# PHIRI: harnessing health information to improve pandemic preparedness
Lessons learnt from the COVID-19 pandemic

Dr Petronille Bogaert

Sciensano, Belgium

Presentation for the ECON/FISC/EMPL/ENVI/ITRE/IMCO/COVI Committee

Outline

1. Current state of play
2. Best practices
3. Identified gaps & recommendations
4. Conclusions

European Parliament

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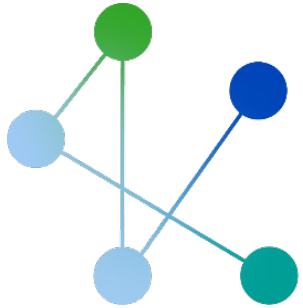
PHIRI
Population Health Information Research Infrastructure

A **European mechanism**, that aims to facilitate and support **data-driven population health research** and exchange of best practices to support **decision making**.

41 partners

30 countries

3 years

State of play of pandemic preparedness: COVID-19 Health Information Systems
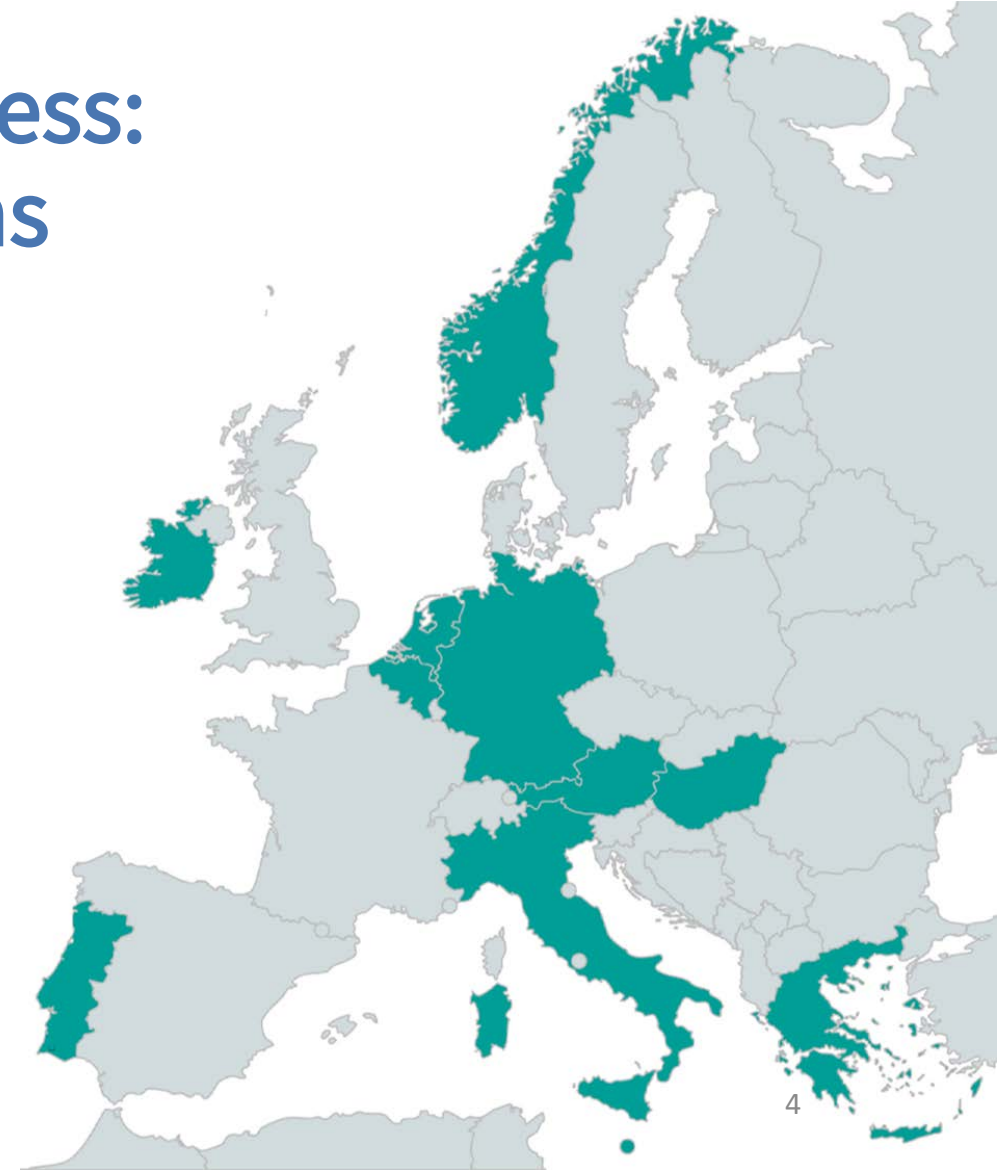
Aim:

