PHIRI
Population Health Information Research Infrastructure

InfAct Final Meeting

22/01/2021

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101018317

InfAct and COVID-19

- Partners at the core of the Covid-19 response teams have indicated a strong need to structurally exchange between countries.
- InfAct facilitates exchanges between partners and with international organizations
- How?
  - Rapid exchange with InfAct connecting experts and expertise
  - Two weekly meetings with specific questions
  - Storage of relevant information

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InfAct and COVID-19

- What?
  - Exchange and provide overview of ongoing or planned Covid-19 studies
    - What data should be collected to analysis impact COVID-19 on with NCDs?
  - Exchange relevant regional, national and international data sources
    - Which data sources are available at sub-regional level?
  - Discuss and exchange on latest developments, recently validated tools, approaches, standard operating procedures, protocols and guidelines
    - How are you counting COVID-19 deaths in your country and who is being tested?
    - How are you carrying out contact tracing in your country?
  - Exchange policy and impact measures
    - Measure/guidelines about re-opening of schools and data indicating the consequences of the re-opening?
    - How are hospital visits and visits to LTCF organized in your country?
    - Impact on mental health through health surveys.

Conclusions

1. Many questions remain unanswered. Data gaps are persistent.
2. Partners are looking for mechanisms for structured exchange.
3. InfAct build up trust between the partners to share and exchange. InfAct provided a safe space.

➔ The need for a Research Infrastructure on population health is also reflected during the COVID-19 crisis for which DIPoH can provide the basis.

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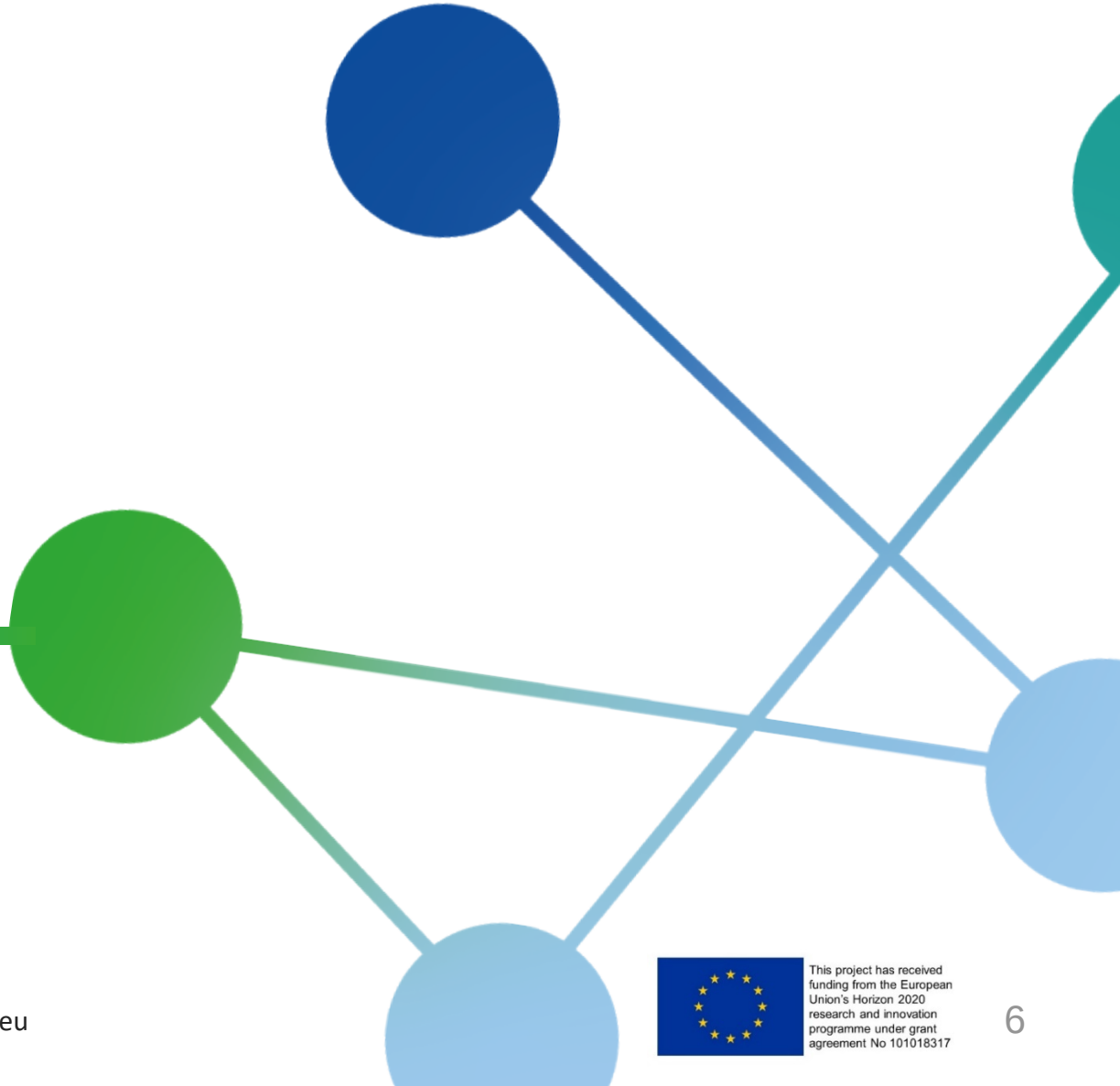
Population Health Information Research Infrastructure (PHIRI) for COVID-19

DIPoH's practical use case



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Overview

- Timeline: 1 November 2020 – 3 years
- Financing: European Commission Horizon 2020 – 5M€
- Coverage: 41 partners in 30 countries based on InfAct consortia
  - 27 National Institute of Public Health or Research or Disease Control
  - 7 Universities
  - 7 Ministries of Health
- Structure: 9 workpackages and 3 transversal topics

