

# CVD-COVID-UK/COVID-IMPACT Research Outputs

The papers and preprints listed below have been produced on behalf of the <a href="CVD-COVID-UK/COVID-IMPACT Consortium">CVD-COVID-UK/COVID-IMPACT Consortium</a>, supported by the BHF Data Science Centre.

In line with the consortium's principles - based on a collaborative, transparent and inclusive ethos - all related analysis plans, protocols, code, phenotype code lists and reports are made publicly available via the centre's <u>collection on the HDR UK Gateway</u>, repositories in the centre's <u>GitHub</u> organisation and through open-access publications (via the links below).

# Published papers/reports and preprints

#### August 2023

**Title:** Antipsychotic drug prescribing and mortality in people with dementia before and during

the COVID-19 pandemic: a retrospective cohort study in Wales. The Lancet Healthy

Longevity.

**Project:** CCU016\_01: Cardiovascular and cerebrovascular diseases related to antipsychotic

prescribing in patients with dementia during the COVID-19 pandemic

**DOI:** https://doi.org/10.1016/S2666-7568(23)00105-8

GitHub: <a href="https://github.com/BHFDSC/CCU016\_01">https://github.com/BHFDSC/CCU016\_01</a>

### July 2023

Title: Hospital admissions linked to SARS-CoV-2 infection in children and adolescents: cohort

study of 3.2 million first ascertained infections in England. BMJ.

Project: CCU029 01: Hospital admissions linked to SARS-CoV-2 infection in children and

adolescents: cohort study of 3.2 million first ascertained infections in England

**DOI:** <a href="https://doi.org/10.1136/bmj-2022-073639">https://doi.org/10.1136/bmj-2022-073639</a> **GitHub:** <a href="https://github.com/BHFDSC/CCU029">https://github.com/BHFDSC/CCU029</a> 01

#### March 2023

Title: Risk of cardiovascular events following COVID-19 in people with and without pre-

existing chronic respiratory disease. medRxiv.

**Project:** CCU035\_01: SARS-CoV-2 infection and risk of major vascular events in people with

chronic respiratory diseases

**DOI:** <a href="https://doi.org/10.1101/2023.03.01.23286624">https://doi.org/10.1101/2023.03.01.23286624</a>

GitHub: <a href="https://github.com/BHFDSC/CCU035\_01">https://github.com/BHFDSC/CCU035\_01</a>

### January 2023

Title: The impact of the COVID-19 pandemic on cardiovascular disease prevention and

management. Nature Medicine.

Project: CCU014\_01: Assessing cardiovascular disease impact through medicines

**DOI:** https://doi.org/10.1038/s41591-022-02158-7

GitHub: https://github.com/BHFDSC/CCU014 01



### January 2023

Title: Harmonising electronic health records for reproducible research: challenges, solutions

and recommendations from a UK-wide COVID-19 research collaboration. BMC Medical

Informatics and Decision Making.

**Project:** CCU005 03: Harmonising electronic health records for reproducible research:

challenges, solutions and recommendations from a UK-wide COVID-19 research

collaboration

**DOI:** https://doi.org/10.1186/s12911-022-02093-0

GitHub: https://github.com/BHFDSC/CCU005 03

## November 2022

Title: Better End of Life 2022. Mind the gaps: understanding and improving out-of-hours care

for people with advanced illness and their informal carers. Research report. Marie

Curie.

**Project:** CCU024\_01: Mind the gaps: understanding and improving out-of-hours care for people

with advanced illness and their informal carers.

URL: <a href="https://www.mariecurie.org.uk/globalassets/media/documents/policy/beol-reports-">https://www.mariecurie.org.uk/globalassets/media/documents/policy/beol-reports-</a>

2022/better-end-of-life-report-2022.pdf

GitHub: https://github.com/BHFDSC/CCU024 01

Title: Effects of the COVID-19 pandemic on secondary care for cardiovascular disease in the

UK: an electronic health record analysis across three countries. European Heart Journal

- Quality of Care and Clinical Outcomes.

Project: CCU003 04: Quantifying the impact of the COVID-19 pandemic on the provision of

cardiovascular disease-related hospital healthcare in the UK

DOI: <a href="https://doi.org/10.1093/ehjqcco/qcac077">https://doi.org/10.1093/ehjqcco/qcac077</a>
GitHub: <a href="https://github.com/BHFDSC/CCU003">https://github.com/BHFDSC/CCU003</a> 04

**Title:** Using national electronic health records for pandemic preparedness: validation of a

parsimonious model for predicting excess deaths among those with COVID-19 - a data-

driven retrospective cohort study. *Journal of the Royal Society of Medicine*.

