



NIHR Update

NIHR Statistics Group Conference

20 June 2019

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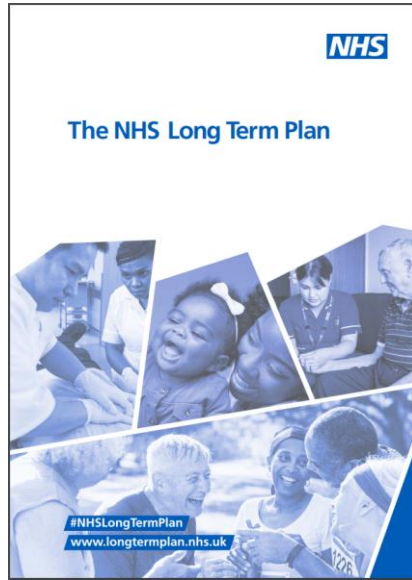
The public wants a research-active NHS



83% think health research is very important (2017)¹

85% want to help the NHS to find better treatments for serious illnesses (2018)²

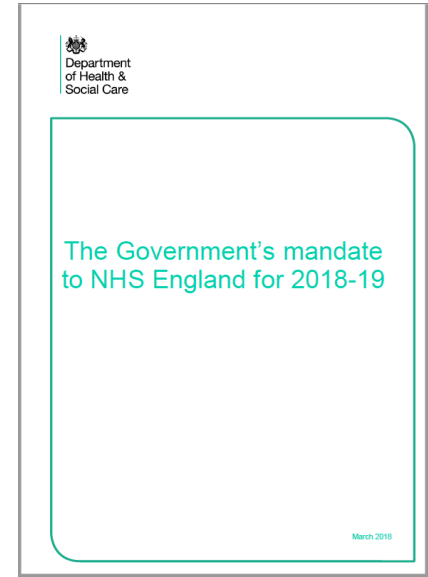
NHS Policy & Legal Framework



“Patients benefit enormously from research and innovation, with breakthroughs enabling prevention of ill-health, earlier diagnosis, more effective treatments, better outcomes and faster recover”



The NHS aspires to the highest standards of excellence and professionalism.....and through its commitment to innovation and to the **promotion, conduct and use of research** to improve the current and future health and care of the population.



OBJECTIVE 7: To support research, innovation and growth and to support the Government's implementation of EU Exit in regards to health and care

Research Activity Improves Outcomes



Public Health
Volume 157, April 2018, Pages 1-6



Original Research

The correlation between National Health Service trusts' clinical trial activity and both mortality rates and care quality commission ratings: a retrospective cross-sectional study

L. Jonker^{a,b,1}, S.J. Fisher^{a,1}

Highlights

- Increased National Institute for Health Research-adopted clinical trial activity is associated with reduced mortality.
- Increased National Institute for Health Research-adopted clinical trial activity is associated with better Care Quality Commission outcomes.
- Particularly, the number of clinical trial patients correlates with improved hospital performance.
- The link between clinical trials activity and quality is not Trust-size dependent.

[Jonker, L., Fisher, S. The correlation between National Health Service trusts' clinical trial activity and both mortality rates and care quality commission ratings: a retrospective cross-sectional study. *Public Health*. 2018. 157:1-6](#)



Ted Baker, CQC chief inspector of hospitals, said: “We know there is evidence that research-active organisations have the potential to achieve better patient outcomes and [the] CQC has been working with the NIHR to strengthen how we assess research and innovation as part of our well-led inspections.”