Map of PHIRI Partners

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PHIRI for Covid-19

Population Health Information Research Infrastructure (PHIRI) aims to:

- Identify, access, assess and reuse for research population health and non-health data in Member States and across Member States that can underpin public health policy decisions relevant to Covid-19

In close interaction with key stakeholders in the health information landscape, in particular with ECDC, EUROSTAT, JRC, OECD, and WHO

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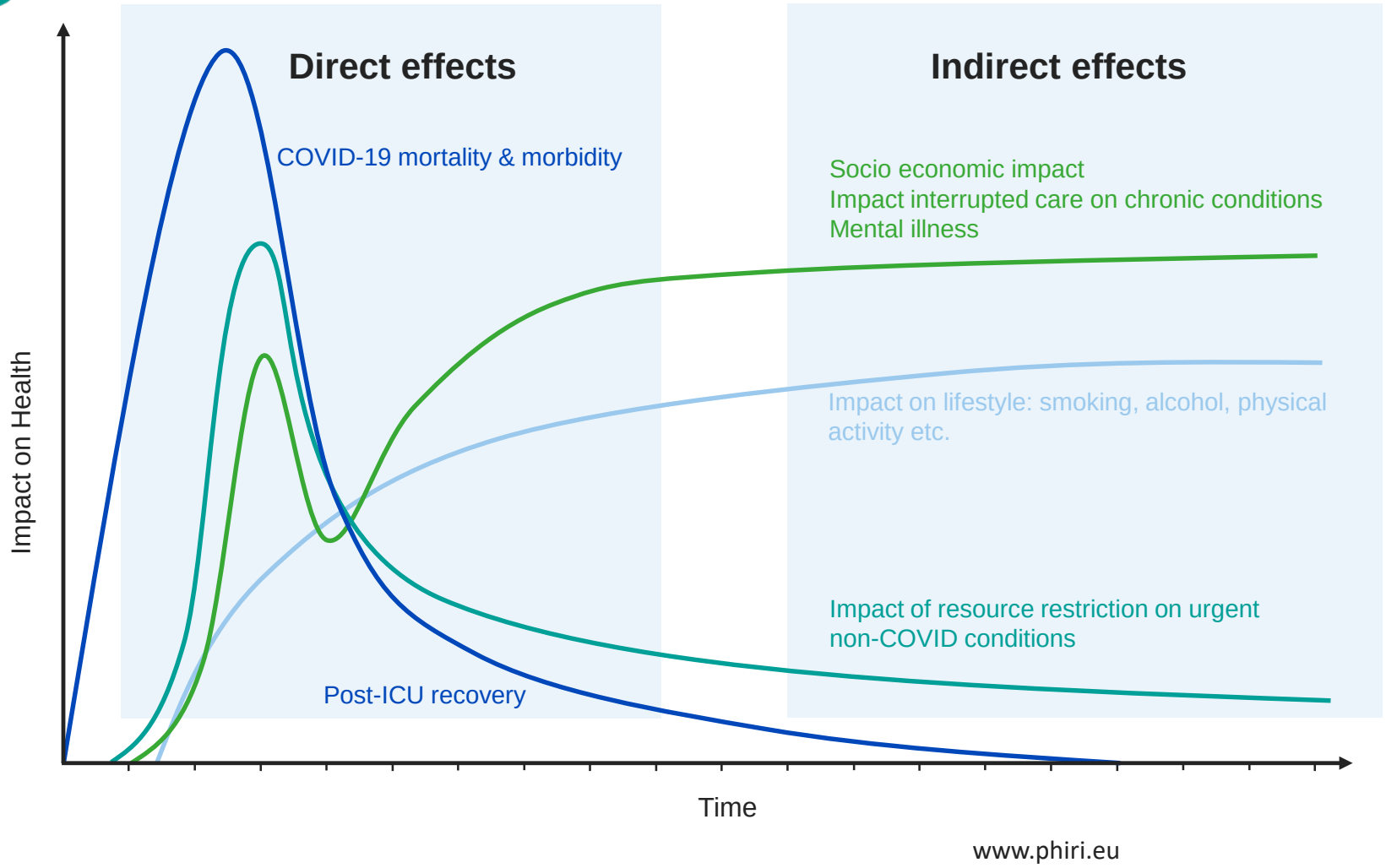
(In)direct impact of COVID-19 on population health



PHIRI

Research use cases
Research methodologies

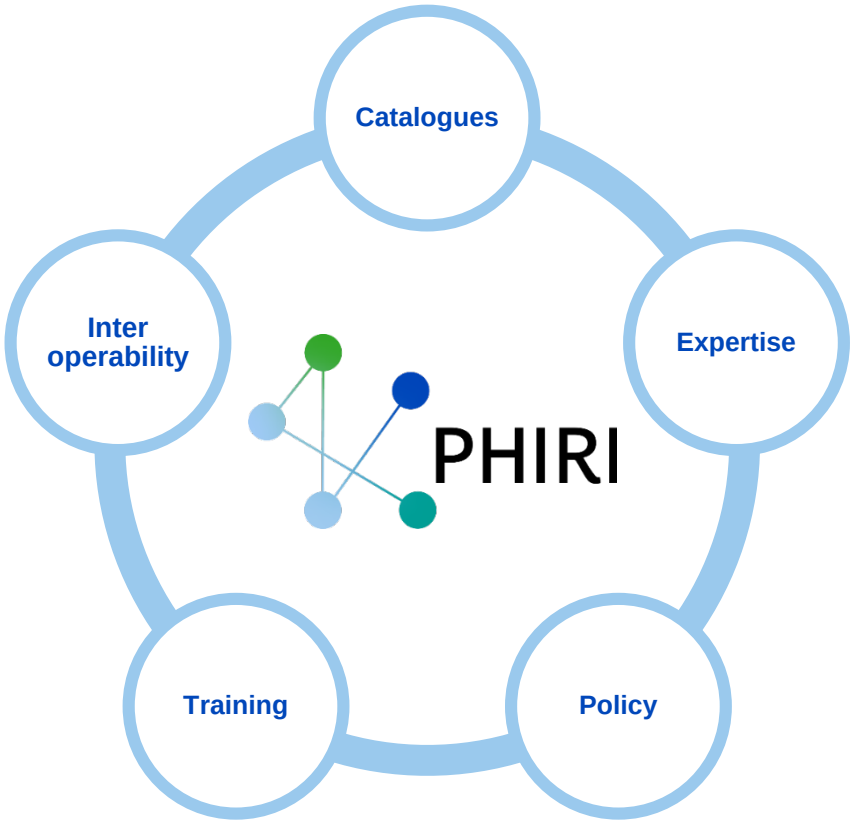
Health information Portal
Federated Research Infrastructure

