

# Long-term follow up of adults hospitalised with COVID-19

<b>Submission date</b> 16/07/2020	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 22/07/2020	<b>Overall study status</b> Ongoing	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 27/01/2025	<b>Condition category</b> Infections and Infestations	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

COVID-19 is a condition caused by the coronavirus (called SARS-CoV-2) that was first identified in late 2019. This virus can infect the respiratory (breathing) system. Some people do not have symptoms but can carry the virus and pass it on to others. People who have developed the condition may develop a fever and/or a continuous cough among other symptoms. This can develop into pneumonia. Pneumonia is a chest infection where the small air pockets of the lungs, called alveoli, fill with liquid and make it more difficult to breathe.

In 2020, the virus has spread to many countries around the world and neither a vaccine against the virus or specific treatment for COVID-19 has yet been developed. As of April 2020, it is advised that people minimize travel and social contact, and regularly wash their hands to reduce the spread of the virus.

Groups who are at a higher risk from infection with the virus, and therefore of developing COVID-19, include people aged over 70 years, people who have long-term health conditions (such as asthma or diabetes), people who have a weakened immune system and people who are pregnant. People in these groups, and people who might come into contact with them, can reduce this risk by following the up-to-date advice to reduce the spread of the virus.

The COVID-19 pandemic has tragically led to severe acute illness, hospitalisation and death. Beyond the health of those affected, it has had widespread economic, psychological and societal effects. The clinical spectrum is broad, ranging from those with no or minimal symptoms to severe pneumonia in 15-20% with evidence of widespread disease beyond the lung. 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 concerning the long-term effects of COVID-19 and the ongoing medical, psychological and rehabilitation needs of these patients. This will be a national UK research study, embedded within clinical care, that aims to understand and improve long-term outcomes for survivors following hospitalisation with COVID-19. This study includes expert groups across the UK and will use standardised assessments of patients, including advanced imaging, recording of information and collection of samples. This study will provide researchers with a comprehensive understanding of the impact on the health of those that have been hospitalised with COVID-19. This will enable trials of new strategies of clinical care including personalised treatments to improve the long-term outcome of current and future COVID-19 survivors.

### Who can participate?

Patients aged over 18 who were admitted to a UK hospital and discharged following suspected COVID-19

### What does the study involve?

The researchers will collect data from any clinic visits and from routine health records of all participants. This will include signs and symptoms, medication, physical test results, questionnaire answers, laboratory test results and imaging. In a subset of participants, the researchers will undertake additional research tests and obtain samples (for example, blood) for research experiments. Some participants may be asked to take part in additional studies.

### What are the possible benefits and risks of participating?

There is no direct benefit to participants as this study will not directly change the clinical care that they receive. The information that is collected may help clinicians to better care for other patients in the future. If there are any test results that require follow-up, the participants' doctor will be informed. The researchers will not share the results from unvalidated research tests using the samples (for example, genetic data). Some participants may be asked to provide additional samples in addition to those needed for their clinical care. Whenever possible these samples will be taken at the same time as regular samples to reduce the extra procedures and participants will be advised on the maximum amount of sample that we will take when they agree to take part (and they will be free to decline any extra tests or samples). There is a risk of pain or discomfort when samples are taken, and these are detailed in the participant information sheet.

### Where is the study run from?

The study is led by the University of Leicester and participants will be recruited at multiple hospital sites from across the UK (including Scotland, Wales and Northern Ireland)

### When is the study starting and how long is it expected to run for?

April 2020 to December 2046

### Who is funding the study?

This study is supported by a grant to the University of Leicester from the MRC-UK Research and Innovation, and National Institute for Health Research (NIHR) rapid response panel to tackle COVID-19 and by core funding provided by NIHR Leicester Biomedical Research Centre - a partnership between the University of Leicester and University Hospitals of Leicester NHS Trust.

