

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

The papers and preprints listed below have been produced on behalf of the [CVD-COVID-UK/COVID-IMPACT Consortium](#), 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 [collection on the HDR UK Gateway](#), repositories in the centre's [GitHub organisation](#) and through open-access publications (via the links below).

### Published papers/reports and preprints

#### 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:** <https://doi.org/10.1101/2023.03.01.23286624>
- GitHub:** [https://github.com/BHFDSC/CCU035\\_01](https://github.com/BHFDSC/CCU035_01)

#### February 2023

- Title:** Antipsychotic prescribing and mortality in people with dementia before and during the COVID-19 pandemic: retrospective cohort study. *medRxiv*.
- Project:** CCU016\_01: Cardiovascular and cerebrovascular diseases related to antipsychotic prescribing in patients with dementia during the COVID-19 pandemic
- DOI:** <https://doi.org/10.1101/2023.02.18.23286127>
- GitHub:** [https://github.com/BHFDSC/CCU016\\_01](https://github.com/BHFDSC/CCU016_01)

#### 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](https://github.com/BHFDSC/CCU014_01)
- 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](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:** <https://www.mariecurie.org.uk/globalassets/media/documents/policy/beol-reports-2022/better-end-of-life-report-2022.pdf>

**GitHub:** [https://github.com/BHFDSC/CCU024\\_01](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:** <https://doi.org/10.1093/ehjqcco/qcac077>

**GitHub:** [https://github.com/BHFDSC/CCU003\\_04](https://github.com/BHFDSC/CCU003_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](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](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](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:** <https://doi.org/10.1016/j.kint.2022.05.015>

**GitHub:** [https://github.com/BHFDSC/CCU003\\_01](https://github.com/BHFDSC/CCU003_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](https://doi.org/10.1016/S2589-7500(22)00091-7)

**GitHub:** [https://github.com/BHFDSC/CCU013\\_01\\_ENG-COVID-19\\_event\\_phenotyping](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:** <http://dx.doi.org/10.1136/heartjnl-2021-320325>

**GitHub:** <https://github.com/BHFDSC/CCU020>

**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:** [https://github.com/BHFDSC/CCU002\\_03](https://github.com/BHFDSC/CCU002_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](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:** [https://github.com/BHFDSC/CCU004\\_02](https://github.com/BHFDSC/CCU004_02)

### 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>