Royal Colleges: call to action

**Royal College
of Physicians**

Setting higher standards

Delivering research for all: expectations and aspirations for the NHS in England

The Royal College of Physicians sees research in its broadest sense, from quality improvement to epidemiology and clinical trials, as crucial to patient care. Research is a key part of the NHS England constitution¹ and the benefits research can bring are broad. Research-active trusts have improved outcomes for patients² and the Care Quality Commission (CQC) has now included clinical research activity within its remit for trust inspections. Many doctors, nurses and other clinicians regard research as an important part of their job and find it a very positive experience. However, they are challenged by the lack of protected time for patient-facing research.³

High-quality research in the NHS is everyone's responsibility and a core part of clinical care. It is important that every clinician working in the NHS is research active, whether this is identifying opportunities for new research, recruiting patients, supporting

colleagues or leading research studies themselves. Facilitation of research in trusts should be part of core activity and seen as a key indicator of improving patient care. Trusts should increase their research activity and clinicians should be supported to pursue research activity as far as they wish to.⁴ This will mean more patients than ever can have the opportunity to be involved with or benefit from clinical research.

The UK is one of the best places in the world for investment in clinical research. This means investment into the NHS and National Institute for Health Research (NIHR) activity can generate revenue for trusts with further employment opportunities for the wider economy.⁵

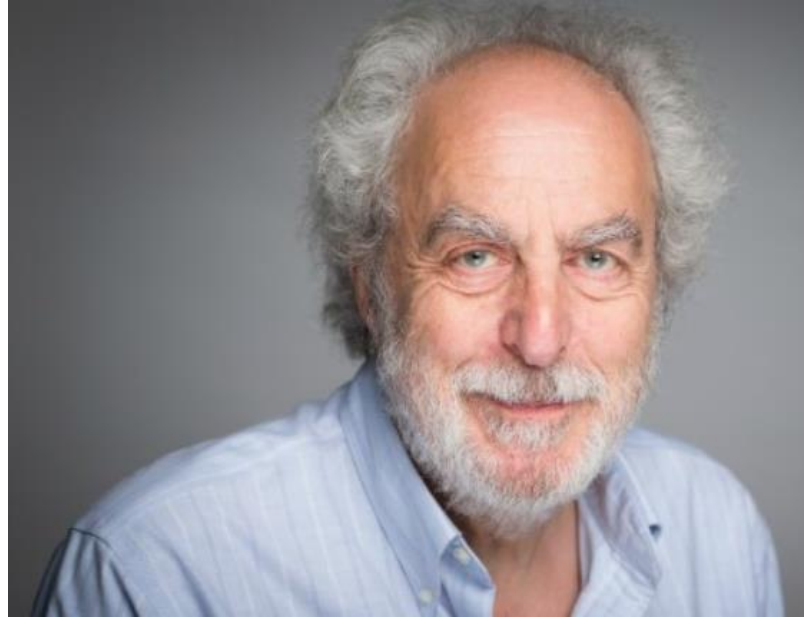


This statement is endorsed by the following organisations:



National Institute for Health Research





“We need less research, better research, and research done for the right reasons.”

Doug Altman 1994 <https://doi.org/10.1136/bmj.308.6924.283>

NIHR “Health Futures” 20 year forward look

Differences in state of health & provision of healthcare and differential impact e.g by geography

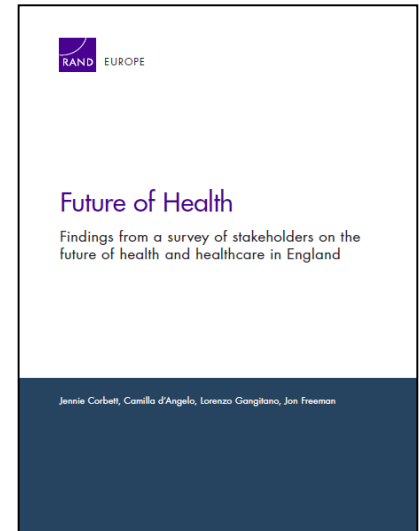
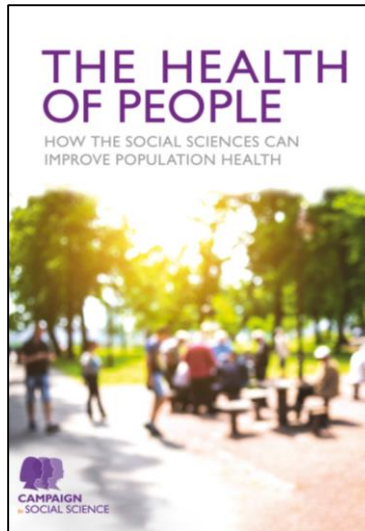
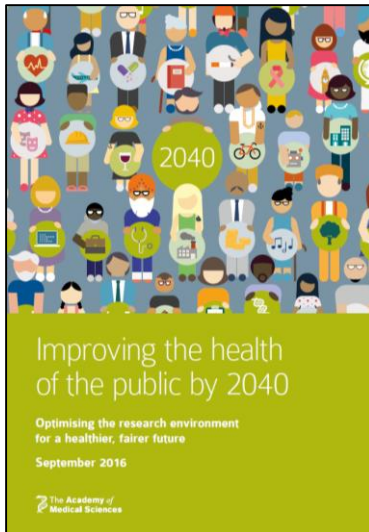
Key drivers for change