**Project:** CCU003\_03: Using national electronic health records for pandemic preparedness:

validation of a parsimonious model for predicting excess deaths among those with

COVID-19.

**DOI:** https://doi.org/10.1177/01410768221131897

**GitHub:** https://github.com/BHFDSC/CCU003\_03

Title: Digital ethnicity data in population-wide electronic health records in England: a

description of completeness, coverage, and granularity of diversity. medRxiv.

Project: CCU037 01: Implementing a novel approach to improve correctness, completeness,

and granularity of ethnicity information using routinely collected data

**DOI:** https://doi.org/10.1101/2022.11.11.22282217

GitHub: https://github.com/BHFDSC/CCU037 01



#### September 2022

Title: Association of COVID-19 with major arterial and venous thrombotic diseases: a

population-wide cohort study of 48 million adults in England and Wales. Circulation.

Project: CCU002 01: SARS-CoV-2 infection and risk of venous thromboembolism and arterial

thrombotic events

**DOI:** https://doi.org/10.1161/CIRCULATIONAHA.122.060785

GitHub: https://github.com/BHFDSC/CCU002 01

#### June 2022

**Title:** A retrospective cohort study measured predicting and validating the impact of the

COVID-19 pandemic in individuals with chronic kidney disease. Kidney International.

**Project:** CCU003\_01: Predicting and validating risk of pre-pandemic and excess mortality during

the COVID-19 pandemic in individuals with chronic kidney disease

DOI: <a href="https://doi.org/10.1016/j.kint.2022.05.015">https://doi.org/10.1016/j.kint.2022.05.015</a>
GitHub: <a href="https://github.com/BHFDSC/CCU003">https://github.com/BHFDSC/CCU003</a> 01

Title: COVID-19 trajectories among 57 million adults in England: a cohort study using

electronic health records. The Lancet Digital Health.

Project: CCU013\_01: Characterising COVID-19 related events in a nationwide electronic health

record cohort of 57 million people in England

**DOI:** https://doi.org/10.1016/S2589-7500(22)00091-7

GitHub: https://github.com/BHFDSC/CCU013 01 ENG-COVID-19 event phenotyping

# **March 2022**

Title: Evaluation of antithrombotic use and COVID-19 outcomes in a nationwide atrial

fibrillation cohort. Heart.

**Project:** CCU020: Evaluation of antithrombotic use and COVID-19 outcomes

**DOI:** <a href="http://dx.doi.org/10.1136/heartjnl-2021-320325">http://dx.doi.org/10.1136/heartjnl-2021-320325</a>

**GitHub:** <a href="https://github.com/BHFDSC/CCU020">https://github.com/BHFDSC/CCU020</a>

Title: Risk of myocarditis and pericarditis following BNT162b2 and ChAdOx1 COVID-19

vaccinations. medRxiv.

**Project:** CCU002\_03: COVID-19 vaccination and disease and the risks of myocarditis and

pericarditis

**DOI:** https://doi.org/10.1101/2022.03.06.21267462

GitHub: <a href="https://github.com/BHFDSC/CCU002">https://github.com/BHFDSC/CCU002</a> 03



### February 2022

Title: Association of COVID-19 vaccines ChAdOx1 and BNT162b2 with major venous, arterial,

or thrombocytopenic events: A population-based cohort study of 46 million adults in

England. PLOS Medicine.

Project: CCU002 02: COVID-19 vaccination and disease and the risks of major venous and

arterial vascular events

**DOI:** https://doi.org/10.1371/journal.pmed.1003926

GitHub: https://github.com/BHFDSC/CCU002\_02

#### December 2021

**Title:** A nationwide deep learning pipeline to predict stroke and COVID-19 death in atrial

fibrillation. medRxiv.

Project: CCU004 02: Prediction of stroke and COVID-19 death using deep learning and

sequential medical histories in a nationwide atrial fibrillation cohort

**DOI:** https://doi.org/10.1101/2021.12.20.21268113

GitHub: <a href="https://github.com/BHFDSC/CCU004\_02">https://github.com/BHFDSC/CCU004\_02</a>

#### **April 2021**

Title: Linked electronic health records for research on a nationwide cohort of more than 54

million people in England: data resource. BMJ.

Project: CCU005: Data management and analysis methods

**DOI:** https://doi.org/10.1136/bmj.n826

GitHub: https://github.com/BHFDSC/Linked-EHR-England-2021