“It is so inspiring to see how combining high-resolution data from two NHS trusts can only be achieved by diverse teams working together. Our efforts will help the health data science community to improve patient care for years to come.”

Kirstie Whitaker
DECOVID Analytics Workstream Co-Lead and Programme Lead for Tools, Practices and Systems
The Alan Turing Institute

Initiated during the early stages of the pandemic, the DECOVID project has created a detailed database of anonymised patient health data, which can be analysed to answer pressing clinical questions about the virus, providing insights into the treatment and effects of COVID-19. The project was founded by researchers at the Turing (led by Chris Holmes, Programme Director for Health and Medical Sciences) and four other partner institutes, and the initial funding was diverted from an existing Turing grant from the Engineering and Physical Sciences Research Council (EPSRC).

A major breakthrough has been the transfer and combination of data from the electronic patient record systems of two NHS trusts (University College London Hospitals and University Hospitals Birmingham), covering 185,000 patients. Now, the work continues with in-kind contributions from researchers around the UK, who are analysing the data to shed light on four key questions: how COVID-19 patients are affected by blood clots, when to put critical COVID-19 patients onto a ventilator, how patients with long-term health conditions are affected by COVID-19, and whether the current patient scoring system successfully identifies the COVID-19 patients at most risk of further deterioration. Ethicists in the Turing’s public policy programme have also been embedded within the research teams from the start of the project to ensure that the algorithms used and developed during DECOVID are as transparent and bias-free as possible. Results from the first analyses are expected later in 2021.