

## Lords Science & Technology Committee Inquiry into Clinical Academics in the NHS

### Cancer Research UK Submission, December 2022

***Please outline why the role of clinical academics and clinicians engaged in research is so important for the NHS.***

In 2021, the UK and devolved governments set out their vision for the future of clinical research delivery<sup>i</sup>, with a sustainable and supported research workforce identified as fundamental to its success. In particular, the Vision recognised the essential role the research workforce plays recruiting participants, delivering research protocols, and ensuring all study data is collected. Research-active clinicians also provide an invaluable bridge between research clinical practice.

Crucially, the Vision recognises that if the UK's to truly become a world-leading destination for clinical trials, the support available to clinical academics and clinicians must improve, including more funding, training and protected time for research. Cancer Research UK (CRUK) is also dedicated to supporting clinical academic careers, including by promoting their importance across the research ecosystem, through funding, working with the NHS and universities to improve training pathways, and improving research culture.

Unfortunately, there is a long way to go, with chronic staff shortages across the whole cancer workforce far from new. In 2020, the first ever comprehensive NHS Cancer Plan told a similar story about years of underfunding and underinvestment leaving concerning workforce gaps<sup>ii</sup>. Consecutive Governments have - as yet - failed to rise to the challenge and provide the long-term investment and planning needed to grow and train an NHS cancer workforce that can meet patient need.

From a research perspective, chronic staff shortages have been particularly challenging, with the NHS continuing to see research as a burdensome (albeit beneficial) add-on to standard care<sup>iii</sup>. An attitude that is currently widespread, with 43% of NHS staff in research-inactive Trusts reporting it as a barrier to research<sup>iv</sup>. The consequence of this has been that whenever resources are scarce research often suffers disproportionately. On the ground, this creates difficulties securing the facilities and capacity needed to deliver cancer trials. **We hope the new Health and Care Act 2022 will provide a strong platform from which to embed research in the NHS. More views about how the NHS can build a stronger research culture are provided in our response to question 7.**

The benefits of a research engaged clinical workforce, both to the NHS and wider economy, are well-evidenced, with NHS research an essential part of developing new ways of preventing, diagnosing, and treating health conditions, such as cancer. But its benefits extend far beyond this, with analysis showing that hospitals involved in research provide higher-quality care and have lower levels of patient mortality<sup>v vi</sup>. Research also shows that research-active hospitals have increased rates of staff retention and find it easier to recruit healthcare professionals<sup>vii viii ix</sup>. **Given the shortages described, this represents a huge area of untapped potential.**

The NHS also stands to benefit financially from an engaged research workforce. For instance, in 2018/19, industry research generated £355m for the NHS in England<sup>x</sup>. And the wider economy also benefits. For instance, in 2018-19 alone, clinical research supported over 47,500 jobs and generated £2.7 billion in Gross Value Added for the UK economy<sup>xi</sup>. The UK's success enables clinical cancer research to attract new investment into the UK science base<sup>xii</sup> and forge ground-breaking scientific partnerships around the world<sup>xiii</sup>. Maintaining and building on this success is therefore vital to achieving the Government's ambitions for the UK to be a science superpower.

***Is the existing or future clinical academic workforce under threat and, if so, why? Where are the pressures most acute and what can be done to address this problem?***

As described, dramatic NHS workforce shortages and the many barriers facing researchers are not new. For instance, evidence clearly shows that a lack of time and capacity for healthcare staff to participate in research has significantly held the UK back for many years<sup>xiv</sup>. In some instances, staff have even reported having to take annual leave to conduct research<sup>xv</sup>. In addition to a lack of time, NHS staff also report insufficient funding and skills support, inadequate organisational support, and limited opportunities to engage with research<sup>xvi xvii</sup>. Concerningly, the pressure is only expected to build as clinical trials become even more complex<sup>xviii xix</sup>.

Our report, *Creating Time for Research*, also described some concerning disparities in the opportunities people have to develop research careers across different regions, professions, specialties, genders, and ethnic groups. These are discussed in our response to question 4.