Major trends in health & healthcare

Which issues are overstated & why?

Which issues are understated & why?

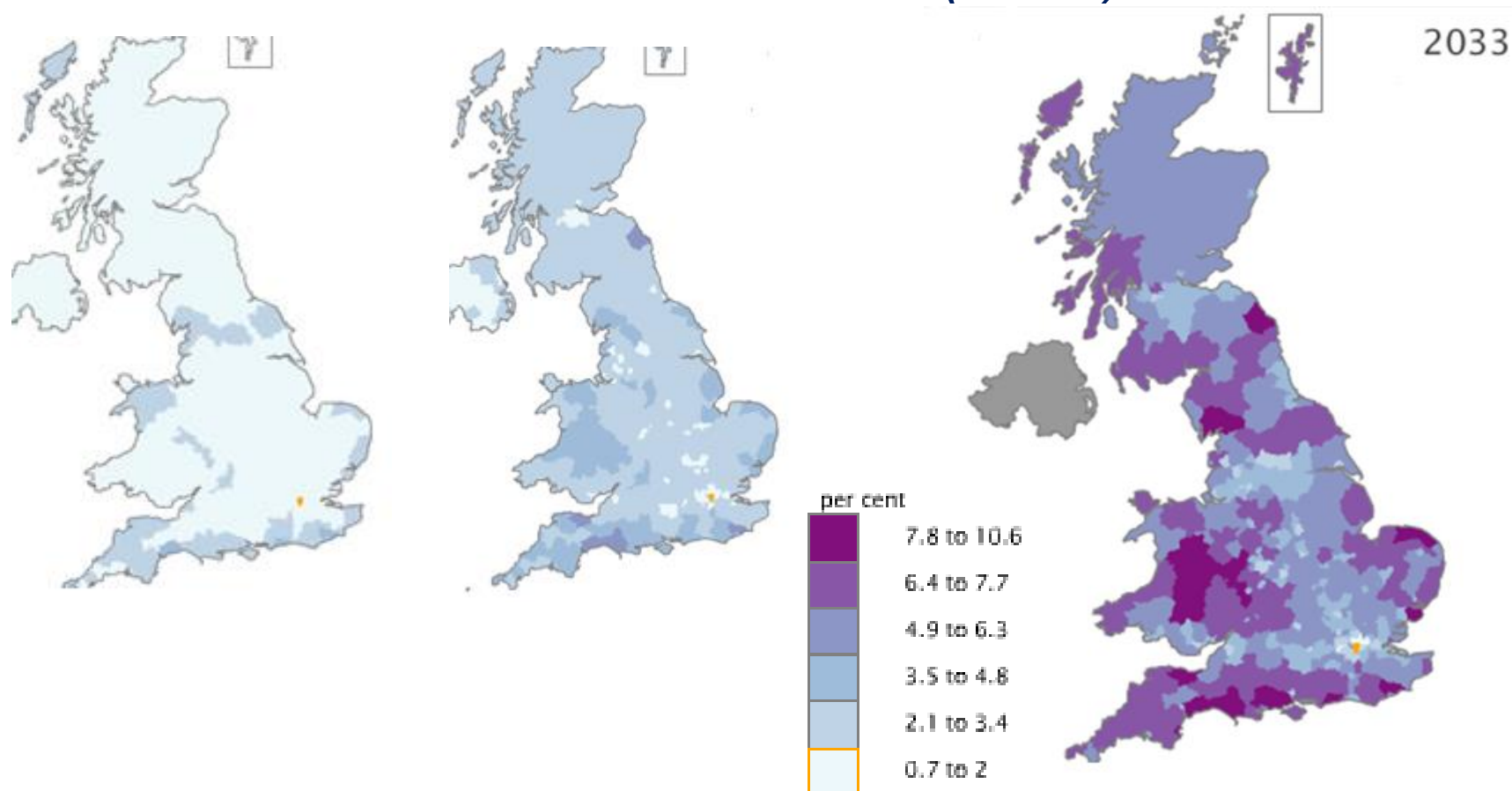
[Link: https://www.rand.org/pubs/research_reports/RR2147.html](https://www.rand.org/pubs/research_reports/RR2147.html)



