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Has the COVID-19 pandemic changed non-COVID-19 healthcare utilisation patterns across Europe?

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As SARS-COV-2, the virus responsible for the COVID-19 pandemic, spread across Europe in the first half of 2020, countries deployed a range of responses to mitigate its spread and reduce mortality. Most countries adopted some form of “social distancing”, restricting movement and contact between households in order to minimise the burden on healthcare systems. During this time a dramatic fall in non-COVID-19 related healthcare utilisation (HCU) has been observed universally. We aim to quantify this change in HCU across 7 European countries during and following the COVID-19 pandemic. Identifying to what extent different types of HCU have recovered, and the associations between these HCU and COVID-19 infection and hospitalisation rates. We gathered aggregated age standardised longitudinal health and administrative data from 7 European countries between 2017 and 2021 using standardised scripts held in the PHIRI Docker Application to examine the impact of COVID-19 on HCU. We deploy a meta-analysis using a combination of forecasting and generalised linear models to investigate the association between local COVID-19 metrics and three types of HCU: emergency cardiovascular incidents, elective surgeries, and severe trauma admissions. Results vary markedly by country and show an association both with general incidence rates and public health measures taken in the course of the pandemic, based on the OxCGRT index. We provide a first-time comprehensive cross-European analysis of the indirect effects of the COVID-19 pandemic with lessons for sustainable and resilient health systems in crisis times. More research is needed to understand the drivers at the national and subnational level within welfare state contexts.

Key messages:

- Patterns of healthcare utilisation changed dramatically during the COVID-19 pandemic, but to varying degrees across Europe.
- The PHIRI framework allows coordination with a number of European groups enabling a much more substantial analysis on healthcare utilization.