

Written evidence submitted by UK Research and Innovation (MRS0507)

1. **UK Research and Innovation (UKRI)** works in partnership with universities, research organisations, businesses, charities, and government to create the best possible environment for research and innovation to flourish. We aim to maximise the contribution of each of our component parts, working individually and collectively. We work with our many partners to benefit everyone through knowledge, talent and ideas.
2. Operating across the whole of the UK with a combined budget of more than £7 billion, UKRI brings together the seven research councils, Innovate UK and Research England funding the breadth of research and innovation as well as supporting universities through Quality-research (QR) funding.
3. As a major public funder, employer and leader of research and innovation, our current priorities are to:
 - a. Support our people and maintain business continuity as much as possible (e.g. we're working to minimise disruption to funding streams and other core functions).
 - b. Contribute to the national effort to deal with Covid-19 through an ongoing open multidisciplinary call for research across both research and innovation and specifically, in:
 - i. supporting cutting edge research (e.g. vaccines, testing, therapeutics, tech)
 - ii. mobilising industry support (e.g. to scale up numbers of available ventilators)
 - iii. reinforcing government decision-making by facilitating access to expertise (e.g. modelling the spread of the outbreak)
 - iv. addressing and mitigating the social, economic, cultural and environmental impacts of the pandemic.
 - c. Stabilise the wider research and innovation system: We are keen to understand the different pressures and impacts on stakeholders and are working with our partners, other parts of Government and our stakeholder communities to identify where UKRI can support and develop appropriate policy responses to support the R&I sector.
 - d. Review our longer-term strategy to adapt to circumstances and contribute to larger conversations post-Covid-19.

Introduction

4. Like every part of society, the research and innovation system is facing great uncertainty which will affect individuals and groups in different ways. UKRI recognises that most researchers and innovators are now having to deal with very difficult and different sets of circumstances, such as major interruptions to their work or rapidly transitioning their research and innovation activities to address or mitigate the impacts of Covid-19. These difficulties can range from a researcher just setting out on their career, a lab technician critical to delivering research, or the founder of a small business exploring new innovations. These challenges are occurring, for some people, alongside concerns for both

their own and their families' health and wellbeing, particularly for those who are considered vulnerable and needing to shield.

5. UKRI is in daily contact with central government, working across different departments and liaising closely with institutions and representative groups to ensure that we are listening to the concerns of the organisations and individuals we fund and work with to produce sustainable solutions. This inquiry presents an opportunity to listen to others as well as to hear the perspectives of particular sectors. We welcome this inquiry to consider the evidence and discuss ways to mitigate the impact of Covid-19 on those with protected characteristics.
6. Given the nature of a pandemic, there is a need to take quick decisions as new issues and challenges emerge. UKRI is committed to equality, diversity and inclusion and we are taking action to identify, monitor, understand and address the impact Covid-19 is having on particular individuals and groups. This is being done at three levels:

Funding:

- As part of an ongoing collaboration, the National Institute for Health Research (NIHR)¹ and UKRI announced a joint call for research proposals to investigate emerging evidence of an association between ethnicity and Covid-19 incidence and outcomes. The funding call, requested as a priority by Chief Medical Officer Professor Chris Whitty, is seeking proposals that can further our understanding of potential differences in risk for ethnic groups. This includes considering which groups are at greatest risk of a range of adverse outcomes, and based on that understanding, how to reduce morbidity and mortality from Covid-19. The call is also seeking proposals on the impact of Covid-19 specifically on people from Black and Minority Ethnic backgrounds working in health and social care.
- Existing UKRI investments, and new activity funded through the ongoing UKRI open call, are addressing and mitigating the social and economic impacts of the pandemic on different groups. Examples include:
 - Work carried out by the Institute of Fiscal Studies (IFS), an ESRC Research Institute, examines the differential impact of the pandemic on men and women, at work and at home. Ongoing work by IFS tracks the impact of school closures current generations of young people and children, and particularly on those from less advantaged households.
 - Understanding Society, an ongoing ESRC-funded longitudinal study of 40,000 UK households, is carrying out new monthly waves of data collection. These allow an assessment pandemic's impact on an array of issues (including health, mental health and wellbeing, employment and income) and among a wide range of subgroups (including different BAME groups).
 - A project led by Professor Abigail Adams-Prassl (University of Oxford) is monitoring the impacts of the pandemic on workers and assessing the effectiveness of different policies aiming to smooth the effect of containment

measures on their living standards. It allows a focus on workers across a range of income levels, ages, sex and employment arrangements.

