This briefing highlights the Bill’s implications for the science and research sector.

The Bill must protect and build upon the UK’s reputation as a country where science and research thrives and where international partnership and collaboration is encouraged. This is key to improving cancer survival rates and to delivering the Prime Minister’s ambitious commitment that 75% of cancers are diagnosed early – we need an immigration system that supports that ambition by supporting those working in science and research.

CRUK is proposing an amendment to the Bill that ensures Government recognises the needs of the research sector and clarifies their intended changes to the immigration system. This amendment is backed by Cancer Research UK and 19 other cancer charities.

Background to Cancer Research UK

1. Cancer Research UK (CRUK) is the world’s largest charitable funder of cancer research. We support research into all aspects of cancer through the work of 4,000 scientists, doctors and nurses. In 2017/18, we spent £423 million on research in institutes, hospitals and universities across the UK. We receive no funding from the Government for our research and are dependent on fundraising with the public.

2. We are making progress. In the 1970s, 1 in 4 people survived their cancer for 10 years or more. Today, thanks to research, 2 in 4 people survive. CRUK wants to accelerate progress so that 3 in 4 people survive their cancer for 10 years or more by 2034. We welcomed the Prime Minister’s commitment that 75% of cancers (from about 50%) are diagnosed early by 2028 – we need an immigration system that supports that by supporting those working in science and research.

Maintaining Researcher Mobility

3. Cancer research, like all medical research, is international. Our research, which has played a role in developing 8 of the world’s top 10 cancer drugs, involves collaboration with many other countries. Essential to international collaboration is the ability for researchers to move easily across borders. Half of the PhD students we fund are not originally from the UK, as well as 76% of post-doctoral researchers at our institutes. Approximately half of our Fellows are not from the UK, with 36% coming from the EEA. Nearly 50% of all cancer research involves international collaboration and 72% of UK based researchers spent time abroad between 1996 and 2005.

Protecting the UK’s research reputation

4. As the UK leaves the European Union, Government has made clear that protecting our world-leading medical research and life sciences environment must be a priority. This sector drives improvements in outcomes for patients in the UK and beyond and delivers significant economic benefits to the UK. To safeguard this environment, it is essential that the UK retains its ability to attract, recruit and retain global scientific talent at all levels.

5. Likewise, the Government’s ambition to increase spending on Research and Development (R&D) to 2.4% of GDP by 2027 is very welcome. Achieving this ambitious target will rely on considerable effort from Government, industry and charity funders. It will also require a dynamic
and talented research workforce, which must be supported by an immigration system responsive to the needs of research.

The current non-EEA immigration system is not appropriate for facilitating world-class medical research

6. The Immigration and Social Security Co-ordination (EU Withdrawal) Bill proposes to end the free movement of EU citizens and other related EU-derived rights, repealing retained EU law relating to immigration. The Bill will bring EEA citizens under the UK’s underlying immigration system, which currently applies only to non-EEA citizens.

7. CRUK is concerned that:

- The current non-EEA immigration system is not appropriate for facilitating world-class medical research;
- This Bill paves the way for EEA citizens to move onto this underlying system without making any accompanying proposals for how the system will be improved to facilitate world-class medical research;
- There is therefore no guarantee that the medical research environment will be adequately protected under a new system;
- Government has said they will make changes to the underlying system using secondary legislation (Immigration Rules) rather than primary legislation. Given the once-in-a-generation changes to the system being proposed, there is concern that too little parliamentary scrutiny will be applied.

8. We welcome the Government’s decision to consult on changes to the underlying immigration system, but we are concerned about the lack of information on mechanisms to ensure that research is protected. Government has given positive signals to the scientific community about the need to protect research. However, this Bill ought to include, or be accompanied by, an assurance that the underlying immigration system will be reformed in a way that avoids damaging existing, or deterring future, scientific links between the UK and other countries.

9. We are seeking assurances on these points.

Wider considerations - The Immigration White Paper

10. The UK needs an immigration system that works for science, health and research. The Bill will provide Government with enabling powers to design a new immigration system. While the Bill does not set out details on features of this new system, the Immigration White Paper does.

