

Our research explained

BRCsnapshots

Using Electronic Health Records for research



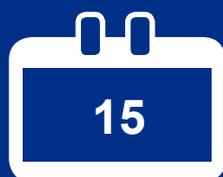
What we know

Every time you have a hospital stay or appointment, your doctors keep a record of the visit, including information about your health conditions, treatments, test results, prescriptions and referrals to other departments. They also record demographic data such as your date of birth and ethnicity. All of this makes up your Electronic Health Record (EHR) which can be accessed by clinicians across the hospital.

Before the COVID-19 pandemic, we were working to make the sharing of EHRs' data easier between departments and clinicians. We were doing this by pooling together data from lots of EHRs into one secure place called a 'Data Lake'.



We have collected data on over 1,500 COVID-19 patients so far



15 projects are currently using the Data Lake



Many of these are being carried out along with colleagues across the UK

What is COVID-19?

COVID-19 (Coronavirus disease) is an infectious disease caused by a newly discovered coronavirus (a large family of viruses which may cause illness in animals or humans). The most common symptoms are fever, dry cough and loss of or change to taste and smell. There are a range of other symptoms which are less well understood at this time.

What we are doing

We are now working to make the data pooled in our Data Lake accessible for use across our COVID-19 research. By anonymising all EHRs within a COVID-19 Data Lake, we can give researchers working on different COVID-19 studies access to a very large patient dataset without the need to seek patients' consent for each separate study.

This means research to describe, track and compare the progression of COVID-19 can happen quicker than would have been possible otherwise. This is helping us to improve the care and outcomes for COVID-19 patients faster.

We plan to add this to national COVID-19 data studies. Learning from this will help us to plan ways of sharing data like this for other diseases.

How will this change care

“The new Data Lake makes it much quicker and easier for our researchers to access the data they need for their studies, without needing to recruit a new set of participants each time. This of course also means that patients don't need to be bothered by lots of different people, which is especially difficult when someone is severely ill with something like COVID-19.

“Combining anonymous patient information in this way also means that our doctors will have access to data on all patients who are receiving treatment (or who have been treated) for COVID-19 at Guy's and St Thomas'.”

Professor Charles Wolfe, Director of Research and Development at Guy's and St Thomas'.



Further information

For further information about the Data Lake please contact Finola Higgins, research informatics programme manager finola.higgins@kcl.ac.uk

About our NIHR Guy's and St Thomas' Biomedical Research Centre

Our NIHR Biomedical Research Centre is a partnership between Guy's and St Thomas' NHS Foundation Trust and King's College London. We work to develop and deliver new medicines and diagnostics to patients. We drive research and innovation into the NHS to provide maximum impact to our patients.

www.guysandstthomasbrc.nhr.ac.uk