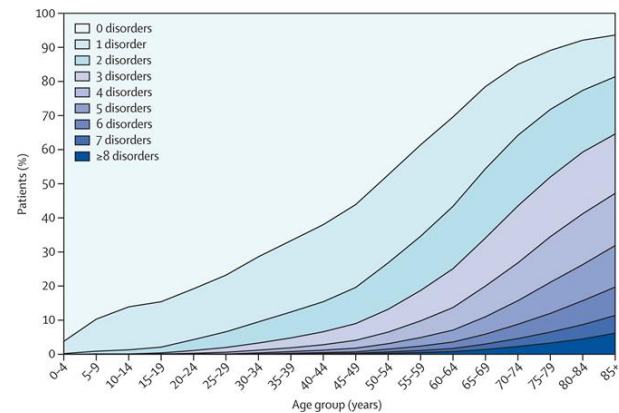
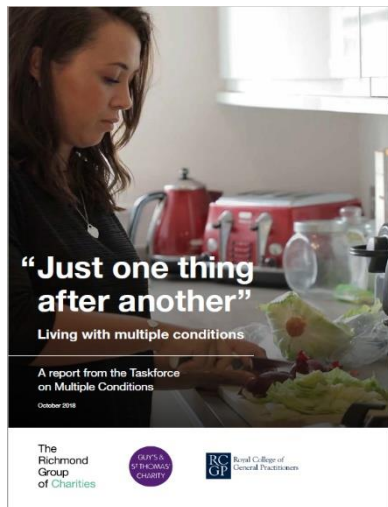
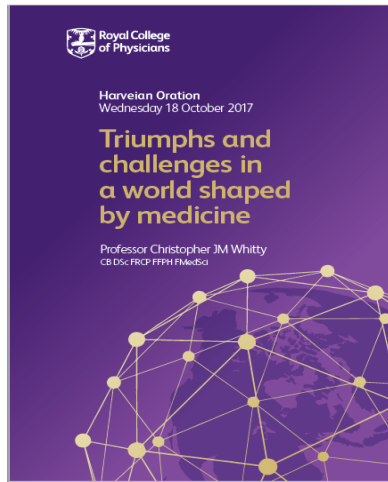
Health futures - recurring themes

- **Transformation** in organisation and delivery of health and social care
- **Patient expectations and voice** are growing
- Increasing **health inequalities** driven by wider determinants
- Challenge of **lifestyle and environmental drivers** for public health needs – obesity and air pollution
- Growing burden of **mental ill-health** (young and old highlighted)
- **Demographic pressures** (ageing population with multi-morbidities)
- Improving maternal and child health & end-of-life care –**life course approach**
- Challenge of keeping pace with **advances in technology** and positive/negative consequences of new personal digital devices
- **Global challenges** and changing patterns of disease - infectious disease – climate change and AMR