Rapid Exchange Forum
Outreach & Engagement

Foresight: Modeling & Scenarios

Stakeholder involvement
Capacity building
Policy linkage

PHIRI for COVID-19



Objectives:

1. To provide a **Health Information portal** for COVID-19 with FAIR catalogues on health and healthcare data for structured information exchange across European countries. To link different data sources and to use Pan-European data in a GDPR compliant, federated way.
2. To provide structured exchange between countries on COVID-19 **best practices and expertise**. It allows researchers to provide relevant and evidence based information ready for use in research, and decision-making processes.
3. To promote **interoperability** and tackle health information inequalities. PHIRI supports researchers and public health bodies to research queries related to COVID-19 and provides **capacity building** for management of COVID-19 relevant population health and healthcare data.

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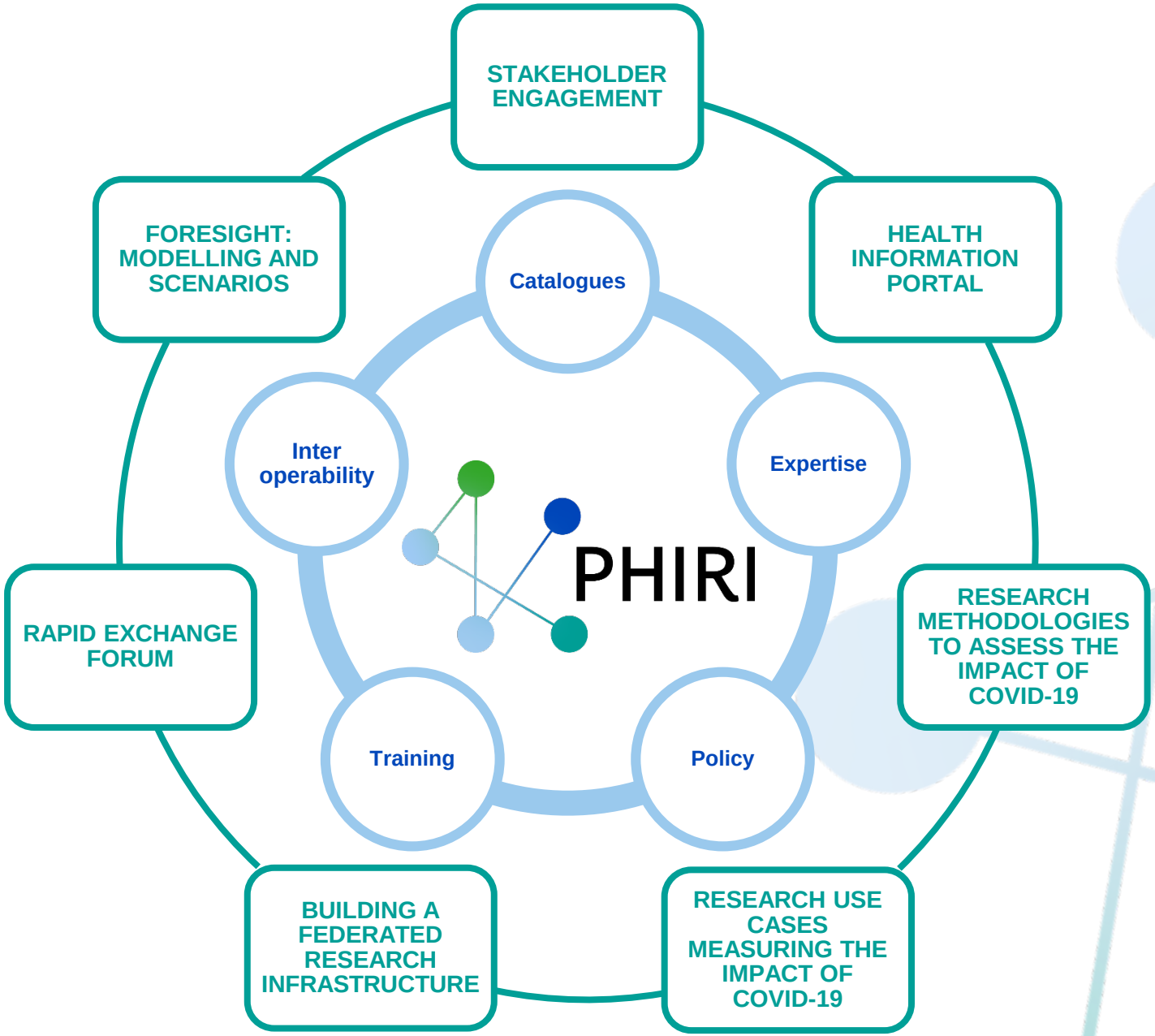