As has already been discussed, it is felt by some that many of these issues can be traced back to a weak research culture in the NHS. And while the pandemic raised the profile of clinical research, culture remains a key bottleneck<sup>xx</sup>. Until we see improvements in the awareness and communication around the role of research in improving the quality and safety of patient healthcare, experience, and outcomes, this is likely to continue being a limiting factor. **The current plans in the Clinical Research Vision to develop new metrics that increase the visibility and recognition for undertaking research will therefore be an important step, and one we strongly believe should involve engagement with medical research charities<sup>xxi</sup>.**

Unsurprisingly, many of the issues described have been exacerbated by COVID-19. For instance, significantly higher rates of sickness and fatigue amongst NHS staff<sup>xxii</sup> meant there were less staff available to deliver clinical research during the pandemic<sup>xxiii</sup>. Something that continues to impact the NHS' capacity to deliver studies and set-up new ones, including ongoing concerns about staff retention. For instance, a survey CRUK ran last year found that 3 in 10 people working in UK clinical cancer research said their experiences during the pandemic had made them more likely to leave the field in the next five years<sup>xxiv</sup>.

***Are there significant opportunity costs to becoming a clinical researcher which funders or Government could seek to address to make this a more attractive career, including for underrepresented groups such as women, ethnic minorities and those from less affluent backgrounds?***

Underrepresented professions (such as nurses, midwives and AHPs) face greater barriers to accessing support and they often receive less recognition for their contributions to research<sup>xxv</sup>. For instance, 36% of nurses and midwives report difficulties accessing research training compared with 25% of doctors<sup>xxvi</sup>. These disparities are partly the result of research funding being “disproportionately skewed to doctors rather than anyone lower on the food chain.”<sup>xxvii</sup>

However, even professions that are well-represented in research experience inequalities in access and support. The Royal College of Physicians, for example, found that physicians who were women or ethnic minorities had fewer opportunities to participate in research and were more likely to face difficulties accessing research training<sup>xxviii</sup>.

**The UK Government's £30 million investment in research skills and training opportunities for nurses, midwives and AHPs is a vital step towards making research more inclusive and expanding**

**the NHS's clinical research capacity<sup>xxxix</sup>, and we encourage further such investments to be made using the £5 billion allocated for health research in the Comprehensive Spending Review.**

***What measures have been taken to address the impact of the COVID-19 pandemic and subsequent backlog on clinical research and have these been successful? What more could be done?***

The pandemic significantly reduced the UK's ability to deliver clinical cancer trials, with non-COVID research paused in 40% of NHS Trusts<sup>xxx</sup> and CRUK forced to pause 95% of its trials during the pandemic's first wave. This dramatic scaling back of research was primarily caused by key staff and resources being redeployed to frontline care, higher rates of sickness and fatigue among NHS staff<sup>xxxii</sup>, and site-based research activities being paused to reduce the spread of infection.

As well as delaying the development of potentially innovative treatments for future cancer patients, this denied thousands of existing cancer patients access to potentially life-saving new treatments<sup>xxxiii</sup>, many of whom had limited approved treatment options. In April this year, CRUK funded Clinician Scientist, Dr Sheeba Irshad, spoke to the Financial Times about how Covid-19 disrupted years of planning for her trial into three new treatments for patients with an aggressive form breast cancer<sup>xxxiii</sup>. Delays meant only three of the study's nine prospective sites resumed recruitment. Challenges like those discussed meant that the number of new patients recruited to non-COVID trials in 2020 dropped by 95%<sup>xxxiv</sup>.

In response to this, the National Institute for Health Research (NIHR) established a Restart Framework to help restart research paused due to COVID-19. It aimed to do this by prioritising which studies should be restarted first<sup>xxxv</sup>. However, this approach was unsuccessful as research capacity continued to be diminished and the allocation of resources between studies was hard to coordinate.

NIHR was forced to revise its approach in May 2021, resulting in the Managed Recovery programme. This sought to accelerate recovery by creating a shortlist of high-priority clinical trials that would be 'fast-tracked' while pausing or slowing down low-priority studies<sup>xxxvi</sup>. The aim here was to accelerate trial completion and therefore reduce the number of studies on the UK trial portfolio and the demand on capacity. However, this strategy also struggled to deliver a recovery in research activity.

Research Reset is the Government's latest attempt. It involves the closure of studies that are not viable in the current context to free delivery resources in the system for those studies that can deliver. As part of this, the Government has been asking study sponsors, and more recently funders, to review their active studies to assess the viability of delivering these within the capacity available.