### Who is the main contact?

Prof. Chris Brightling  
phosp@leicester.ac.uk

## Contact information

### Type(s)

Scientific

### Contact name

Prof Christopher Brightling

### ORCID ID

<https://orcid.org/0000-0002-9345-4903>

**Contact details**

NIHR Biomedical Research Centre- Respiratory  
Department of Respiratory Sciences,  
University of Leicester  
Glenfield Hospital  
Groby Road  
Leicester  
United Kingdom  
LE3 9QP  
-  
phosp@leicester.ac.uk

**Type(s)**

Scientific

**Contact name**

Prof Louise Wain

**ORCID ID**

<https://orcid.org/0000-0003-4951-1867>

**Contact details**

Department of Health Sciences  
NIHR Biomedical Research Centre- Respiratory  
University of Leicester  
University Road  
Leicester  
United Kingdom  
LE1 7RH  
-  
phosp@leicester.ac.uk

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Scientific

**Contact name**

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NIHR Biomedical Research Centre- Respiratory  
Department of Respiratory Sciences,  
University of Leicester  
Glenfield Hospital  
Groby Road  
Leicester  
United Kingdom  
LE3 9QP

-  
phosp@leicester.ac.uk

**Type(s)**  
Public

**Contact name**  
Miss Ananga Sundari Devi Dasi

**Contact details**  
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Department of Respiratory Sciences  
College of Life Sciences  
Glenfield Hospital  
Groby Road  
Leicester  
United Kingdom  
LE3 9QP  
-  
phosp@leicester.ac.uk

## Additional identifiers

**Integrated Research Application System (IRAS)**  
285439

**Protocol serial number**  
CPMS 46443, IRAS 285439

## Study information

**Scientific Title**  
Post-hospitalisation COVID-19 study: a national consortium to understand and improve long-term health outcomes (PHOSP-COVID)

**Acronym**  
PHOSP-COVID

### Study objectives

The aims of this study are to:

1. Determine the short to long-term chronic health (and health economic) sequelae of COVID-19 infection in post-hospitalisation survivors; to define demographic, clinical and molecular biomarkers of the susceptibility, development, progression and resolution of these health sequelae
2. Understand the impact of interventions during the acute illness on these long-term sequelae
3. Build the foundation for multiple in-depth studies e.g. lung fibrosis, pulmonary and systemic vasculature, cardiometabolic, renal, sarcopenia, rehabilitation, mental health and neurological disease.

The findings will inform precision medicine in at-risk groups by directing new clinical trials and care for current and future post-COVID-19 patients.

## **Ethics approval required**

Old ethics approval format

## **Ethics approval(s)**

Approved 14/07/2020, Yorkshire & The Humber -Leeds West Research Ethics Committee (NHSBT Newcastle Blood Donor Centre, Holland Drive, Newcastle upon Tyne, NE2 4NQ, UK; +44 (0)207 972 2504, +44 (0)207 104 8088, +44 (0)207 104 8018; leedswest.rec@hra.nhs.uk), REC ref: 20/YH/0225

## **Study design**

Prospective observational longitudinal study

## **Primary study design**

Observational

## **Study type(s)**

Other

## **Health condition(s) or problem(s) studied**

Adult survivors of a hospital admission with COVID-19 (SARS-CoV-2 infection)

## **Interventions**

PHOSP-COVID is an observational longitudinal follow-up study of adults post-hospitalisation with COVID-19. The researchers propose to analyse routine clinical data with linkage to retrospective and prospective health and social care records (Tier 1), enhanced clinical data and research-specific biosampling (Tier 2) and re-call of participants by genotype and phenotype for more detailed studies (Tier 3).

All participants will be followed up for at least 12 months after discharge from hospital. The researchers will ask participants for their agreement to continue to extract data from their electronic records, and to be contacted about future research, for at least 25 years after recruitment to the study.

## **Intervention Type**

Other

## **Primary outcome(s)**

Current primary outcome measure as of 18/11/2021:

1. Incidence of long-term sequelae of COVID-19 measured using multiple methods including:
  - 1.1. Symptoms and quality of life measured using one or more of the following questionnaires: EQ-5D, Dyspnoea-12, Fatigue (FACIT), Brief Pain Inventory (BPI), MRC dyspnoea score, Montreal Cognitive Assessment (MoCA), Clinical Frailty Scale
  - 1.2. Mental health: symptoms of anxiety assessed using Generalised Anxiety Disorder Assessment (GAD-7), depression assessed using Patient Health Questionnaire (PHQ-9), post-traumatic stress disorder (PTSD) checklist (PCL-5)
  - 1.3. Physical function measured using one or more the following tests: Short Physical Performance Battery (SPPB), Incremental Shuttle Walk Test (ISWT), muscle strength tests (handgrip strength), physical activity monitoring
  - 1.4. Biological samples taken e.g blood, urine, sputum, saliva, breath

#### 1.5. Any imaging as part of clinical care

Measured at 6 weeks - 7.5 months and 12 months post-hospital discharge (and at regular timepoints thereafter for up to 25 years)

Please note that not all participants will be asked to complete or perform all of the above questionnaires and tests. Data from routine clinical investigations and tests will be recorded.