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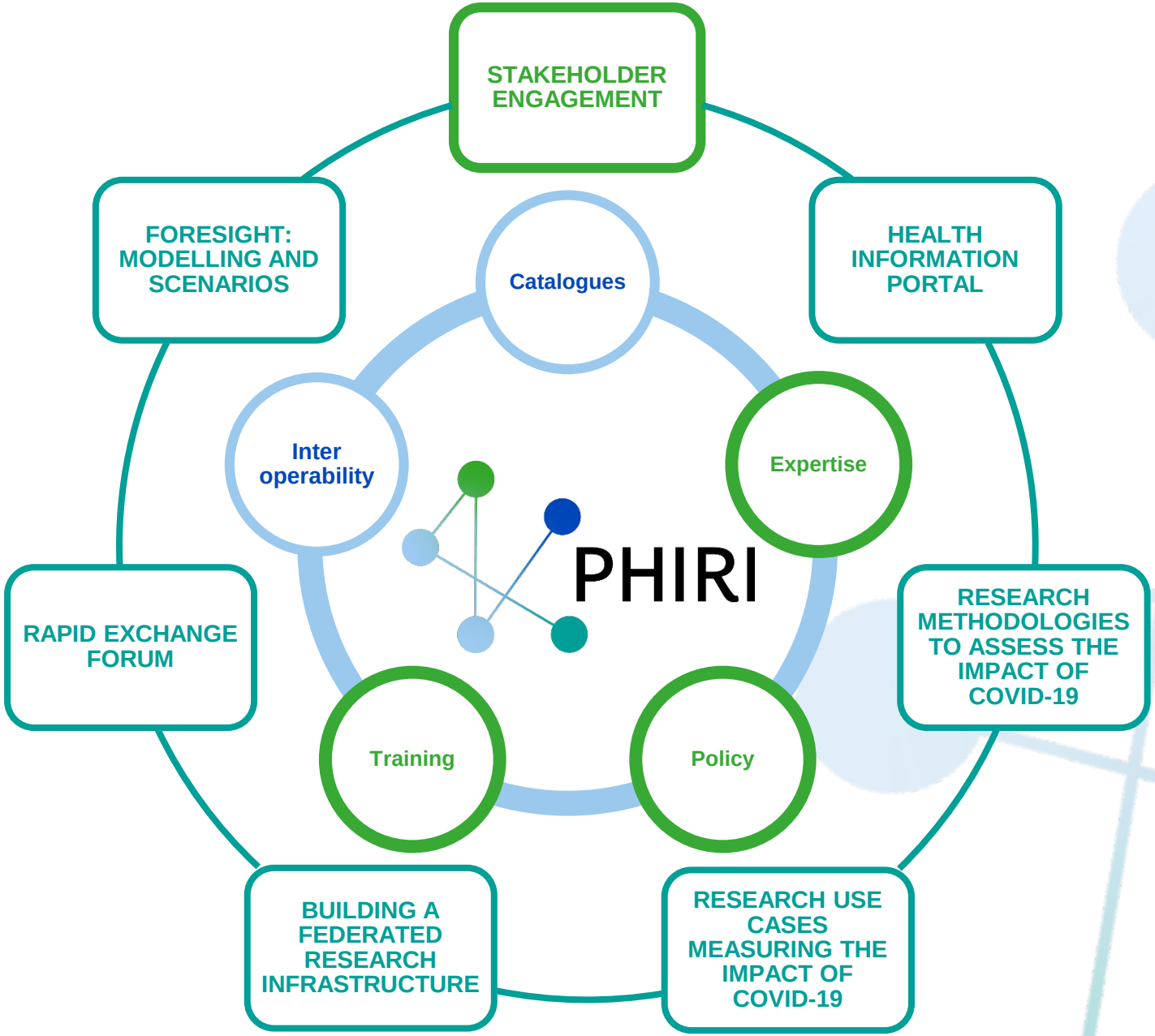

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Engage and involve

- Addressing the COVID-19 infodemic (training, FAQ section, key messages)
- Country visits to map state of play on monitoring the wider effects of COVID-19
- Stakeholder meetings: 3 main meetings and short ones every two months
  - Overview of relevant COVID-19 activities

➔ Adapting InfAct's health information system assessments

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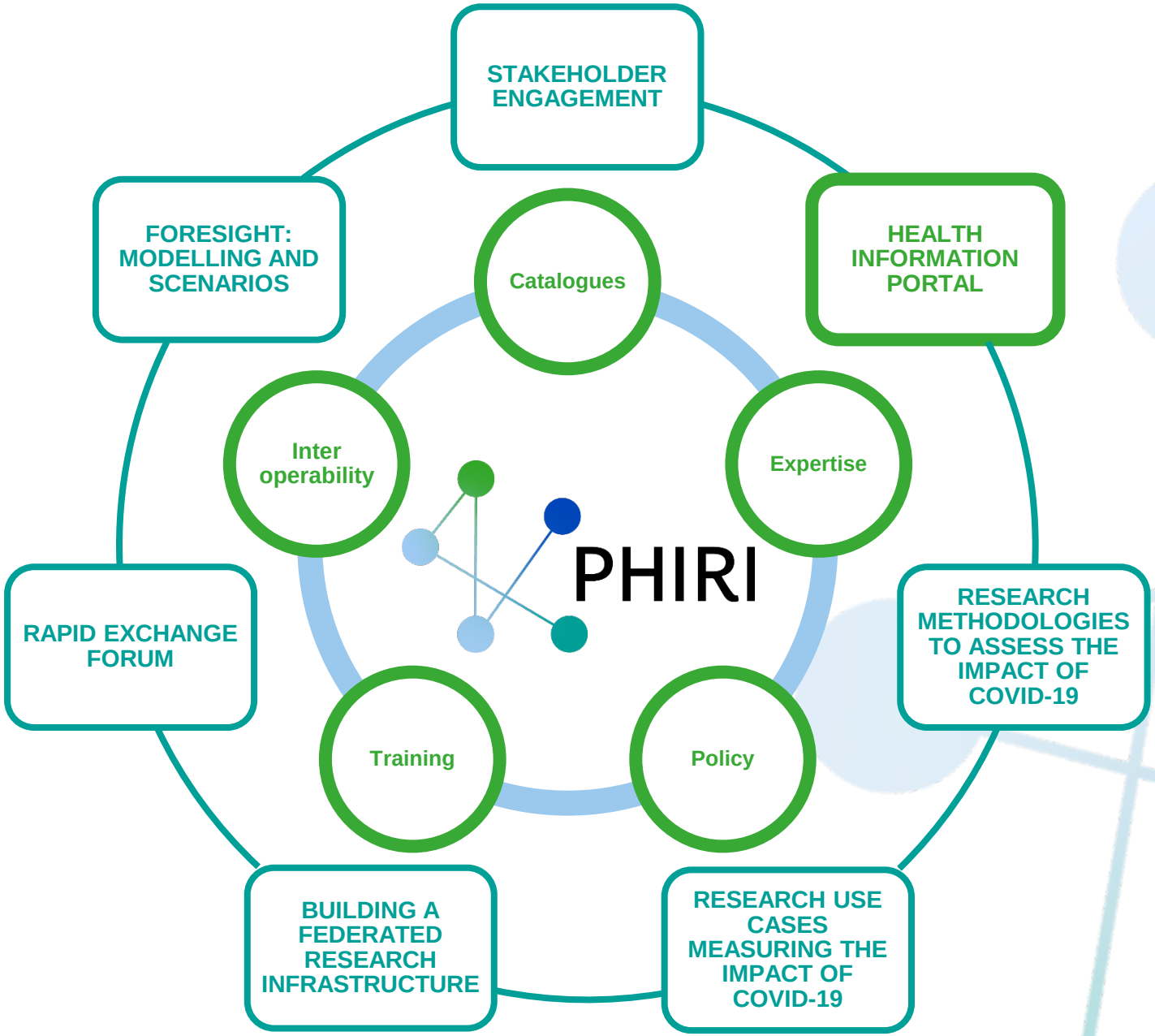

