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FROM DATA TO PUBLIC HEALTH ACTIONS:

STRENGTHENING HEALTH INFORMATION SYSTEMS ACROSS EUROPE

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EPHA Webinar – 6th of November 2024

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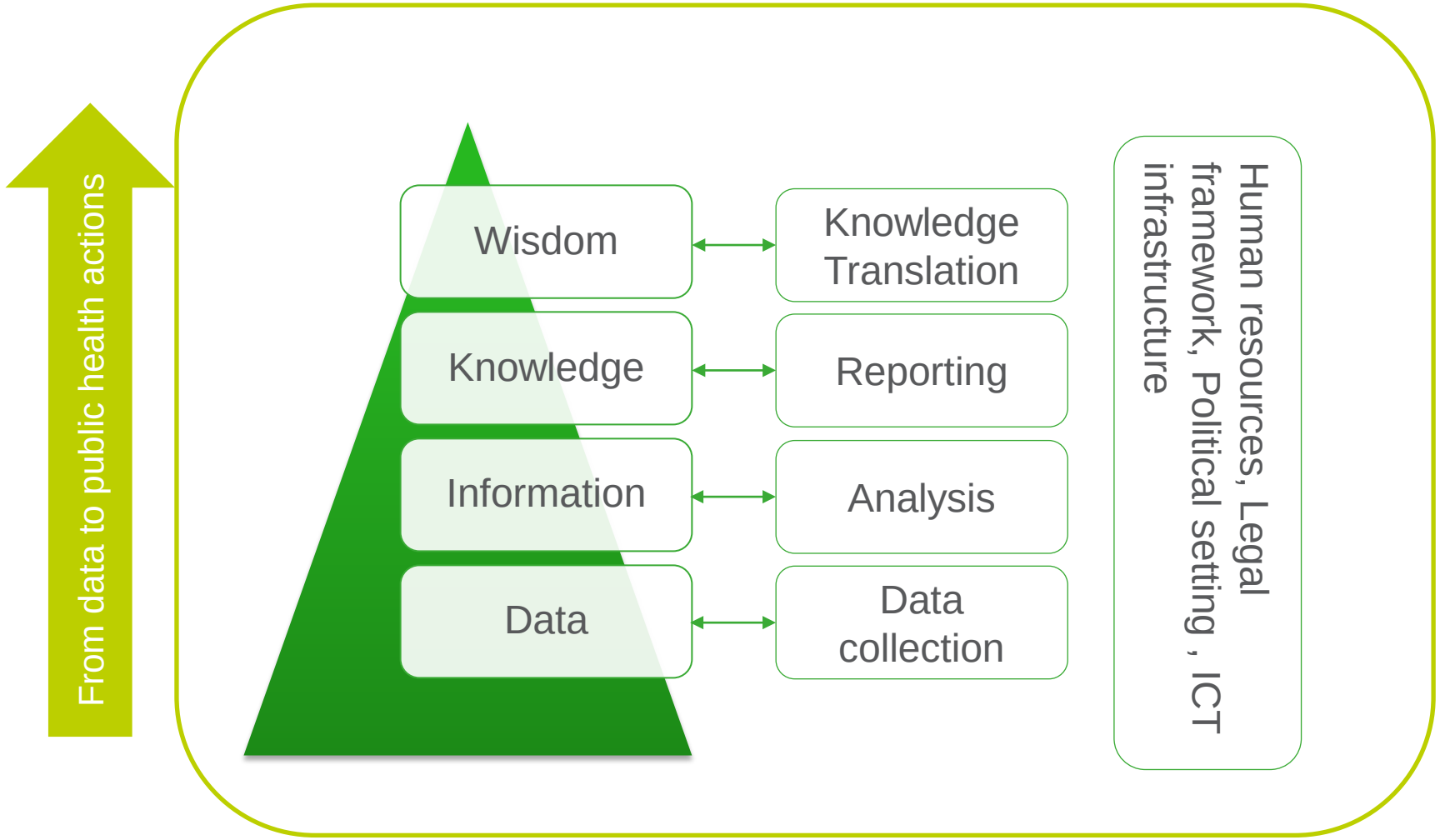
Health Information Systems