Population 85 and over: 1992, 2015, 2033 (ONS)



Tackling Multi-morbidity



Barnett et al 2012

NHS research and innovation - needs and uptake



<https://www.ahsnnetwork.com/wp-content/uploads/2014/12/National-survey-of-local-research-and-innovation-needs-of-the-NHS.pdf>



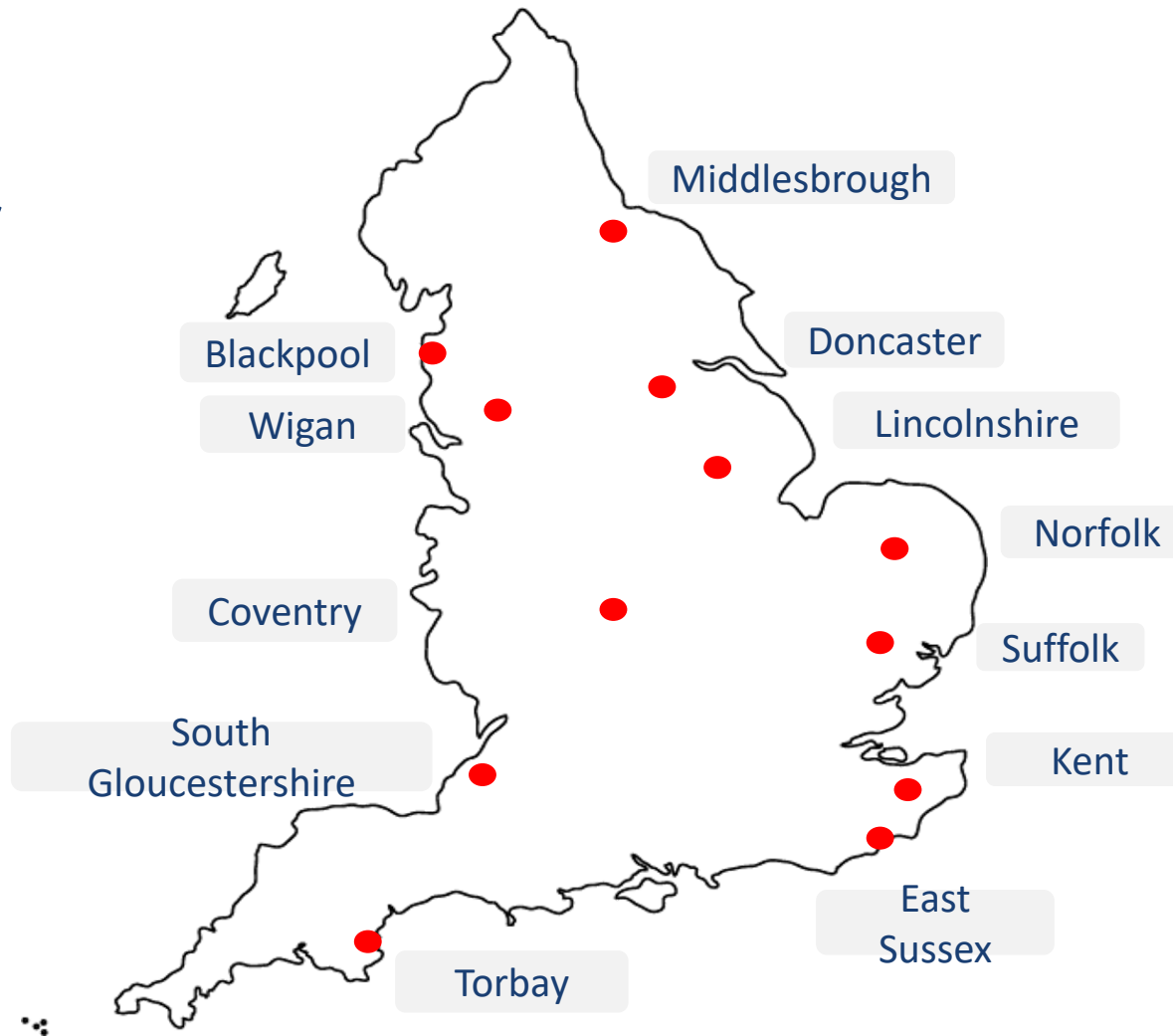
Dr Sam Roberts
NHS England

Accelerated Access Collaborative

- Implement a system to **identify the best new innovations** and make sure the **NHS is ready to make use of them**
- Set up a **single point of call for innovators** working inside or outside the NHS, so they can understand the system and where to go for support
- Signal the needs of clinicians and patients, so **innovators know which problems they need to solve**
