

Future-proofing UK Health Research: a people-centred, coordinated approach

Public summary

UK health research saves and improves lives. Without it, we would not have the discoveries that provide health benefits to people in the UK and around the world. For instance, research during the COVID-19 pandemic produced revolutionary new vaccines and treatments against the disease. In recent years, discoveries about our immune system gave us new therapies for debilitating inflammatory conditions such as rheumatoid arthritis and Crohn's disease, while public health research led to the life-saving smoking ban.

As well as improving health, such research also improves wealth through direct financial returns to the economy. For instance, for every £1 of public investment in medical research, a return of around 25p is gained each year, forever. The economy also benefits from a healthier population that is better able to work and participate in society.

The UK is internationally recognised for its health research, which involves universities and other research institutions, the NHS, private companies, and charities. Excellent research needs a strong, future-proofed research system that allows talented researchers, science and innovation to thrive. However, the current system is no longer fit for purpose. It presents too many barriers to too many people, fails to cover the full cost of health research, and does not do enough to support research in the NHS. At risk is the UK's ability to deliver world-leading health research and the benefits that brings to patients and the public.

This report was informed by leaders and organisations across all parts of the research system including patients and carers. It analyses the strengths in UK health research, and the threats to it flourishing in the long-term. The report offers solutions to ensure people here and around the world continue to benefit from the UK's outstanding health research.





Key issues in the UK's health research system

The people behind research

The UK's highly trained and committed researchers drive its ground-breaking health discoveries. Diverse teams from different disciplines provide varied perspectives and expertise to improve problem solving and come up with innovative answers to health challenges. However, the present system is often challenging for people to build long-term careers in research, with fixed or short-term contracts common.

Researchers in universities face growing workloads as they juggle research, teaching, and administrative tasks. Additionally, the system is failing to attract or develop the careers of researchers from under-represented groups and different backgrounds, including women and those from ethnic and racial minorities. The system is also neglecting the involvement and career development of people with diverse expertise including researchers with specialist skills or those with lived experience, such as patients or carers, who can bring unique insights. The UK also needs to be an appealing place for talented people from across the world to work in.

Working across sectors

Researchers who can move between working in the public and private sectors and charities can share information and learnings, while developing varied careers. Unfortunately, the current research system discourages such movement. This means sectors fail to work together effectively, stalling innovation that could improve our health.

Unstable funding

The UK has many world-leading universities and other academic institutions that use funds from the public, charitable and private sectors to train people and carry out health research. However, no research funder covers the full costs of the research that they are supporting. This situation means doing research leads to financial loss for institutions.

The gap is widening between the cost of research and the income these academic institutions get. Therefore, universities have to subsidise research with other sources of income, mainly tuition fees from international students. Adding to this problem are the uncertain times we live in. Current high rates of inflation raise the cost of research. At the same time, funding for research is affected by post-Brexit uncertainty about the UK's participation in EU research funding programmes. Lack of financial stability in the UK's research institutions threatens their ability to support the next generation of researchers and ultimately to produce the excellent science that will benefit people's lives.

Research in the NHS

As the national healthcare provider, the NHS has unique research potential, from trialling new treatments to using people's health records, which can be anonymised, to provide data for studies. Research is a duty of the NHS because it can improve care for patients and the health of the population. The power of research in the NHS was highlighted during the pandemic by the ground-breaking RECOVERY Trial, which recruited almost 50,000 patients and identified treatments for COVID-19. The lessons learnt from that study are now being applied to conditions such as heart and kidney disease and diabetes. However, the NHS is under extreme pressure, especially since the pandemic, resulting in long patient waiting lists and a stretched workforce with staff suffering from burnout.

Many doctors, nurses and other healthcare professionals want to do research, but workload and time pressures prevent them. However, evidence suggests that people working in the NHS who do health research have higher job satisfaction, improved morale and are less likely to experience burnout. Some of these healthcare professionals also have research roles in universities. Balancing these joint jobs is challenging, so worryingly, healthcare professionals who do so are declining in numbers.



Solutions

To address the issues impacting the UK's health research system and its ability to deliver the benefits of excellent research to the population and the economy, this report provides a range of solutions in four key areas.



Place people at the heart of the UK research system

- Public and charitable funders and employers should address the fragility and inflexibility of research careers e.g., through shared commitments between funders and employers on researcher salaries, contracts and indicators of achievement.
- These organisations should reward employees who add positively to the working culture and value their well-being e.g., by embedding inclusive leadership.
- Public and charitable funders should increase the inclusivity of health research careers in the UK e.g., through implementing evidence-based strategies on equity, diversity and inclusion.
- Government, funders and regulators should remove barriers to attracting global talent e.g., by addressing visa applications and immigration costs.
- Public and charity funders should embed patient and public involvement in all stages of health research e.g., through developing pathways for lived experience leadership, peer-topeer networks, involvement in decision-making/governance and funding schemes from the earliest stages.



Ensure people can develop careers that span sectors

 Employers, Governments, and funders should create conditions in which multi-directional movement between academia, industry, NHS, Government departments and other sectors is understood, attractive and attainable for people and organisations e.g., through secondments, schemes and joint appointments.



Ensure the true cost of health research is covered

- The whole sector should work together to create a funding model that covers the full cost of health research and reduces reliance on cross-subsidy.
- Public, private, and charity funders should collect and share data on funded research in a coordinated and transparent way.
- Governments across all four nations should invest in the fundamental underpinnings of health research e.g., through Charity Research Support Funding.
- Public and charity funders should allocate funding to support and reward true costs of meaningful public and patient involvement activities at all stages of research, including for co-designing research proposals.
- Charities should work together to maximise the impact of their investment through innovative models of partnership funding.



Maximise the research potential of the NHS

- The NHS should reassert the value of research as a core part of its function e.g., through inclusion of research in business plans.
- Regulators, funders and universities should support doctors, nurses and other healthcare professionals who conduct research e.g., by providing balance across early- and midcareer researcher funding opportunities.
- Funders and employers should support the wider healthcare workforce to engage in research e.g., through protected time for research.
- The NHS should facilitate the use of diverse patient data for health research, but this must be done whilst ensuring that the privacy, rights and choices of patients and the public are respected. Patients should be partners in decisions about their data.

Coordination is key

- A holistic and coordinated approach is required to address these issues.
- This should include public and charitable funders, higher education institutions, industry, patients, carers and the public, and NHS leaders.

The report provides further specific actions for Governments, charities, universities, regulators, industry, and the NHS to achieve the four overarching recommendations. No single action will be enough to improve our health research system.

To help the whole sector work together to address these challenges, the Academy of Medical Sciences commits to convening key stakeholders from across the sectors to discuss ways forward. It will assemble this group within six months of publication of the report.

For the full report go to: acmedsci.ac.uk/future-proofing-research