11. The proposals made in the Immigration White Paper are currently the closest approximation of Government plans. CRUK is concerned that some of these proposals could prove detrimental to cancer research and patients. Our main concerns with current proposals are:

- The considerable extra financial and administrative burden to employer and employees in the research and health (NHS) sectors;
- Potential minimum salary thresholds of £30,000 being introduced, especially in the context of our technical research workforce. Salary is not an adequate proxy of skill;
- The implications for short-term mobility, including the ability to work collaboratively with other countries including on clinical trials, to attend international conferences and other opportunities for knowledge sharing;
• Home Office capacity, given the considerable extra workload associated with bringing EU citizens under the non-EEA system.

Cancer Research UK would like to see a redesigned immigration system which:

12. **Does not significantly increase the cost of recruitment for employers and employees.** The current non-EEA system is bureaucratic and costly, and this should not simply be extended to EU nationals. The Immigration Skills Charge and Health Surcharge are among the significant costs faced by research institutions, the NHS, international employees and their dependents. The current system is more expensive than many comparable countries. In 2018, a five-year visa for a researcher with a partner and three children cost over £11,000, which has since increased as a result of the doubling of the NHS surcharge. The same researcher could obtain a four-year French Talent passport, costing approximately £1,040.

13. Making the UK significantly more expensive than comparable countries for researchers and research institutions could damage the competitiveness of the UK’s research sector. Applying current costs in the non-EEA system to EU nationals will significantly increase the cost of employment for research institutions and EU scientific talent. This is funding which could otherwise be spent on lifesaving research.

14. Visa and associated costs may deter global scientific talent from choosing to undertake research in the UK. In a survey of over 600 of our funded researchers, 96% identified the ease with which dependents can access public services and take up work as a key factor in their decision to undertake research in the UK. Comparatively high costs could make the UK less attractive to international researchers, undermining our research environment.

15. **Does not have minimum salary thresholds which prevent skilled staff from entering the UK.** The current proposal of £30,000 minimum salary threshold could prevent highly skilled scientific staff from entering the UK. This is especially true of the technical workforce, the backbone of the research workforce who are nevertheless often paid under this threshold.

16. The role of technical staff is varied, but they provide specialist technical support to research projects, often bringing niche expertise to specialized projects. The Russell Group, which comprises institutions and individuals conducting cancer research, has demonstrated that research institutions tend to employ non-UK technical staff when the skillset required is difficult to source domestically.

17. At Russell Group universities there are approximately 9,000 technicians, half of whom do not earn over £30,000. This workforce is highly skilled, with 64% of technicians at Russell Group Universities skilled to degree level or above. Employers tend to recruit international technical staff to highly specialized roles. 90% of international technicians at Russell Group Universities are skilled to degree level or above, while 25% hold a PhD. This is a highly skilled workforce by Government’s new definition of a skilled worker holding A-Level equivalent or above qualifications.

18. **Enables inward and outward mobility of researchers, to facilitate collaboration on clinical trials, attend international conferences and other opportunities for knowledge transfer.** International travel is a key component of a researcher’s professional development. In 2016, more than half the EEA national researchers who answered our survey had spent time outside the UK for work. Common reasons for this travel included collaborations (such as clinical trials), giving and receiving training, use of equipment and attending conferences. An
immigration system which makes short-term travel for researchers more difficult will reduce the attractiveness of the UK as a research destination.

19. The UK and EU collaborated on over 4,800 clinical trials between 2004 and 2016, requiring movement of the research workforce to share data, equipment, knowledge and expertise. Any future immigration system must enable short-term mobility into and out of the UK.

20. Currently there are no proposals which guarantee frictionless short-term travel between the UK and EU once freedom of movement ends. This could make the UK a less attractive destination for researchers, inhibit our ability to take lead roles in clinical trials and prevent researchers from attending vital conferences.

21. CRUK currently funds 197 clinical trials, 63 of which involve countries outside of the UK. Clinical trials for rare cancers, including brain and paediatric cancers, often involve other countries because the patient populations in individual countries are too small to gather meaningful evidence. These projects often require staff to travel between countries to assist with the setting up, monitoring and development of the trials. A new immigration system must ensure this short-term travel can continue.