2. Healthcare utilisation measured using questionnaires and linkage to health and social care records at 6 weeks, 3 months, 6 months and 12 months post-hospital discharge (and at regular timepoints thereafter for up to 25 years)

3. Mortality measured using ONS data at 6 weeks, 3 months, 6 months and 12 months post-hospital discharge (and at regular timepoints thereafter for up to 25 years)

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#### Previous primary outcome measure:

1. Incidence of long-term sequelae of COVID-19 measured using multiple methods including:

1.1. Symptoms and quality of life measured using one or more of the following questionnaires: EQ-5D, Sarcopenia screen (SARC-F), General Practice Physical Activity Questionnaire (GPPAQ), Dyspnoea-12, Fatigue (FACIT), Brief Pain Inventory (BPI), Nottingham extended activity of daily living (NEADL), MRC dyspnoea score, Montreal Cognitive Assessment (MoCA), Clinical Frailty Scale, Fried Frailty assessment

1.2. Mental health: symptoms of anxiety assessed using Generalised Anxiety Disorder Assessment (GAD-7), depression assessed using Patient Health Questionnaire (PHQ-9), post-traumatic stress disorder (PTSD) checklist (PCL-5)

1.3. Physical function measured using one or more the following tests: Short Physical Performance Battery (SPPB), Incremental Shuttle Walk Test (ISWT), muscle strength tests (handgrip and quadriceps strength), physical activity monitoring, cardiometabolic risk assessment and body composition measurements

1.4. Biological samples taken e.g blood, urine, sputum, saliva, breath

1.5. Any imaging as part of clinical care

Measured at 6 weeks, 3 months, 6 months and 12 months post-hospital discharge (and at regular timepoints thereafter for up to 25 years)

Please note that not all participants will be asked to complete or perform all of the above questionnaires and tests. Data from routine clinical investigations and tests will be recorded.

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3. Mortality measured using ONS data at 6 weeks, 3 months, 6 months and 12 months post-hospital discharge (and at regular timepoints thereafter for up to 25 years)

#### Key secondary outcome(s)

Current secondary outcome measures as of 18/11/2021:

Characterisation of specific long-term morbidities and impacts of COVID-19 hospitalisation measured using multiple methods including:

1. Symptoms and quality of life measured using one or more of the following questionnaires: EQ-5D, Sarcopenia screen (SARC-F), General Practice Physical Activity Questionnaire (GPPAQ), Dyspnoea-12, Fatigue (FACIT), Brief Pain Inventory (BPI), Nottingham extended activity of daily living (NEADL), MRC dyspnoea score, Montreal Cognitive Assessment (MoCA), Clinical Frailty Scale, Fried Frailty assessment

2. Mental health: symptoms of anxiety assessed using Generalised Anxiety Disorder Assessment (GAD-7), depression assessed using Patient Health Questionnaire (PHQ-9), post-traumatic stress

disorder (PTSD) checklist (PCL-5)

3. Physical function measured using one or more the following tests: Short Physical Performance Battery (SPPB), Incremental Shuttle Walk Test (ISWT), muscle strength tests (handgrip and quadriceps strength), physical activity monitoring, cardiometabolic risk assessment and body composition measurements

4. Biological samples taken e.g blood, urine, sputum, saliva, breath

5. Any imaging as part of clinical care

6. Healthcare utilisation assessed from linkage to health and social care records

Measured at 6 weeks - 7.5 months and 12 months post-hospital discharge (and at regular timepoints thereafter for up to 25 years)

Please note that not all participants will be asked to complete or perform all of the above questionnaires and tests. Data from routine clinical investigations and tests will be recorded.