- Our global disciplinary and interdisciplinary funds, the Global Challenges Research Fund (GCRF) and Newton Fund, have launched a call to directly address and mitigate the impact of Covid-19 across developing countries where communities are already dealing with systemic and structural challenges to sustainable and equitable livelihoods and living conditions.
- We have already funded a suite of projects that will give us data on population surveillance, behaviour and policy research, and transmission modelling. These should be able to provide additional insight into the impact of Covid-19 on certain groups and communities. For example:
 - A project led by Professor Aziz Sheikh at the University of Edinburgh will track the progress of the Covid-19 epidemic in relation to age in near real-time. Using anonymised electronic health records (including GP and hospital visits and test results) from 1.2 million people in Scotland, it will allow investigation of subgroups such as children aged under 5 or adults over 65.
 - Professor Isabel Oliver, Public Health England, will evaluate the public health measures that have been introduced. Specifically, the project will conduct surveys and interviews to assess the effectiveness and impacts of the 14-day self-isolation advice on mental health and wellbeing.

Monitor and understand:

- Our central data and analysis team are establishing monitoring and reporting of diversity data to understand who is in receipt of funding through our rapid response calls. This will allow us to review and monitor our policy responses, as well as the health and vitality of the sector.
- We have established a Strategy and Coordination Covid-19 hub to collate and respond rapidly to the community on questions and issues being raised including those relating to equality, diversity and inclusion.
- UKRI funded SMaRTeN Network, working closely with Vitae, are investigating the impact of Covid-19 on researchers through a survey² launched on 16th April, which includes questions relating to mental wellbeing and social connection.
- We are an active participant in the Covid-19 Genomics UK Consortium, established to map how the virus spreads and behaves by using whole genome sequencing, which will use diversity demographic data collected by the NHS.

Guidance and advice:

- UKRI has been issuing revised policies, guidance and support in response to the impacts of Covid-19 in a number of areas including granting no-cost extensions and extensions to those in the final year of their PhD. We are working through the EDI implications of any policy changes through undertaking equality assessments and working closely with institutions to monitor the implementation of these in order to minimise disadvantaging particular individuals or groups.
- Recognising this is a global pandemic, we have been working across government and funding consortia, including as a member of the UK Collaborative on Development Research (UKCDR), to publish guidance³ on safeguarding during Covid-19 in international development research.

Impacts of Covid-19 on individuals or groups

7. Some disciplines are managing to adjust to the virtual world with institutions and businesses doing what they can to redirect research efforts to Covid-19. However, whilst the pandemic will affect everyone in some form, there is some emerging evidence⁴ and observations that some groups are more likely to be affected in a research and innovation environment than others.
8. UKRI anticipates that a number of these issues will be mitigated at the institutional or senior management level in business, for example, through local policies and the support either they or government are providing (including furlough for businesses). UKRI is working closely with those in receipt of funding to ensure consistency and fairness in approach of these policies through regular discussions and efficient reporting and monitoring.
9. We have worked closely with our EDI External Advisory Group, which consists of a diverse set of members from across the R&D landscape, as well as listening to our communities, to outline some of the impacts that we are aware of. To fully understand these impacts UKRI would encourage investigations and furthering monitoring into these areas. These include:
 10. Disability:
 - **Access to support/equipment:**
 - Equipment for the disabled researcher/student or innovator may be solely based at the university in a lab, workshop or office and it may not have been possible to take any (or all of this equipment) to a work-from-home environment.
 - Significantly, many home settings may not be adapted for research, and therefore access to labs, servers, VPN networks etc may be a significant issue for many High-Risk researchers. It may be challenging to replicate or make reasonable adjustments for an effective work environment.
 - Additionally, many disabled researchers are supported by the state's Access to Work scheme; making use of Personal Assistants (PA) in a work setting. The use of a PA in an accessible building in a university work setting does not correspond with the same setting at home. PAs, and therefore the academic, may not be able to work in the same way at home. For example, a PA may no longer be able to visit and work with the academic at home due to shielding. Finally, therapies, such as physiotherapy, have been suspended at this time. These are often critical to the well-being of patients with complex motor and other physical issues and can also impact on productivity and overall wellbeing.
 - **Shifting to virtual working:** For a number of professors or lecturers, they have had to transition to a virtual classroom, focussing on creating and uploading online lectures, remote exams, and assessments. This impacts their research time, but may also put pressure on any accessibility needs and requirements e.g. those with hearing impairments that may require hearing loops or support as well as the cognitive load of dealing with high interactions on screens.