22. Is supported by adequate Home Office capacity, given the considerable extra workload associated with bringing EU citizens under the non-EEA system. The majority of international scientists working on CRUK projects are from the European Union. One third of our fellows are from the EU, compared to 10% who are from other countries outside of the UK. Bringing EU scientific talent under the current immigration system will likely bring considerable extra burden to the Home Office.

Proposed amendment to the Bill

23. CRUK supports an amendment, outlined below, to the Bill requiring an assessment of the impact of the legislation on the medical research workforce. The amendment is not intended to alter or obstruct the intentions of the Bill, but rather to provide an opportunity for Government to outline its plans to protect the research environment and assuage concerns of the sector and patients.

Cancer Research UK amendment proposal

24. We support an amendment to the Bill, which would require an impact assessment of proposed changes

25. Clause 1, line 9, at end insert –

1A Regulations may only be made under subsection (1) if the Secretary of State makes arrangements to undertake an impact assessment of the effects of the regulations laid out in subsection (1) on the United Kingdom health, social care and research sectors prior to them being made.

Within 12 months of Royal Assent of this Act, the Secretary of State must lay before each House of Parliament a report setting out the findings of the impact assessments as set out in subsection (1C)
The impact assessment as in subsection (1A) must include analysis and an assessment of the effects of the regulations laid out in subsection (1) on—

a. the health and social care workforce
b. the cancer workforce
c. the research workforce

Illustrative case study, 2018

26. **Manchester Institute**

The CRUK Manchester Institute is a leading cancer research institute and a partner in the Manchester Cancer Research Centre. It has been the site of crucial drug discoveries, clinical trials, and pioneering research on cancer biology and personalised medicine.

The Manchester Institute is famous for its extensive infrastructure, state-of-the-art technologies, expertise and its ‘Team Science’ approach to cancer research. This involves integrating perspectives, skills and experiences of researchers from diverse backgrounds to address scientific challenges.

The Manchester Institute’s reputation has attracted scientific talent from all over the world. The resulting wealth of international talent within CRUK’s Manchester Institute has facilitated the collaborative, cross disciplinary approach, which makes the Institute a scientific powerhouse. In complicated research like cancer biology, knowledge pockets are distributed geographically, meaning that depth of experience and expertise of our Manchester team simply could not be found in any single country.

This concept is exemplified by the make-up of the Institute’s research workforce: Half of the group leaders and 80% of the postdoctoral researchers are from outside the UK.

For example, Professor Robert Bristow, Director of the Manchester Cancer Research Centre, Senior Group Leader in CRUK’s Manchester Institute and world-leading clinician-scientist, moved to Manchester from Canada. His experience abroad has allowed him to accrue unparalleled experience in researching the genomics of prostate cancer progression and cancer treatment response.

Dr Claus Jørgensen, a Senior Group Leader at the Manchester Institute, has studied and worked in Denmark and Canada before moving to the UK. He is currently investigating how pancreatic cancer cells signal to healthy cells around them, in order to improve outcomes for patients by uncovering new aspects of the biology of this type of cancer in order to develop new types of treatment.

The Junior Group Leaders have similarly international profiles. For example, Dr Esther Baena, who has studied and conducted research in Spain and the U.S., is a Junior Group Leader at the Manchester Institute. She is contributing to prostate cancer research by investigating how cancer cells grow and become resistant to treatment.

The diversity of the Manchester Institute’s research workforce is precisely what allows for its renowned ‘Team Science’ approach, and its success in researching a wide range of topics to deliver better, more personalised cancer care.

For more information please contact Ben Moore, Policy Adviser, at ben.moore@cancer.org.uk
As well as benefits to the healthcare sector, medical research benefits the wider economy. Each £1 the public invests in medical research returns around 25p to the UK economy every year. https://wellcome.ac.uk/sites/default/files/whats-it-worth-musculoskeletal-disease-research-ianuar-2018.pdf

A ‘profile of Visa systems’, Together Science Can and Fragomen LLP, 2018: https://drive.google.com/file/d/1ETU8hWw2M54h9kQ7WDti6GPqVEegr9yu/view


