glasgow and Chief Scientist (Health) Scottish Government	Scottish Devolved Administration Perspectives
Professor Sadaf Farooqi	Professor of Metabolism and Medicine, Wellcome Trust-MRC Institute of Metabolic Science, University of Cambridge	The Royal Society
Professor Simon Hollingsworth	MRC Council Member & Vice President and Global Franchise Head for IO Biospecifics at AstraZeneca	Industry Perspectives
Professor Patrick Maxwell	Regius Professor of Physic and Head of the School of Clinical Medicine at the University of Cambridge.	Medical Schools Council
Nicola Perrin	Chief Executive AMRC	Association of Medical Research Charities
Professor Sir Stephen Powis	National Medical Director of NHS England	NHS (England)
Dr John-Arne Røttingen	Chief Executive Officer, Wellcome	Wellcome Trust
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Professor Charles Swanton	Chief Clinician CRUK	Cancer Research UK
Professor Irene Tracey	Vice-Chancellor of the University of Oxford	Medical Research Council University Perspective
Dr Teresa Tsakok	AZ-MRC Industry Partnership Fellow NIHR Clinical Lecturer in Dermatology	Clinical Fellowship Perspective
Professor Bryan Williams	Chief Scientific and Medical Officer British Heart Foundation, Chair of Medicine at University College London and Professor at UCL Institute of Cardiovascular Sciences	British Heart Foundation
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