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Previous secondary outcome measures:

Characterisation of specific long-term morbidities and impacts of COVID-19 hospitalisation measured using multiple methods including:

1. Symptoms and quality of life measured using one or more of the following questionnaires: EQ-5D, Sarcopenia screen (SARC-F), General Practice Physical Activity Questionnaire (GPPAQ), Dyspnoea-12, Fatigue (FACIT), Brief Pain Inventory (BPI), Nottingham extended activity of daily living (NEADL), MRC dyspnoea score, Montreal Cognitive Assessment (MoCA), Clinical Frailty Scale, Fried Frailty assessment

2. Mental health: symptoms of anxiety assessed using Generalised Anxiety Disorder Assessment (GAD-7), depression assessed using Patient Health Questionnaire (PHQ-9), post-traumatic stress disorder (PTSD) checklist (PCL-5)

3. Physical function measured using one or more the following tests: Short Physical Performance Battery (SPPB), Incremental Shuttle Walk Test (ISWT), muscle strength tests (handgrip and quadriceps strength), physical activity monitoring, cardiometabolic risk assessment and body composition measurements

4. Biological samples taken e.g blood, urine, sputum, saliva, breath

5. Any imaging as part of clinical care

6. Healthcare utilisation assessed from linkage to health and social care records

Measured at 6 weeks, 3 months, 6 months and 12 months post-hospital discharge (and at regular timepoints thereafter for up to 25 years)

Please note that not all participants will be asked to complete or perform all of the above questionnaires and tests. Data from routine clinical investigations and tests will be recorded.

**Completion date**

31/12/2046

## Eligibility

### Key inclusion criteria

1. Participant admitted to an acute admissions unit or ward at a UK hospital and discharged with suspected COVID-19

2. Age 18 years and over
3. Participant is willing and able to give informed consent for participation in the study
4. Aged 18 years or above

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Sex**

All

**Key exclusion criteria**

1. Confirmed diagnosis of a pathogen unrelated to the objectives of this study and no indication or likelihood of co-infection with a relevant pathogen
2. Attendance at an A&E or emergency department only
3. Refusal by participant, parent or appropriate representative
4. Other life-limiting illness with life expectancy <6 months such as disseminated malignancy

**Date of first enrolment**

25/07/2020

**Date of final enrolment**

01/03/2022

## **Locations**

**Countries of recruitment**

United Kingdom

England

Northern Ireland

Scotland

Wales

**Study participating centre**

Queen Elizabeth Hospital

Heritage Building

University Hospitals of Birmingham NHS Trust



Mindelsohn Way  
Edgbaston  
Birmingham  
United Kingdom  
B15 2TH

**Study participating centre**

**Hull Royal Infirmary**

Hull University Teaching Hospitals NHS Trust  
Anlaby Rd  
Hull  
United Kingdom  
HU3 2JZ

**Study participating centre**

**Bradford Royal Infirmary**

Bradford Teaching Hospitals NHS Foundation Trust  
Duckworth Ln  
Bradford  
United Kingdom  
BD9 6RJ

**Study participating centre**

**Southmead Hospital**

North Bristol NHS Trust  
Southmead Rd  
Bristol  
United Kingdom  
BS10 5NB

**Study participating centre**

**Fulbourn Hospital**

Cambridgeshire and Peterborough NHS Foundation Trust  
Elizabeth House  
Cambridge  
United Kingdom  
CB21 5EF

**Study participating centre**

**Royal Papworth Hospital**

Royal Papworth Hospital NHS Foundation Trust

Papworth Rd  
Trumpington  
Cambridge  
United Kingdom  
CB2 0AY

**Study participating centre**

**Leeds General Infirmary**

The Leeds Teaching Hospitals NHS Trust  
Great George St  
Leeds  
United Kingdom  
LS1 3EX

**Study participating centre**

**Glenfield Hospital**

University Hospitals of Leicester NHS Trust  
Groby Road  
Leicester  
United Kingdom  
LE3 9QP

**Study participating centre**

**Royal Liverpool Hospital**

Liverpool University Hospitals NHS Foundation Trust  
Prescot St  
Liverpool  
United Kingdom  
L7 8XP

**Study participating centre**

**St Mary's Hospital**

Imperial College Healthcare NHS Trust  
The Bays  
South Wharf Road  
London  
United Kingdom  
W2 1NY

**Study participating centre**

**Chelsea & Westminster Hospital**

Chelsea & Westminster Hospital NHS Trust  
369 Fulham Rd  
Chelsea  
London  
United Kingdom  
SW10 9NH

**Study participating centre****Northwick Park Hospital**

London North West University Healthcare NHS Trust  
Central Middlesex  
Ealing Hospital  
London  
United Kingdom  
HA1 3UJ

**Study participating centre****Mount Vernon Hospital**

The Hillingdon Hospitals NHS Foundation Trust  
Rickmansworth Road  
Northwood  
London  
United Kingdom  
HA6 2RN

**Study participating centre****Royal Brompton & Harefield Trust**

Royal Brompton Hospital  
1 Manresa Rd  
Chelsea  
London  
United Kingdom  
SW3 6LR