Bogaert (2023) – adapted from Verschuuren and van Oers (2019)

Health Information Systems assessments

→ European countries exhibit distinct Health Information Systems (HIS)

→ While there have been notable advancements in HIS across Europe, studies have revealed that progress is not uniform among countries

Assessments of health information systems support:

- The mapping of a state-of-play
- The identification of strengths and weaknesses
- The development of actions for improvements
- Stakeholders' interactions
- Preparedness

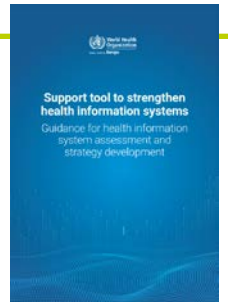
How? Adapting the methodology to our needs

1. Preparatory desk review

- Preparatory report
- Stakeholders' selection – bring experts together

2. Country visit

- Semi structured-interviews with adapted list from WHO Support tool to strengthen health information systems
- Each assessment uses its own adapted tool



3. Debriefing meeting

- Multi-stakeholder meeting
- Review with stakeholders

4. Reporting

- One-pagers
- Reports
- Publications
- Presentations

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Population Health Information Research Infrastructure

TEHDAS
Towards European Health Data Space

EU-HIP
EU INTEROPERABILITY WITH HERA'S IT PLATFORM

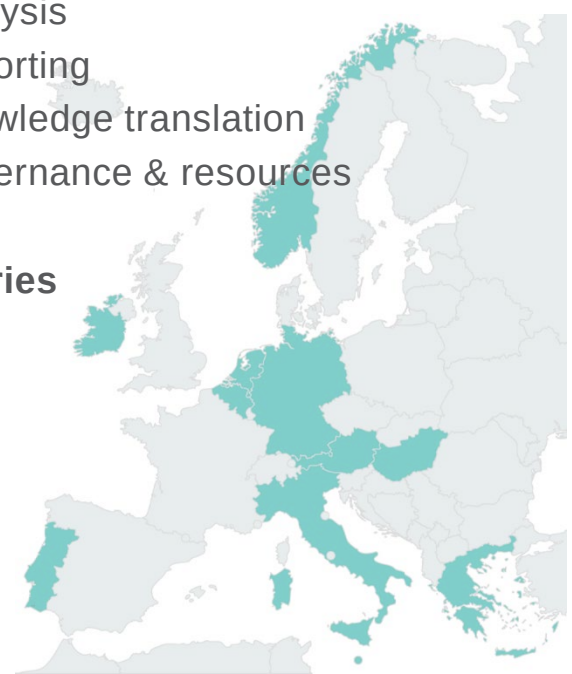
Aim

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

Scope

- Data collection
- Analysis
- Reporting
- Knowledge translation
- Governance & resources

8 countries



Example - Identified barriers

Organisational

- Paper-based records
- No unique personal ID
- Data gaps
- Communication gaps to the public
- Under estimation of the value of infodemic management

Technical

- Lack of interoperability - parallel IT systems requiring harmonization
- Inconsistent use of international standards
- Lack of automated processes for data validation, quality checks and reporting
- Barriers for secondary use of data

Legal

- Lack of preparedness plans
- Interpretations of the GDPR
- Emergency response legislations
- Need for long term monitoring and surveillance strategies

RESOURCES (Financial, Technical, Human)

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- Map the state-of-play of the national health data management systems and their preparedness to join a future European Health Data Space for secondary use (EHDS2)
- Identify needs and expectations for the EHDS of national stakeholders

Scope:

- Data collection
- Data quality
- Data storage, interoperability, access
- Data governance
- Resources and capacity
- Needs and expectations for the EHDS