- Establish a **globally leading testing infrastructure**, so innovators can generate the evidence they need to get their products into the NHS
- Oversee a **health innovation funding strategy** that ensures public money is focused on the areas of greatest impact for the NHS and patients
- Support the NHS to more quickly adopt clinically and cost-effective innovations, **to ensure patients get access to the best new treatments and technologies faster than ever before**

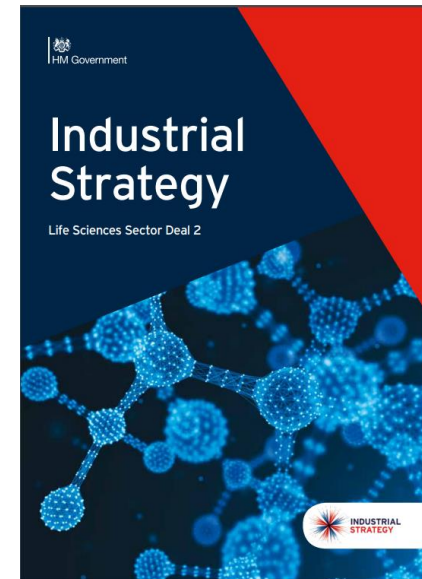
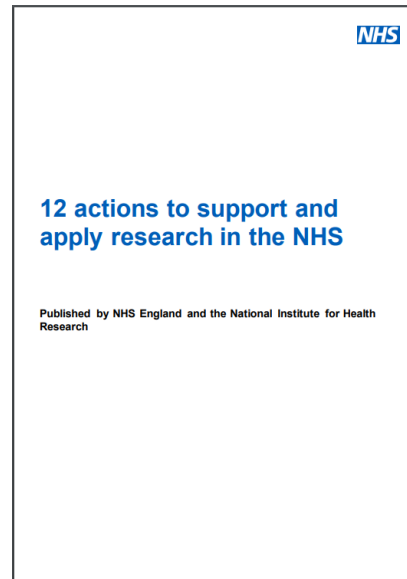
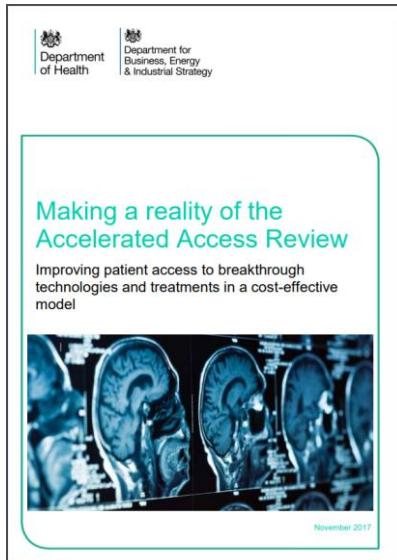
Public Health and Social Care Research

Chief Scientific Advisor
Local Authority Visits



Boosting UK growth and competitiveness

“UK Government to work with industry to boost spending on R&D to 2.4% of GDP by 2027” Philip Hammond