**Study participating centre****St Thomas' Hospital**

Guy's and St Thomas' NHS Foundation Trust  
Westminster Bridge Rd  
London  
United Kingdom  
SE1 7EH

**Study participating centre**

**King's College Hospital**

King's College Hospital NHS Foundation Trust  
Denmark Hill  
Brixton  
London  
United Kingdom  
SE5 9RS

**Study participating centre**

**The Royal Hospital**

Barts Health NHS Trust  
Whitechapel Rd  
London  
United Kingdom  
E1 1BB

**Study participating centre**

**University College London Hospital**

University College London Hospitals NHS Foundation Trust  
235 Euston Road  
Bloomsbury  
London  
United Kingdom  
NW1 2BU

**Study participating centre**

**The Whittington Hospital**

Whittington Health NHS Trust  
Magdala Ave  
London  
United Kingdom  
N19 5NF

**Study participating centre**

**Royal Free Hospital**

Royal Free London NHS Foundation Trust  
17 Lyndhurst Gardens  
Hampstead

London  
United Kingdom  
NW3 5NU

**Study participating centre**

**North Middlesex University Hospital**

North Middlesex University Hospital NHS Trust  
Sterling Way  
London  
United Kingdom  
N18 1QX

**Study participating centre**

**St George's Hospital**

St George's University Hospitals NHS Foundation Trust  
Blackshaw Road  
Tooting  
London  
United Kingdom  
SW17 0QT

**Study participating centre**

**Manchester Royal Infirmary**

Manchester University NHS Foundation Trust  
Cobbett House  
Oxford Road  
Manchester  
United Kingdom  
M13 9WL

**Study participating centre**

**Salford Royal Hospital**

Salford Royal NHS Foundation Trust  
Stott Ln  
Salford  
United Kingdom  
M6 8HD

**Study participating centre**

**Freeman Hospital**

Newcastle Upon Tyne Hospitals NHS Foundation Trust

Freeman Road  
High Heaton  
Newcastle-upon-Tyne  
United Kingdom  
NE7 7DN

**Study participating centre**

**Belfast City Hospital**

Belfast Health and Social Care Trust  
A Floor  
Lisburn Road  
Belfast  
United Kingdom  
BT9 7AB

**Study participating centre**

**Nottingham City Hospital**

Nottingham University Hospitals NHS Trust  
Hucknall Road  
Nottingham  
United Kingdom  
NG5 1PB

**Study participating centre**

**John Radcliffe Hospital**

Oxford University Hospitals NHS Foundation Trust  
Headley Way  
Headington  
Oxford  
United Kingdom  
OX3 9DU

**Study participating centre**

**NHS Grampian**

Summerfield House  
2 Eday Road  
Aberdeen  
United Kingdom  
AB15 6RE

**Study participating centre**

**NHS Dumfries and Galloway**

21-22 High St  
Moffat  
United Kingdom  
DG10 9HL

**Study participating centre**

**NHS Tayside**

230 Clepington Rd  
Dundee  
United Kingdom  
DD2 1GZ

**Study participating centre**

**NHS Fife**

Hayfield House  
Hayfield Rd  
Kirkcaldy  
United Kingdom  
KY2 5AH

**Study participating centre**

**NHS Forth Valley**

Stirling Rd  
Larbert  
United Kingdom  
FK5 4WR

**Study participating centre**

**NHS Highland**

Inverness Retail and Business Park  
John Dewar Building  
Highlander Way  
Inverness  
United Kingdom  
IV2 7GE

**Study participating centre**

**NHS Greater Glasgow and Clyde**

1055 Great Western Road  
Glasgow

United Kingdom  
G12 0XH

**Study participating centre**

**NHS Lothian**

Search Results  
Morningside Pl  
Edinburgh  
United Kingdom  
EH10 5HF

**Study participating centre**

**Royal Hallamshire Hospital**

Sheffield Teaching Hospitals NHS Foundation Trust  
Glossop Rd  
Broomhall  
Sheffield  
United Kingdom  
S10 2JF

**Study participating centre**

**Southampton General Hospital,**

University Hospital Southampton NHS Foundation Trust  
Tremona Rd  
Southampton  
United Kingdom  
SO16 6YD

**Study participating centre**

**Hywel Dda University Health Board**

Ystwyth Building  
St Davids Park  
Jobswell Road  
Carmarthen  
United Kingdom  
SA31 3BB