12 countries

Example - Preparedness for the EHDS

- Digitalised health data (9 / 12)
- Common metadata catalogue in place or work ongoing (5 / 12)
- Universal usage of a unique personal identifier for health (10 / 12)
- Use remote secure processing environments for data analysis (8 / 12)
- Wide use of internationally recognised standards for data management (4 /12)
- Use of semantic interoperability standards, health data structure (9 / 12)
- Similar access rights for national and foreign researchers (11 / 12)
- Political will to join the EHDS (12 / 12)
- Potential national contact point for the EHDS2 already existing (3 / 12)

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EU INTEROPERABILITY WITH HERA'S IT PLATFORM

Aim

- Support countries to enhance IT systems towards interoperability with DG HERA's platform (ATHINA)
- Gain insights into functionality of digital infrastructures for crisis preparedness and response

Scope

- Digital infrastructures and systems
- Key stakeholders
- Relevant legislation

Priority areas

- Pathogens with high pandemic potential
- Antimicrobial resistance (AMR)
- Chemical, biological, radiological and nuclear (CBRN)
- Medical countermeasures (MCMs)
- OneHealth

4 countries

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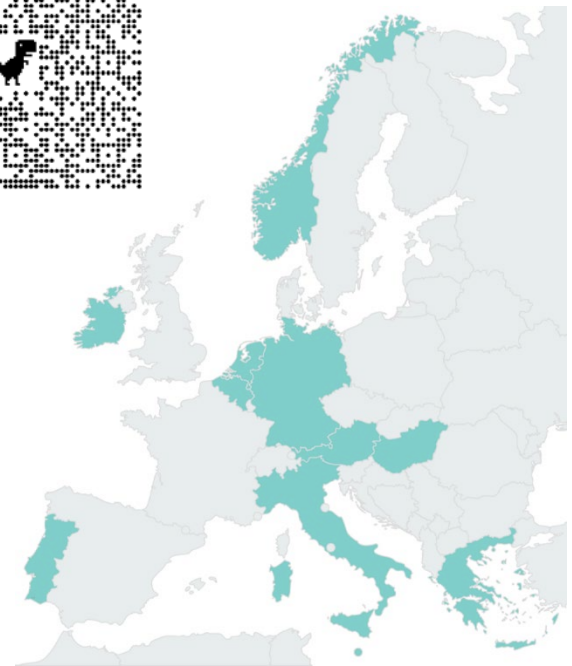

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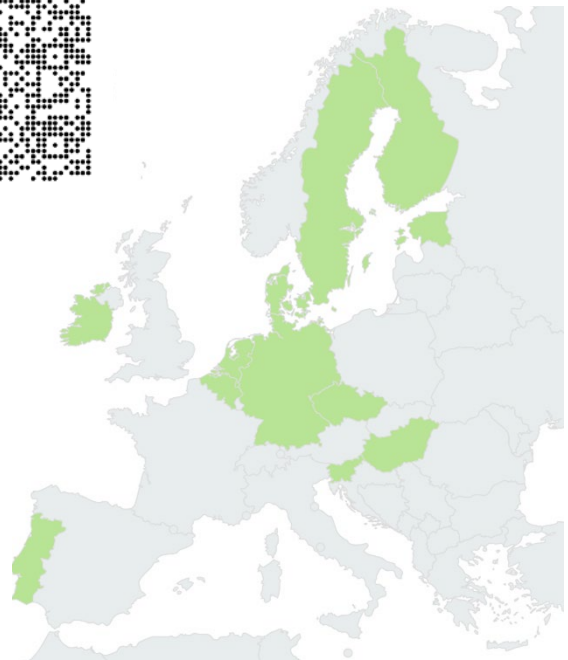

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Belgian Pandemic Intelligence Network (BE-PIN)

Aim

- Investigate how the network can be organised and set up
- Assess the needs and potential gaps for the governance of a Belgian Pandemic Intelligence Network
- Investigate structural options of such a network based on international comparison and best practices