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Health Information Portal

- Health information portal
  - Catalogue of population health data sources in countries
  - Catalogue of COVID-19 population health studies
  - Catalogue of COVID-19 international guidelines, initiatives and projects
  - Catalogue of COVID-19 training material and courses
  - Practices on COVID-19 ethical and legal aspects
- Strengthening National Nodes setup in InfAct

➔ Extending work InfAct, base for DIPoH and transversal design

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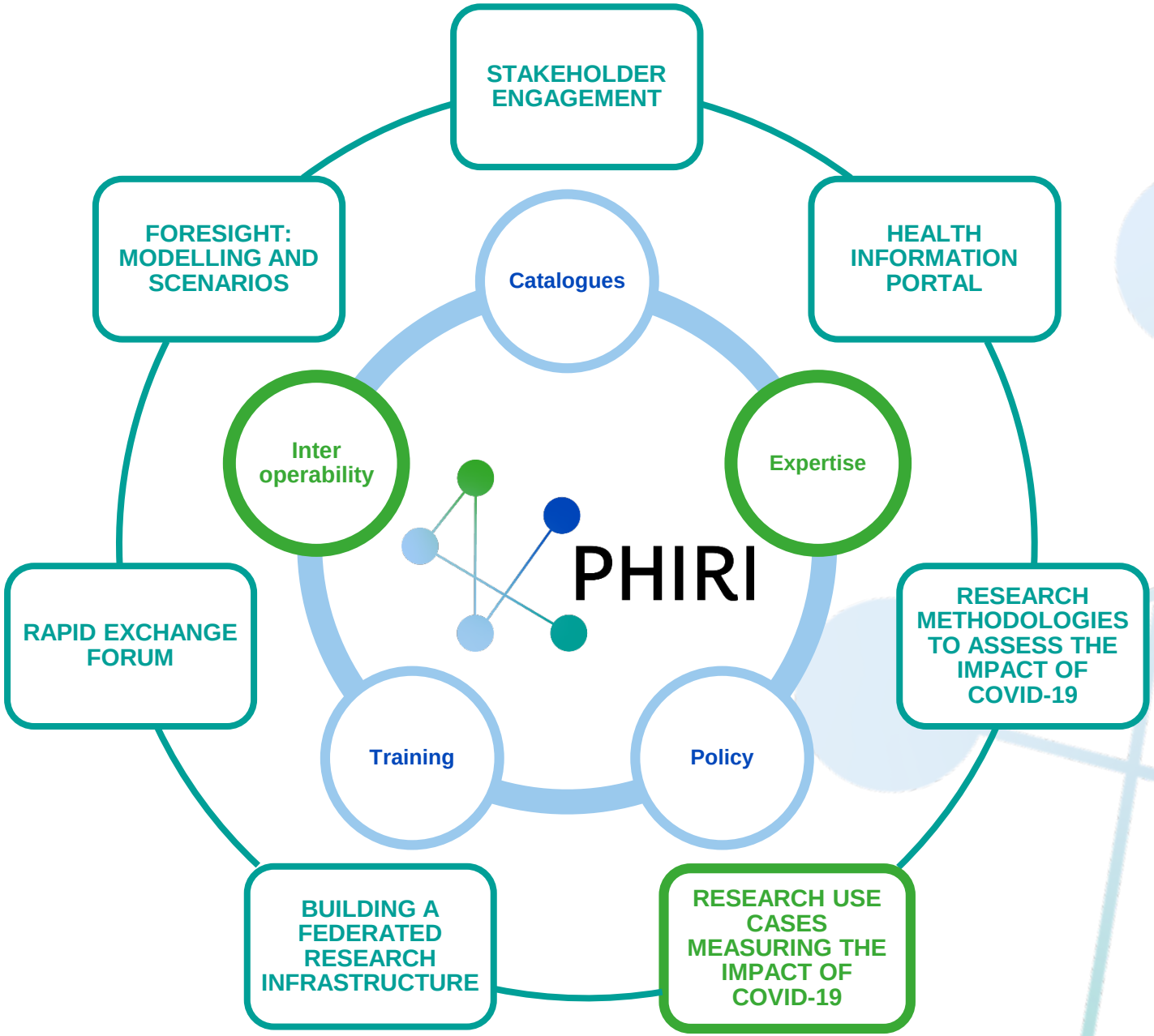

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Four use cases

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 to produce actionable insights.