However, despite best efforts, the aftershocks of the pandemic continue to have a concerning impact on UK clinical research<sup>xxxvii xxxviii</sup>. For instance, while the overall size of the UK's trial portfolio is beginning to return to near pre-COVID levels, we currently have minimal information about how this change relates to capacity levels, with a concerningly high proportion of trials still behind recruitment targets and stuck in set-up<sup>xxxix</sup>. Many of the studies stuck in set-up have passed their expected opening data by over 90 days, shining a harsh light on pre-existing and deep-rooted barriers to research in the NHS<sup>xl</sup>.

And, while we continue to support the Government's efforts to reset the UK's capacity to deliver clinical research, we are increasingly concerned that Reset is beginning to be a source of distraction for the Government. **Therefore, to ensure that the difficult decisions taken as part of the Reset programme result in lasting change, we would urge the Government to take steps to refocus on the plans in the Clinical Research Vision so that it can tackle the underlying issues that have**

**contributed to the concerning trends we're seeing in the first place.** Otherwise, while issues might be alleviated in the short-term, it is likely that we will find ourselves back in the same place in the not-too-distant future.

To help accelerate UK clinical research go beyond recovery, **we therefore encourage the Government to consider how it can prioritise the allocation of scarce NIHR and NHS resources.** We believe this should include a focus on existing national health priorities and commitments, such as those for cancer. **It will also be important to take steps to define what capacity is available in the system for research, comparing it to an assessment of what is required to deliver the portfolio.**

We also fully recognise that funders and sponsors need to be taking a proactive role in helping to recover the UK's portfolio. This should include having more robust processes to monitor and manage their own portfolios. If a study is struggling, this should be quickly addressed to prevent blockages forming within the wider system. Something we believe should be a requirement for funders and sponsors wishing to access NIHR and NHS resources.

And finally, we also have concerns about study set-up processes at NHS sites, with local R&D approvals and technical assurances remaining a critical bottle neck for study start-up and amendments. **As such, less bureaucratic and faster routes across the network should be found to help with study approvals.**

***What needs to change to embed research more fully within the NHS and ensure clinicians and primary care staff are able to engage with it?***

As has been described above, clinical research is too often seen as a burdensome, albeit beneficial, add-on to standard care<sup>xi</sup>. Consequently, when the NHS is under immense pressure – as it is now – research is often the first to suffer, illustrating that research is not yet embedded within the NHS.

This often stands in the way of staff developing the expertise required to deliver research and improve services. For example, our survey found that only 51% of NHS staff believe research engagement is recognised in promotion criteria<sup>xiii</sup>. This view of career advancement discourages staff from developing their research expertise and capabilities. Despite these barriers, there is widespread enthusiasm for research amongst the NHS workforce, with 57% of Physicians wanting to conduct research<sup>xiii</sup>. **To leverage this interest and make the NHS workforce an “innovation partner”<sup>xiv</sup>, we recommend NHS England, and its devolved equivalents, incorporate research training and career progression into both national- and Trust-level workforce strategies to recruit, develop and retain healthcare professionals<sup>xiv</sup>.**

More broadly, it is crucial that the Government improves how NHS research engagement and impact is monitored and evaluated. The 2022 Health and Care Act took a welcome first step by enhancing the duties of ICBs, NHSE and Secretary of State for Health and Social Care to report on how they are promoting and facilitating research. The amendments mean it is now a legal requirement for ICBs to publish how they will deliver clinical research in their annual reports and joint forward plans.

**The Government's Clinical Research Vision must now build on this momentum;** something we are pleased it has already started doing. This includes a commitment for NHSE to develop a new research framework to help ICBs better understand and fulfil the expectations set in new Act.

We also welcome the vision's recent commitment to work across the UK administrations to develop a set of metrics for research. Metrics, such as Trust-level cancer waiting times, play a crucial role in informing decisions, evaluating performance, and motivating improvements to cancer services. Yet

cancer research, in contrast, faces a dearth of metrics<sup>xlvi</sup>, making it difficult to demonstrate research's benefits, including cost savings<sup>xlvii</sup> and increased staff retention<sup>xlviii</sup>.

