Research study into long-term health impacts of COVID-19 launched in the UK

This announcement was made on 5 July 2020.

- major new UK study into long-term physical and mental health implications of COVID-19 launched in UK
- world-leading study backed by £8.4 million of funding
- results will support development of new measures to treat NHS patients with coronavirus

One of the world's largest comprehensive research studies into the long-term health impacts of coronavirus on hospitalised patients has been launched in the UK, the Health and Social Care Secretary, Matt Hancock has announced.

Around 10,000 patients are expected to take part in the ground-breaking new study, which has been awarded £8.4 million by the government, through UK Research and Innovation (UKRI) and the National Institute for Health Research (NIHR).

Led by the NIHR Leicester Biomedical Research Centre, a partnership between the University of Leicester and the University Hospitals of Leicester NHS Trust, the <u>post-hospitalisation COVID-19 (PHOSP-COVID) study</u> will draw on expertise from a consortium of leading researchers and doctors from across the UK.

They will assess and publish findings on the impact of COVID-19 on patient health and their recovery. This includes looking at possible ways to help improve the mental health of patients hospitalised with coronavirus, and how individual characteristics influence recovery, such as gender or ethnicity.

Patients on the study from across the UK will be assessed using techniques such as advanced imaging, data collection and analysis of blood and lung samples, creating a comprehensive picture of the impact COVID-19 has on longer-term health outcomes.

The findings will support the development of new strategies for clinical and rehabilitation care, including personalised treatments based on the particular disease characteristics that a patient shows, to improve their long-term health.

Health and Social Care Secretary Matt Hancock said:

As we continue our fight against this global pandemic, we are learning more and more about the impact the disease can have not only on immediate health, but longer-term physical and mental health too.

This world-leading study is another fantastic contribution from the UK's world-leading life sciences and research sector. It will also help to ensure future treatment can be tailored as much as possible to the person.

Chief Medical Officer and Head of NIHR, Professor Chris Whitty said:

As well as the immediate health impacts of the virus it is also important to look at the longer-term impacts on health, which may be significant.

We have rightly focused on mortality, and what the UK can do straight away to protect lives but we should also look at how COVID-19 impacts on the health of people after they have recovered from the immediate disease.

This UKRI and NIHR funded study is one of the first steps in doing this.

UK Research and Innovation Chief Executive, Professor Ottoline Leyser, said:

We have much to learn about the long-term health impacts of COVID-19 and its management in hospital, including the effects of debilitating lung and heart conditions, fatigue, trauma and the mental health and wellbeing of patients.

UKRI is collaborating with NIHR to fund one of the world's largest studies to track the long-term effects of the virus after hospital treatment, recognising that for many people survival may be just the start of a long road to recovery.

This study will support the development of better care and rehabilitation and, we hope, improve the lives of survivors.

This study is one of a number of COVID-19 studies that have been given urgent public health research status by the Department of Health and Social Care (DHSC).

Symptoms of COVID-19 have varied among those who have tested positive: some have displayed no symptoms, while others have developed severe pneumonia and, tragically, have even lost their lives.

For those who were hospitalised and have since been discharged, it is not yet clear what their medical, psychological and rehabilitation needs will be to enable them to make as full a recovery as possible.

The recruitment process for patients has been designed to ensure the best representation of those hospitalised with coronavirus, with a team of experts that have worked extensively on optimising inclusion and recruitment of

underrepresented groups. The patients are expected to start being recruited by the end of July.

Chris Brightling, Professor of Respiratory Medicine at the University of Leicester, Consultant Respiratory Physician at Leicester's Hospitals and Chief Investigator said:

As we emerge from the first wave of the pandemic, we have new insights into the acute phase of this disease but very little information about patients' long-term needs.

It is vitally important that we rapidly gather evidence on the longer-term consequences of contracting severe COVID-19 so we can develop and test new treatment strategies for them and other people affected by future waves of the disease.

This follows the announcement yesterday (4 July 2020) of a <u>new revolutionary</u> <u>on-demand recovery service</u> to be launched for tens of thousands of people suffering from the long-term effects of coronavirus.

The <u>PHOSP-COVID study</u> is widely supported across the NIHR infrastructure, including the Translational Research Collaborations for respiratory, mental health, cardiovascular, dementia, and diet, exercise and nutrition, and many of the NIHR Biomedical Research Centres, which are set up to translate labbased scientific breakthroughs into potential new treatments, diagnostics and medical technologies.

The <u>University of Leicester</u> is led by discovery and innovation — an international centre for excellence renowned for research, teaching and broadening access to higher education. It is among the top 25 universities in the Times Higher Education REF Research Power rankings with 75% of research adjudged to be internationally excellent with wide-ranging impacts on society, health, culture, and the environment. The university is home to just over 20,000 students and approximately 4,000 staff.

The NIHR Leicester Biomedical Research Centre (BRC) is a partnership between University Hospitals of Leicester NHS Trust, the University of Leicester and Loughborough University. It is funded by the NIHR.

The <u>NIHR Leicester BRC</u> undertakes translational clinical research in priority areas of high disease burden and clinical need. These include cardiovascular disease, respiratory disease, and lifestyle, obesity and physical activity. There is also a cross-cutting theme for precision medicine. The BRC harnesses the power of experimental science to explore and develop ways to help prevent and treat chronic disease. It brings together 70 highly skilled researchers, 30 of which are at the forefront of clinical services delivery. By having scientists working closely with clinicians, the BRC can deliver research that is relevant to patients and the professionals who treat them.

To ensure rapid and wide-scale sharing of results, the award terms and conditions include that awardees:

The NIHR is the nation's largest funder of health and care research. It:

- funds, supports and delivers high-quality research that benefits the NHS, public health and social care
- engages and involves patients, carers and the public in order to improve the reach, quality and impact of research
- attracts, trains and supports the best researchers to tackle the complex health and care challenges of the future
- invests in world-class infrastructure and a skilled delivery workforce to translate discoveries into improved treatments and services
- partners with other public funders, charities and industry to maximise the value of research to patients and the economy

The NIHR was established in 2006 to improve the health and wealth of the nation through research, and is funded by DHSC. In addition to its national role, the NIHR supports applied health research for the direct and primary benefit of people in low and middle-income countries, using UK aid from the UK government.