1. Direct and indirect determinants of COVID-19 infection and outcomes in vulnerable population groups with reference to inequalities
2. COVID-19 related delayed care in breast cancer patients
3. the impact of COVID-19 on perinatal health and perinatal health inequalities
4. COVID-19 related changes in population mental health

➔ Making use of InfAct's network and Research Networks

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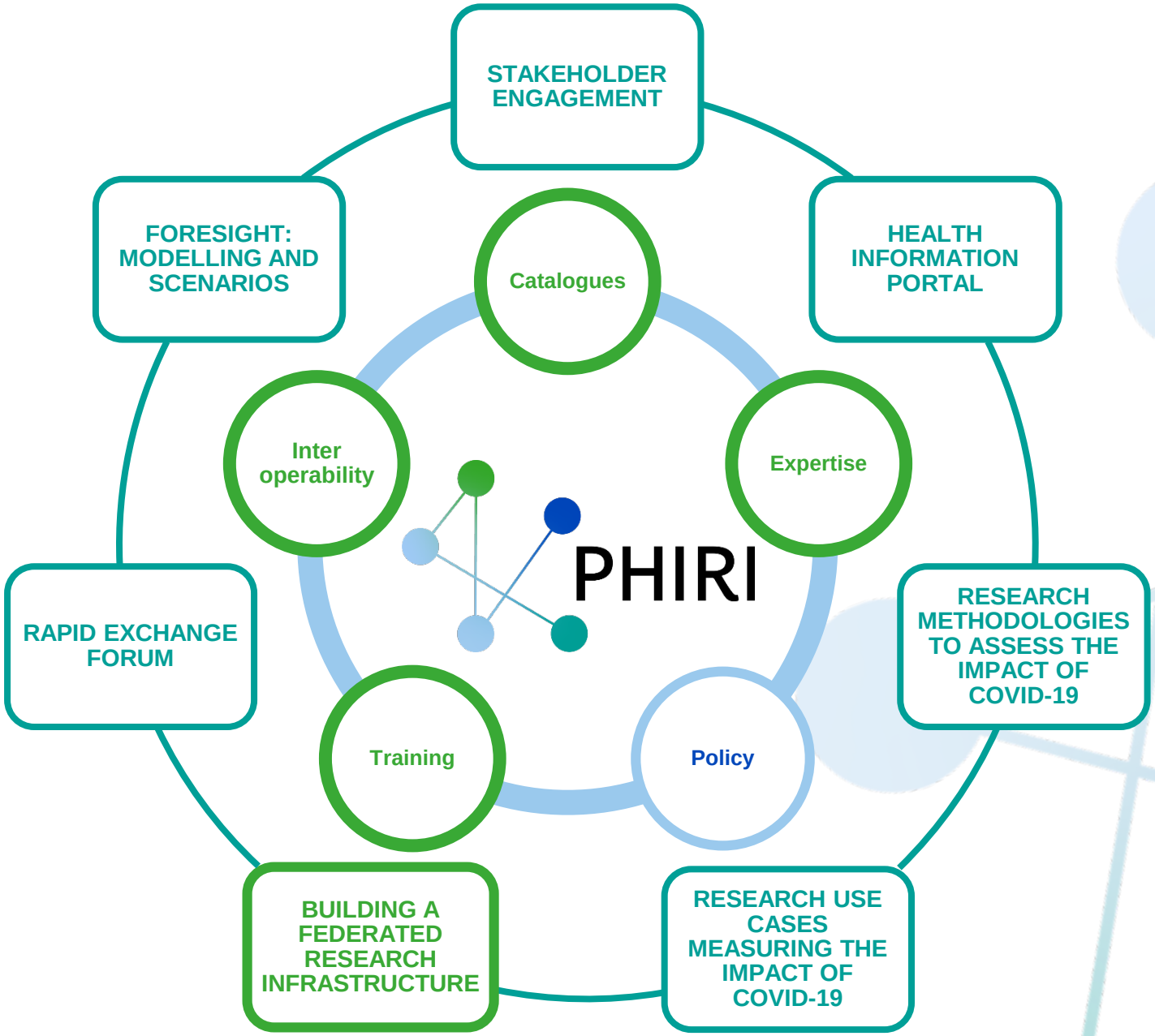

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Federated research infrastructure

Showing the potential of the infrastructure for a rapid cycle analysis using a demonstration pilot case

Pilot, developing an advanced version of the federated research infrastructure, including:

a) The development of a common data model for a COVID-19 rapid response
b) The design and deployment of the required data extraction, transformation and loading (ETL) processes and
c) The implementation of the distributed analytical solutions, in particular the FAIR implementation of intermediate processes and final research outputs. This advanced version will mainly build on WP6 use cases