Map the COVID-19 health information system (HIS) that monitors the effects of COVID-19 on population health: identifying strengths and weaknesses

Domains:

Data collection, analysis, reporting, knowledge translation, governance & resources

Coverage:

Italy, Portugal, Ireland, Malta, Norway, Hungary, Netherlands and Belgium (planned in April)

Best practices

- **Preparedness**: Strong vaccination system implemented before the COVID-19 crisis
- **Resilience**: Rapid technological surveillance system set-up
- **Responsiveness**: Pivotal role of telemedicine during COVID-19
- **Transparency**: Data dashboards and regular reports (publicly) available
- **Multidisciplinary collaboration**: Involvement of private companies outside health to learn from e.g. their supply chain expertise
- **Knowledge Translation**: Experts involved in an interdisciplinary manner to improve communication and dissemination activities
- **Trustworthiness**: Trust in relation to health information identified as a key priority in peacetime and was built over time
- **Interoperability**: Linkage of databases to ensure e.g. coverage of vulnerable groups
- **Innovation**: Increased use of water sewage surveillance

Identified gaps & recommendations

Organisational   **Technical**   **Legal**   **Resources**

Identified gaps & recommendations

Organisational

- Paper-based records

- No unique personal ID consistently used

- Communication gaps to the public: infodemic management

- Network to exchange

- Modernise systems and digitalise paper-based processes for integration with more robust digital systems

- Increase potential of the unique identifier for automated linkage of different databases

- Include infodemic management in an overarching strategy for health information system

- Continue promoting collaboration across national and regional stakeholders

EU response and coordination mechanisms

Rapid Exchange Forum is PHIRI's structured platform for regular cross-country exchange

1. Trust to share information quickly
2. Anticipation on upcoming needs
3. Covering vast area of topics
4. Network of networks

28 Countries

48 Meetings

7 Special editions

100+ Questions

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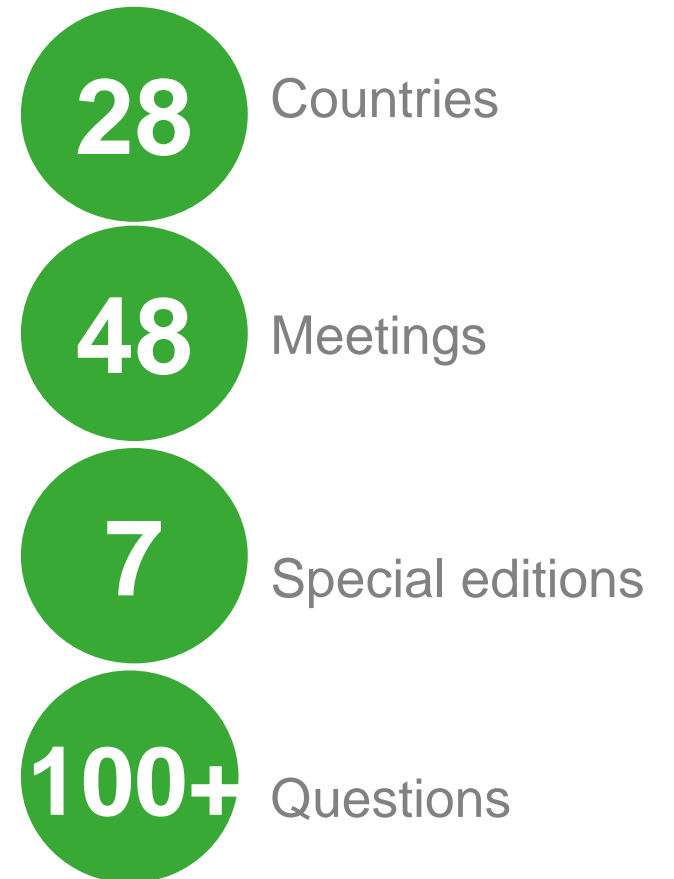
Identified gaps & recommendations

Technical

- Lack of interoperability causing administrative burden on health providers

- Data gaps

- Inconsistent use of definitions and international standards

- Reduce administrative burden on healthcare providers by creating interoperable system that avoids duplication of reporting