**To help ensure research has the right metrics, we encourage the Government to develop them in partnership with the clinical research community, including medical research charities. CRUK would support an approach akin to the “UK-wide clinical research dashboard” proposed by ABPI<sup>xlix</sup>.**

***Do you consider that clinical academics get adequate support and collaboration from their NHS clinical colleagues, for example in accessing data, thus ensuring their work achieves its full potential?***

Given the availability of excellent research talent and data, England is uniquely positioned to improve population health through data-driven research and healthcare. **However, to enable national improvements, there is a need to enhance coordination, strong governance, support and collaboration for clinical academics whose research drives the UK's science and health innovations.**

In England, there has been a growing momentum to increase support and collaboration with clinical academics through developing data infrastructure and access to drive innovation and research. In the Clinical Research Vision, the Government recognised the need to take steps to leverage the potential of data-enabled clinical research delivery - for example, recognising the need to scale current platforms and create mechanisms to connect eligible patients with opportunities to participate in relevant clinical research. The report also committed to improving interoperability between systems at both a national and local level. This aimed to optimise accessibility for research across different data assets, including OpenSafely, NHSD's DigiTrials, NWeHealth, Clinical Practice Research Datalink (CPRD), UK BioBank, NIHR Bioresource, Genes and Health and Genomics England<sup>i</sup>.

However, there are existing barriers within data access pathways that inhibit clinical academics. These include data access time, commercial company access limits, the time taken to locate and analyse the quality of data sets, and cost. A survey conducted by Medicines Discovery Catapult and the Association of the British Pharmaceutical Industry (ABPI) found that of the 92 separate data access requests included<sup>ii</sup>, clinical trial data is one of the most requested types of data and had a success rate of 45% of clinicians being able to access the data. However, the process of access is hampered with lack of guidance, significant delays and high cost<sup>lii</sup>. Delays to legitimate researcher access to data can be significant and can be a blocker to discovery and validation. Complicated access processes can exacerbate delays to legitimate requests and create a backlog to all applications.

The UK has the opportunity to catalyse the innovative and ethical use of its rich health database to increase science and health innovation. However, this requires actively investing in support and collaborating with clinical academics<sup>liii</sup>. **NHS England needs to support clinical academics through the data access process, for example by providing clear guidelines and cost transparency.**

***Are there changes in engagement in and attitudes towards research which occurred during the COVID-19 pandemic that we should try to sustain?***

As described, the pandemic undoubtedly challenged clinical cancer research. However, the pandemic also created a once-in-a-generation opportunity to optimise the environment for clinical cancer research and accelerate improvements to cancer outcomes. And at a time when cancer survival rates are at risk of going backwards for the first time in decades<sup>liv</sup>.

Firstly, high-profile COVID-19 studies like RECOVERY galvanised public enthusiasm for clinical research to an unprecedented level, with 78% of the public wanting the NHS to routinely conduct health research last year<sup>lv lvi</sup>. However, this fervour is unlikely to last forever. **The UK Government must therefore take steps to leverage this opportunity to drive beneficial changes to research, including increased patient and public involvement in clinical trials.**

The Government rose to this challenge by elevating clinical research up the policy agenda by publishing a cross-government strategic vision, the Future of UK Clinical Research Delivery<sup>lvii</sup>. This was shortly followed by the Life Sciences Vision, which included a key commitment to support cancer research<sup>lviii</sup>. And despite significant and ongoing pressures on public finances, the UK Government continues to back these strategies with plans to invest £5 billion in health research between now and 2024-25<sup>lix</sup>. If effectively implemented and sufficiently financed, this renewed government interest in clinical research should provide cancer researchers with much-needed support and help to accelerate innovation. As outlined above though, there are numerous challenges that must be addressed urgently if this is to come to fruition.

**One of the key ways the UK Government can achieve this is by learning lessons from the expedited adoption of innovative approaches to research design and delivery during COVID-19.** For instance, the increased use of platform trials during the pandemic increased their profile immensely. Trial design is now a focal point of science policy<sup>lx</sup>, creating new opportunities for the UK Government to spur innovation in cancer research. Similarly, delivering trials outside of conventional study sites was a pre-existing practice that erupted during the pandemic. These decentralised delivery methods were first used to keep trials running safely during the early stages of the pandemic, but there is a growing interest in applying this approach to make clinical research more accessible and inclusive<sup>lxi</sup>.

**And lastly, the rapid regulatory approval of COVID-19 studies (in days rather than months)<sup>lxii</sup> has demonstrated that clinical trials can be set up much faster.** Although it is unlikely these timeframes could be replicated for cancer trials, there is certainly room for improvement, and the Experimental Cancer Medicine Centre (ECMC) Network has established a pilot programme to explore this potential further. **If cancer trials could be set up more quickly, it would accelerate patient access to new treatments and technologies that could improve cancer outcomes.**

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