➔ Building on demonstrated feasibility in InfAct

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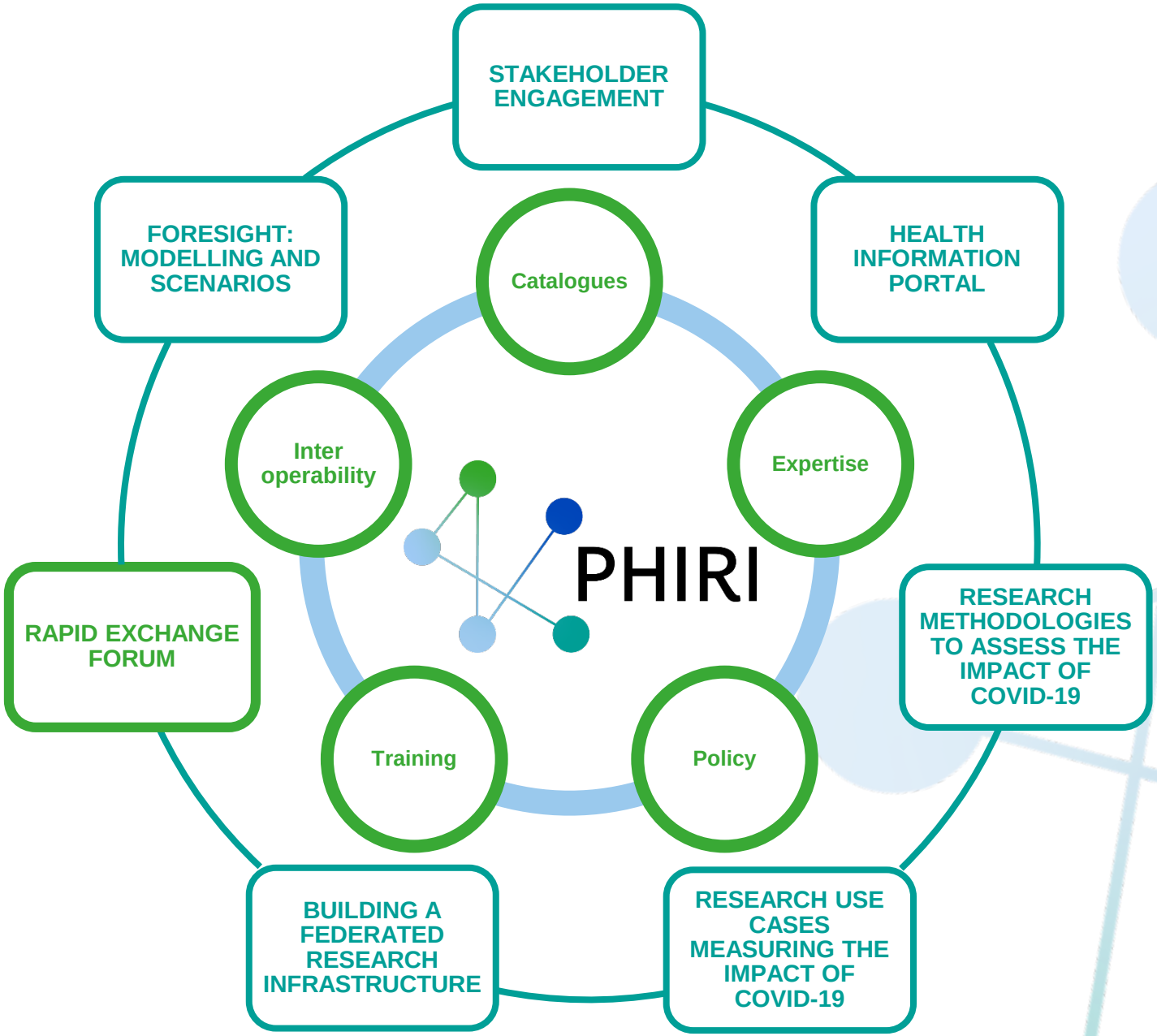

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Rapid exchange forum

1. To provide rapid response to research and policy questions that are raised in countries
2. To promptly disseminate internationally agreed guidelines, standards, reports and initiatives
3. To exchange (best) practices among countries regarding COVID-19
4. To provide a link with policy: the shifting landscape of evidence for policy

➔ Kick started in InfAct

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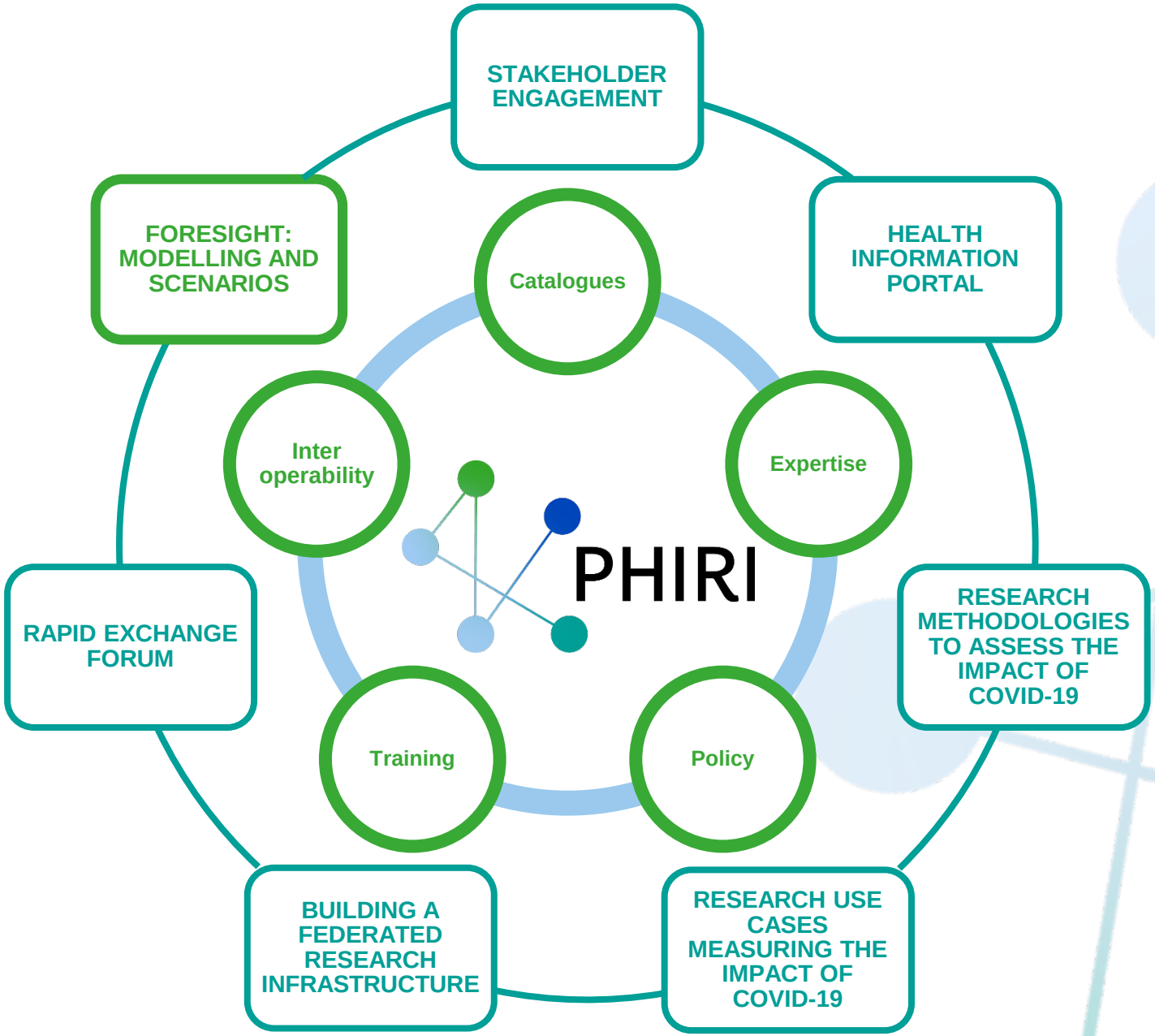