- Set up the legal and technical framework to systematically share data with academia and other health stakeholders

- Encourage the promotion of the FAIR Data Principles to support the findability, accessibility, interoperability and reusability of health data and related (meta)data international standards

- Develop indicators with defined thresholds with key stakeholders

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European Health Information Portal: one-stop shop to facilitate access to population health and health care data, information and expertise across Europe
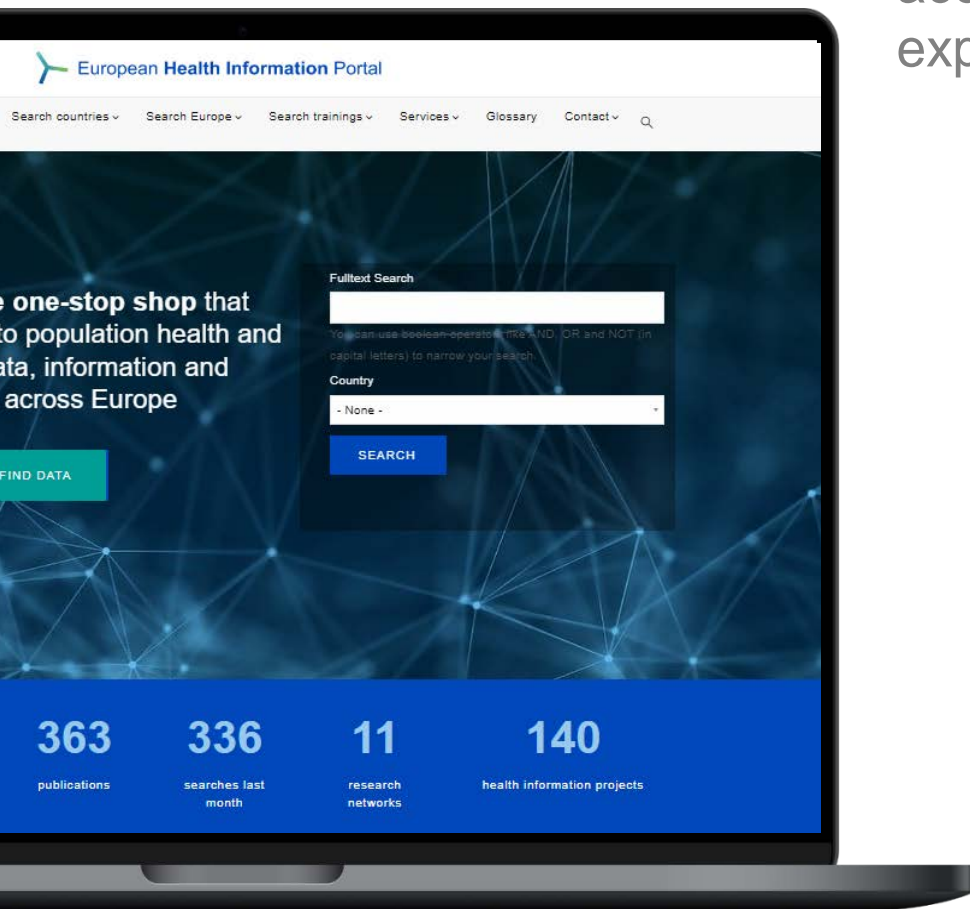
Health information (data) sources

Publications

Countries and national nodes

Trainings in all areas of population health

Research infrastructures, Research networks

COVID-19 Policy measures

Health information projects

COVID-19 Rapid Exchange Forum

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Identified gaps & recommendations

Legal

- Lack of preparedness plans

- Need for long term monitoring and surveillance strategies

- Interpretations of the GDPR

- Strengthen the health information system elements in the pandemic preparedness plan

- Continue working on post-pandemic situation: options for an alternative sustainable COVID-19 surveillance system

- Develop clear guidelines for safe sharing and secondary use of data

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Identified gaps & recommendations

Resources

- Systematic lack of human resources, especially with technical skills, at all levels

- Need for long term monitoring and surveillance strategies

- Increase early training in data management tools starting from the undergraduate level training

- Align employment and training possibilities to address the shortage of health professionals

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Conclusions

Systematically strengthen the health information systems

1. Organisational: networking and collaboration
2. Technical: definitions and standards
3. Legal: legal framework to re-use of health data
4. Resources: training

Thank you for your attention

Dr Petronille Bogaert
Sciensano, Belgium