Title of PhD project	**Lateral impacts of the coronavirus pandemic on non-COVID outcomes and health inequalities in England**
Supervisor	Professor Sinead Langan	LSHTM
Co-Supervisor	Dr Rohini Mathur	LSHTM
Brief description of project	Much global research effort has addressed understanding the COVID-19 pandemic. However, there remains an urgent need to understand the wider impact of population-level lockdown measures and diversion of health care-related resources on hospital admissions and mortality for non-COVID related conditions. While the direct effects of the COVID-19 pandemic have been found to disproportionately affect older people, minority ethnic groups, and deprived populations, inequalities in the indirect effects of the pandemic have yet to be fully explored. This work is now critical to inform recovery of the NHS, including resource allocation and identification of strategies for managing high-risk populations going forward. This will help inform policy and public health response for any future infectious disease outbreaks in the UK. The candidate will develop skills in the epidemiological analysis of large-scale routinely collected health data to contribute to an area of major national importance. This work will draw upon the healthcare records of millions of individuals across the UK and utilize techniques such as survival and time series analysis, causal mediation, and case-only approaches.
Skills we expect a student to develop/acquire whilst pursuing this project	1. Skills in the use of large linked electronic health databases for observational studies. 2. Skills in advanced statistical and epidemiological methodology to temporal trends in disease patterning, public health measures and confounding structures. Estimation of casual effects and handling of missing data.
Particular prior educational requirements for a student undertaking this project	MSc in Epidemiology, Statistics, Bioinformatics, or MSc in a related field with training in Pharmacology, Statistics or Epidemiology.
Project key words	Electronic health records COVID-19

	Statistical Methodology Inequalities
Possible under 1+4 route? Master's options identified.	Yes LSHTM – MSc Epidemiology LSHTM – MSc Medical Statistics LSHTM – MSc Health Data Science
MRC Core Skills developed through this project	Quantitative skills
MRC LID themes	Health Data Science
Further reading	[Indirect acute effects of the COVID-19 pandemic on physical and mental health in the UK: a population-based study](#) [Impact of First UK COVID-19 Lockdown on Hospital Admissions: Interrupted Time Series Study of 32 Million People](#)