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Foresight: Modelling and Scenario

The overall aim of this work package is to gain insights in possible future health impacts of the coronavirus outbreak, by developing scenarios for MS and associated countries' national situation and draw lessons for the EU.

The objectives are:

1. To get an overview of how European countries have been using foresight, modelling and preparedness regarding COVID-19 (mainly indirect effects)
2. To develop and provide foresight capacity (levelling the knowledge needed for performing foresight, reducing information inequalities, strengthening European data uniformity)
3. To support evidence-informed policy decisions, by exploring direct and indirect effects of COVID-19 on population health, on short and long-term, using scenarios and a broad conceptual model of health and care

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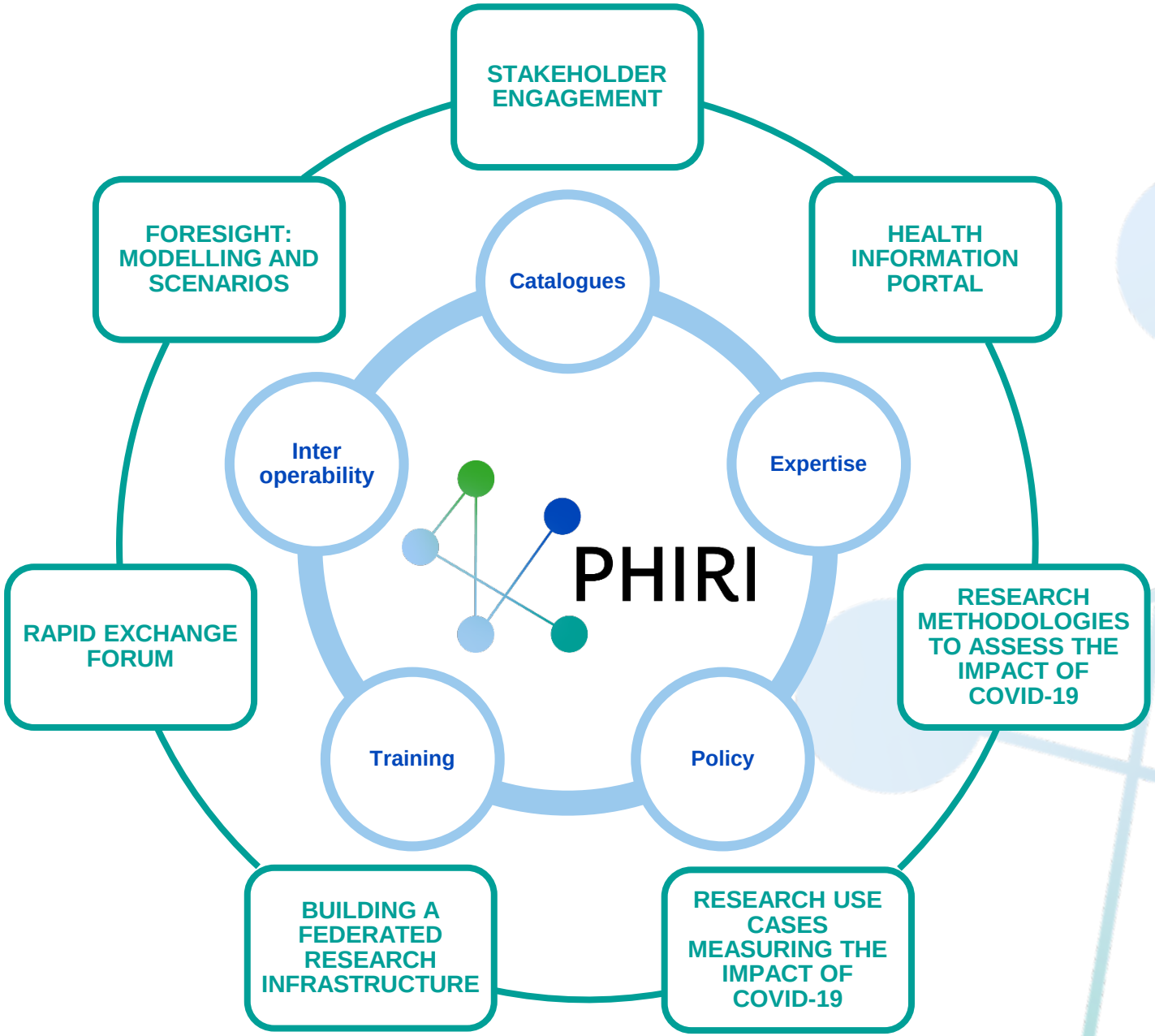

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Interactions

- InfAct

- HealthyCloud: Health Research and Innovation Cloud

- EGI-ACE

- TEHDAS: European Health Data Space

PHIRI

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Thank you!

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