NIHR strategic priorities

- Responding to **disease burden over the life course** and **demographic pressures** inc ageing, disease clusters of multi-morbidity and frailty
- Building **research capacity and capability in underserved areas of greatest need**, e.g. social care, public health, primary care and mental health
- Encouraging **applied health research activity to follow patient need** and attract the nation's leading researchers
- Implementation of the **NIHR Training Strategy**, inc NIHR Academy
- Contributing to UK growth and **increasing industry investment**
- **Equality, diversity and inclusivity** in the research workforce, research participants and those who shape the research agenda (inc team science)
- **Maximise the benefit to LMICs** of our ODA funding portfolio by adding distinctive value to the funding ecosystem




Strategic enablers of research and impact

- Patient data, AI, machine learning, “omics” inc genomics etc.
- New research methodologies and greater research inter-disciplinarity (e.g. economics, humanities, social science)
- Simplification and addressing barriers – application forms, peer review, ETCs
- Better linkage with elements of system responsible for adoption and diffusion of innovation
- AVIR, NIHR digital and comms strategies
- Cohesion and connectivity of NIHR and of UK life sciences ecosystem
- Impact demonstration and quantification

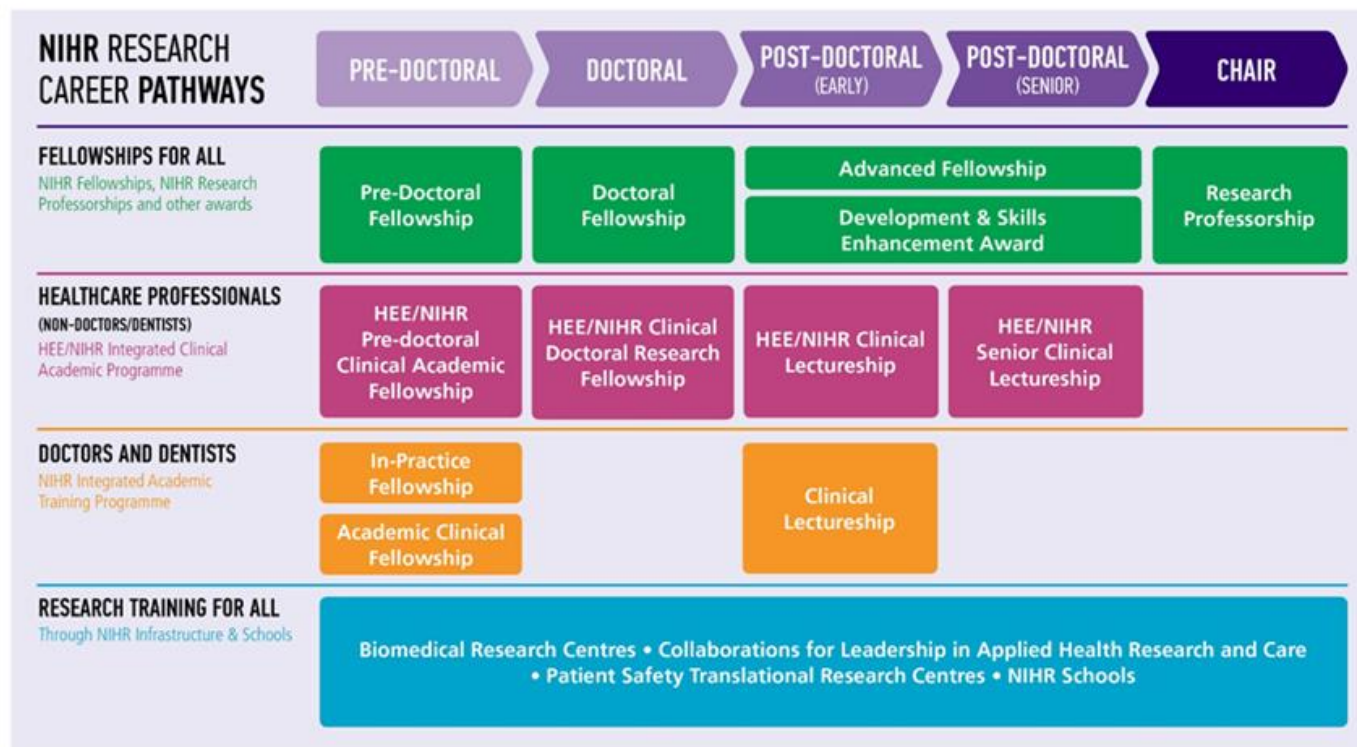
NIHR Training Review



NIHR Academy Programme Areas

 PERSONAL AWARDS	 INTEGRATED PATHWAYS	 INFRASTRUCTURE & CAPACITY BUILDING STRUCTURES
<i>A range of personal career development and recognition awards for all professions</i>	<i>Academic career pathways for clinical professions, including doctors, nurses and AHPs</i>	<i>Academic career support for those based in NIHR Infrastructure and those within capacity building initiatives</i>
<ul style="list-style-type: none">• Senior Investigators• Research Professorships• Fellowships• Development and Skills Enhancement Awards	<ul style="list-style-type: none">• Integrated Academic Training (IAT) Programme• HEE/NIHR Integrated Clinical Academic (ICA) Programme	<p>Training in NIHR infrastructure:</p> <ul style="list-style-type: none">• Biomedical Research Centres• Collaborations for Leadership in Applied Health Research & Care• Patient Safety Translational Research Centres <p>Training in NIHR:</p> <ul style="list-style-type: none">• Schools• Global Health Research Units & Groups• Incubators

NIHR Academy-supported Pathways



NIHR Academy – What's new