BE-PIN

The Belgian Pandemic Intelligence Network

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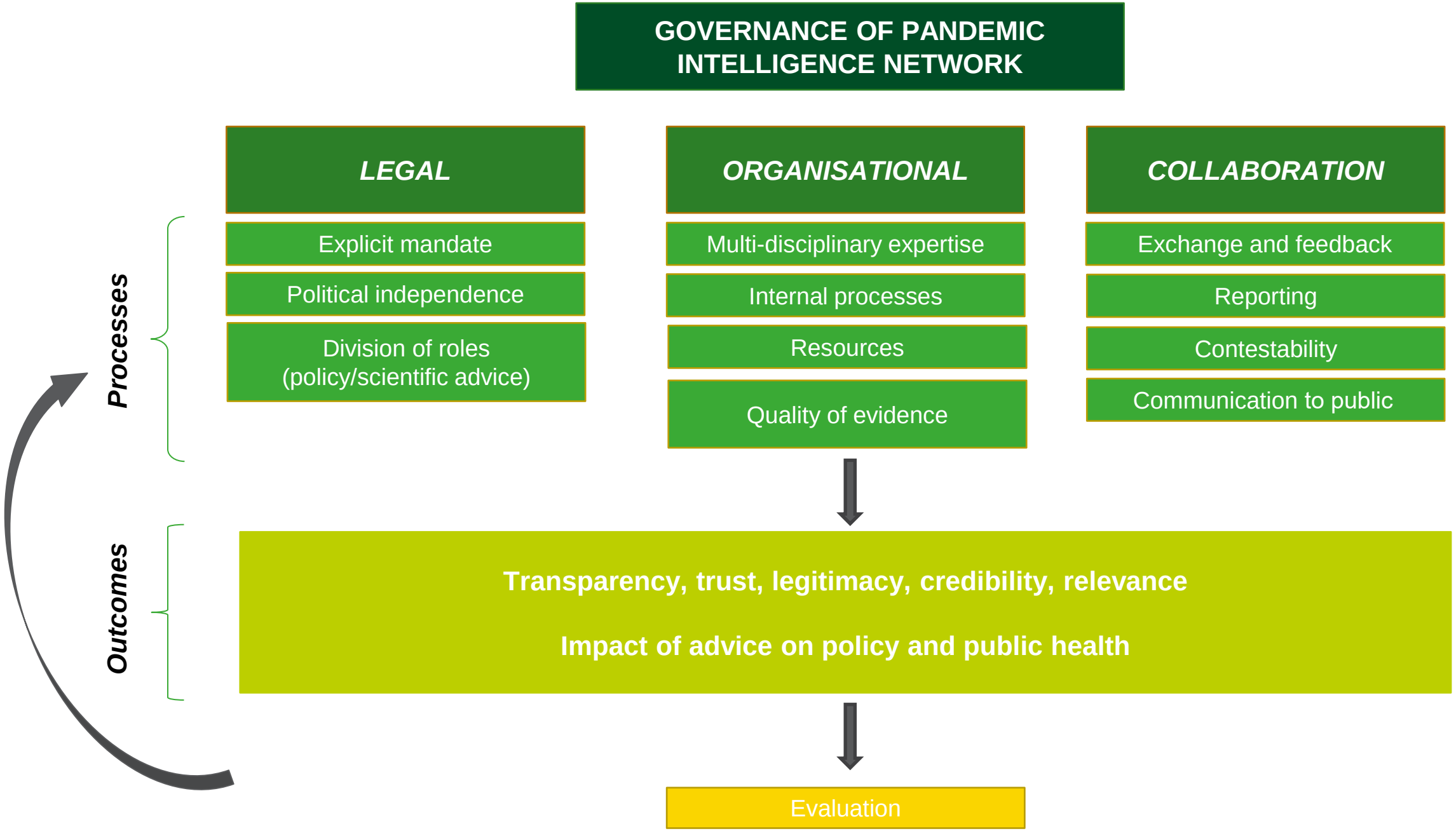

Preliminary results

Collaborations

We need stronger health information systems….

- Need of strong health information systems
- Lack of sufficiently trained workforce, especially in time of crises

…to be better prepared for the future

Reach out for:

→ *Having your country assessed*

- *Tailor assessments depending on the needs*
- *Versatile for multiple types of projects*

→ *Being trained in performing assessments*

Contact

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