**Study participating centre**

**Swansea Bay University Health Board**

1 Talbot Gateway  
Baglan Energy Park



Baglan  
Port Talbot  
United Kingdom  
SA12 7BR

**Study participating centre**  
**Cardiff & Vale University Health Board**  
Heath Park  
Cardiff  
United Kingdom  
CF14 4XW

**Study participating centre**  
**Aneurin Bevan University Health Board**  
Ringland Circle  
Newport  
United Kingdom  
NP19 9PS

**Study participating centre**  
**Betsi Cadwaladr University Health Board**  
Glan Clwyd Hospital  
Sarn Ln  
Bodelwyddan  
Rhyl  
United Kingdom  
LL18 5UJ

**Study participating centre**  
**Lanarkshire Primary Care NHS Trust**  
East Kilbride  
Glasgow  
United Kingdom  
G75 8NH

## **Sponsor information**

**Organisation**  
University of Leicester

ROR

<https://ror.org/04h699437>

## Funder(s)

### Funder type

Government

### Funder Name

UK Research and Innovation

### Alternative Name(s)

UKRI

### Funding Body Type

Government organisation

### Funding Body Subtype

National government

### Location

United Kingdom

### Funder Name

Medical Research Council

### Alternative Name(s)

Medical Research Council (United Kingdom), UK Medical Research Council, MRC

### Funding Body Type

Government organisation

### Funding Body Subtype

National government

### Location

United Kingdom

### Funder Name

National Institute for Health Research

### Alternative Name(s)

National Institute for Health Research, NIHR Research, NIHRresearch, NIHR - National Institute for Health Research, NIHR (The National Institute for Health and Care Research), NIHR

**Funding Body Type**

Government organisation

**Funding Body Subtype**

National government

**Location**

United Kingdom

**Funder Name**

University of Leicester

**Alternative Name(s)**

UniofLeicester, UoL

**Funding Body Type**

Private sector organisation

**Funding Body Subtype**

Universities (academic only)

**Location**

United Kingdom

**Funder Name**

University Hospitals of Leicester NHS Trust

**Alternative Name(s)**

**Funding Body Type**

Private sector organisation

**Funding Body Subtype**

Other non-profit organizations

**Location**

United Kingdom

## **Results and Publications**

Individual participant data (IPD) sharing plan

Participant-level data will be made available for bona fide researchers via application. Researchers interested in accessing the data should contact [phosp@leicester.ac.uk](mailto:phosp@leicester.ac.uk) or visit <http://www.phosp.org> for more details of the process and an application form. Access to data and materials and the study are reviewed and approved by an independent data and materials access committee. Participants have provided appropriate consent to share their anonymised (pseudonymised) data. All access to data will be subject to agreement to appropriate terms and conditions.

## IPD sharing plan summary

Available on request

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>		07/10/2021	11/10/2021	Yes	No
<a href="#">Results article</a>	clinical characteristics with inflammation profiling of Long-COVID and association with one-year recovery following hospitalisation in the UK	22/04/2022	27/04/2022	Yes	No
<a href="#">Results article</a>	prevalence of physical frailty, including risk factors, up to 1 year after hospitalisation for COVID-19 in the UK	11/03/2023	21/03/2023	Yes	No
<a href="#">Results article</a>	Association of blood biomarkers with cognitive deficits	31/08/2023	28/09/2023	Yes	No
<a href="#">Results article</a>	Long COVID and cardiovascular disease	27/05/2024	28/05/2024	Yes	No
<a href="#">Results article</a>	Long term health outcomes in people with diabetes	27/12/2024	27/01/2025	Yes	No
<a href="#">HRA research summary</a>			26/07/2023	No	No
<a href="#">Interim results article</a>	Two doses of SARS-CoV-2 vaccination induce robust immune responses to emerging SARS-CoV-2 variants of concern	17/08/2021	19/08/2021	Yes	No
<a href="#">Interim results article</a>	Symptom Persistence Despite Improvement in Cardiopulmonary Health - Insights from longitudinal CMR, CPET and lung function testing post-COVID-19	20/10/2021	26/10/2021	Yes	No
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes
<a href="#">Preprint results</a>	preprint of clinical characteristics with inflammation profiling of Long-COVID and association with one-year recovery following hospitalisation in the UK	15/12/2021	16/12/2021	No	No
<a href="#">Study website</a>	Study website	11/11/2025	11/11/2025	No	Yes