- **‘High-risk’ individuals:** We recognise that those with disabilities may be considered as part of a ‘high-risk’ group and therefore, may need to follow the Government’s advice to shield. The impact of this could result in lower/lack of productivity during this period and subsequently affect either their ability to continue to contribute to a project or their research, increasing their anxieties at this time.
- **Mental health and wellbeing:** Mental health and wellbeing pressures are likely to be amplified during this time. From a research and innovation perspective, this can be even more prominent where there are uncertainties around funding, for those recently starting out on a PhD or where researchers/innovators are having to turn their work directly to Covid-19. The impact of closed institutions may mean that those most at risk will have additional barriers to accessing the support they need from their institution. In addition, there may be pressure on those who had not wished to declare an illness or disability to now do so in order to access policies or support to secure much needed funding or extensions. We are monitoring and understanding the impact of this through working closely with Vitae on the SMARTEN survey⁵ into the mental health and wellbeing of PhDs. Additional research will help add to our understanding of this issue and how best to intervene and support those who identify as disabled.
- **Declaring of disabilities:** Alternatively, where supervisors or colleagues were unaware of the underlying issues (through a researcher/innovator not wishing to previously declare this information) they may not consider a need to routinely or proactively check in on those who may need additional support. Whilst this would be hard to capture, UKRI is encouraging supervisors to routinely check in on their staff to mitigate this.
- **Returning to ‘normal’:** Post-lockdown there are serious concerns that pressure will be placed upon the high-risk category, including disabled academics to re-engage after their 12-week isolation. Therefore, there is a need for ongoing monitoring and support to be able to act safely, and in line with the latest government advice, at the point of re-engaging in workplaces when the virus is still present (even if a lower risk).

11. Age: The impact of Covid-19 in research and innovation can affect individuals of all ages and examples of this include:

- We are commonly hearing that early career researchers (ECR’s) and Post-Graduate Researchers (PGRs) with caring responsibilities are being disproportionately affected. In addition, from an initial sample from the SMARTEN survey, we understand approximately 30% of postdoctoral researchers and research staff have reduced or no access to the software required to do their research⁶. As a result, it is being reported to UKRI that institutions have seen hardships funds accessed much more frequently in recent weeks, and by significantly more PGRs than usual, particularly with many losing additional hourly work/teaching that they rely on for extra income to top up their stipend or to live on if self-funded.

12. Sex (Gender): There are increasing conversations being had about productivity. Frequently, the discussion revolves around outputs, i.e. journal article submissions and grant applications. There has been some interest in tracking any differences in these rates by gender categories. Some anecdotal evidence⁷ suggests men are submitting up to 50%

more papers and journals than they usually would with women submitting fewer papers. Therefore, whilst this emerging evidence is helpful, further observing and monitoring is required. UKRI will be monitoring this through a year on year comparison of who is applying for our funding and is in receipt of our grants. If there are any changes, we want to be clear which are normal fluctuations due to research cycles and what may reflect impacts of Covid-19.

13. Maternity and pregnancy: There is likely to be an impact on women recently returning to their research from maternity leave who will be faced with losing ‘another year’ away from their research.
14. In addition, there are likely to be pregnant women who may have health concerns and precarity during this time or may have been due to give birth after a project has ended and are now facing an extension or are unable to complete their research project at all. More advice will be needed from government on the impact of Covid-19 on pregnant women.
15. UKRI is working to mitigate these effects and is continuing to engage with the research and innovation community to monitor and further develop our understanding of the impacts on particular groups and individuals. Whilst some of the points raised are observations at this stage, we recognise that these will need further research and understanding to be effectively addressed.
16. UKRI would encourage a cross comparison of impacts across sectors to establish a strong evidence base and stimulate discussions about changes to policy and mitigation efforts. We will continue to provide advice to government and cross-government bodies as we obtain additional information and analysis.

July 2020

¹ [Joint UKRI/NIHR funding call on Covid-19 and ethnicity](#)

² [SMARTEN Survey](#)

³ <https://www.ukcdr.org.uk/resource/practical-application-of-ukcdr-safeguarding-guidance-during-covid-19/>

⁴ https://mbspgh.unimelb.edu.au/_data/assets/pdf_file/0011/3334889/Policy-brief_v3.pdf

⁵ <https://www.smartten.org.uk/covhid-19-study.html>

⁶ <https://www.smartten.org.uk/covid-19-study.html#>

⁷ <https://www.thelily.com/women-academics-seem-to-be-submitting-fewer-papers-during-coronavirus-never-seen-anything-like-it-says-one-editor/>