 PERSONAL AWARDS	 INTEGRATED PATHWAYS	 INFRASTRUCTURE & CAPACITY BUILDING STRUCTURES
Personal awards are now simpler with increased eligibility and flexibility. NIHR Academy Strategic Themes have been introduced to build capacity in key areas.	Increase in Academic Clinical Fellowships and Clinical Lectureships linked to strategic research themes. To improve support for people considering PhD study Pre-doctoral Clinical Academic Fellowships (PCAF) have replaced the ICA Masters scheme.	NIHR Incubators to increase research capacity in key strategic areas.

Introducing Strategic Themes

For Doctoral and Advanced Fellowships:

- Social Care
- Public Health
- Mental Health
- Health Data Science

Pre-doctoral Fellowship:

- Medical Statistics
- Health Economics
- Clinical Trial Design
- Operational Research
- Modelling
- Bioinformatics
- Qualitative Research and Mixed Methods

Review of NIHR Clinical Trials Units

- To examine the development of the network, its funding from NIHR and other sources, and the **research activities to which it contributes**
- To examine the **accessibility of the network** to researchers requiring CTU participation in the design, conduct and analysis of studies
- To consider the **role** of the CTUs in developing **innovative and efficient study designs** and the scope for operational efficiencies across the network
- To consider the most appropriate **contracting arrangements** for CTUs in order to sustain an efficient productive and innovative health research environment
- To make **recommendations to DHSC**.

Joint Initiative on Good Practice in Clinical Research



- develop new clinical practice guidelines for **trials of health interventions that won't be licensed**
- **advocate** for policymakers, regulators, international standards bodies and other funders **to implement** the new guidelines
- **support researchers** to use them in practice.

Equality, diversity and inclusivity



NATURE | NEWS

UK gender-equality scheme spreads across the world

The United States is set to trial a version that will also cover race and disability, while other countries have already embraced the voluntary rating system.

[Elizabeth Gibney](#)

13 September 2017

[PDF](#) [Rights & Permissions](#)



UK Research and Innovation

Team science



<https://acmedsci.ac.uk/file-download/52394024>

"To call in the statistician after the experiment is done may be no more than asking him to perform a post-mortem examination: he may be able to say what the experiment died of."

Sir Ronald Fisher FRS (attr)