

Research use cases measuring the impact of COVID-19 on population health

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population health to underpin decision making and will drive the development of the federated research infrastructure that allows rapid cycle analysis.

Background:

Wide variations in COVID-19 infection and outcomes exist across Europe and within countries. PHIRI will look at COVID-19 impacts in specific subgroups by conducting research through use cases of immediate relevance for public health policies focusing on indirect effects of the pandemic related to healthcare and other policies to contain the pandemic. Furthermore, the use cases represent pilot activities for the benefits and added value of a research infrastructure by bringing together data from different European countries.

Methods:

Four research use cases will focus on selected aspects of vulnerable population groups and risk factors, delayed medical care in cancer, perinatal health outcomes, as well as mental health outcomes and are selected based on public health importance, geographic coverage, feasibility of producing actionable insights and relevance for the PHIRI infrastructure. The use cases will demonstrate how a broad variety of secondary data (e.g. administrative and survey data) can be pooled and/or reused in a distributed way across Europe.

Results:

The outputs of the use cases will be processed by formalizing data models, data management processes and analytical pipelines in an interoperable way to feed in the federated research infrastructure. The use cases facilitate research by making scalable, reproducible methods available within PHIRI and by publishing the FAIRified use cases analysis results on the Health Information Portal. They will provide outcomes to guide policy makers in preparedness and response scenarios and will ensure the development of a format for the timely dissemination of use case results to the targeted groups.

Conclusions:

PHIRI will provide insights in real life use cases to generate immediate results on key health impacts of COVID-19 on