



BRIDGE Health outcomes

Expert Group on Health Information 6th December

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This project is funded by
the Health Programme of
the European Union

BRIDGE Health working framework

Sustainable EU Health Information Structure

Horizontal Activities 1-6

**WP 4: European
Core Health
Indicators**

**WP 5: Health
examination
surveys**

**WP 6:
Environment and
health**

**WP 7: Maternal,
newborn, child
and adolescent
health**

**WP 8: Population
based registries**

**WP 9: Injury
Surveillance**

**WP 10:
Administrative
data on Health
Care**

**WP 11:
Integration of
health data**

**WP 12:
Evaluation of
Health Care
Systems**

WP1.

HIREP-
ERIC

Sustainable EU infrastructure

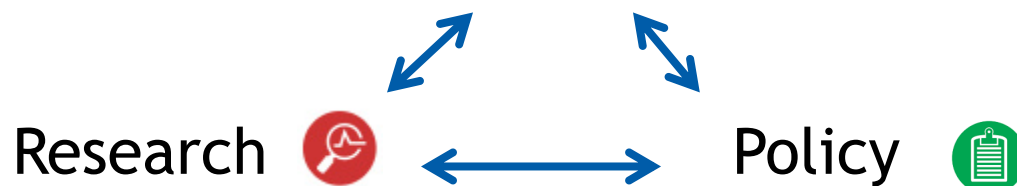
- We delivered a **concept paper and policy paper** describing the scope, tasks, activities and governance structure of a EU health information system (EU HIS);
- We proposed **structural and institutional option** for a EU HIS and supported the transition towards it; and
- Developed blueprints for **specific actions** (tasks) of a EU HIS in a Technical and scientific description of HIREP-ERIC
- See www.bridge-health.eu

WP1.





HIREP-
ERIC

Sustainable EU infrastructure: HIREP-ERIC

A European Research Infrastructure Consortium
on Health Information (HIREP-ERIC)



Core activities:

- Generate health information 
- Manage health information 
- Exchange health information 
- Translate health information 

WP1.

HIREP-
ERIC

Link InfAct



WP7: Proof of
concept of
sustainable
structure on
health
information

WP4.

Improve
indicators for
better policy

European Core Health Indicators Monitoring – ECHIM

Mapped data availability

- 2016: Data availability survey, results to be used for ECHI update / development and for capacity building in EU-MS/EEA and associated countries

Evaluated ECHI policy relevance

- 2017: Mapping of policy focus, balance and appropriateness of the ECHI indicator approach, improving ECHI shortlist use for stakeholders and for comparative EU-wide monitoring and evaluation of population health and health systems performance

Engaged experts

- Established and consulted groups of experts on national / international health indicator issues (Expert group on national health indicator implementation /EG-NHII - 2 meetings // Advisory core group (ACG) - 1 video meeting, 1 joint meeting with EG-NHII)

Designed ECHI indicator repository

- Concept for a web-based single point of entry to easily accessible information on ECHI, promoting ECHI visibility, use and exchange of expertise, under sustainable governance.

Published results as project reports and submitted article to Archives of Public Health

WP4.

Improve
indicators for
better policy

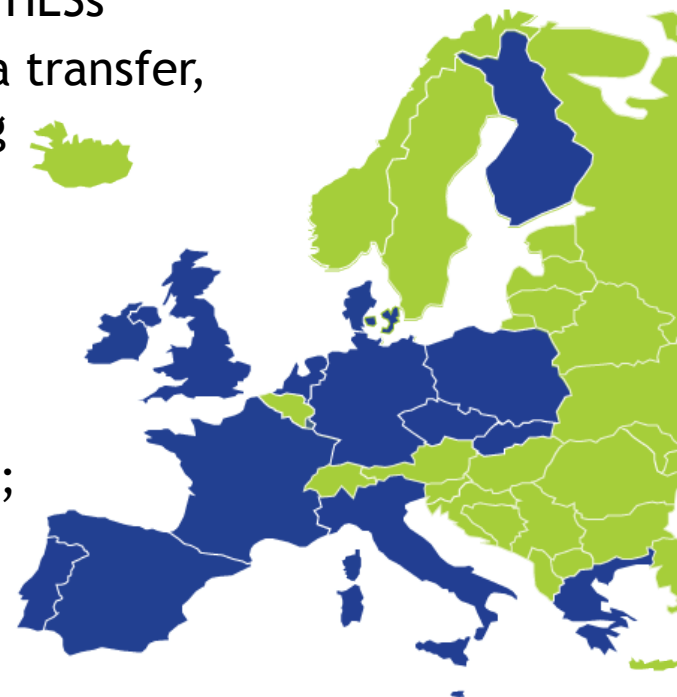
European Core Health Indicators Monitoring – ECHIM



InfAct WP8 Task 2: This task investigates the sustainable use(ability) of the ECHI-shortlist and its future implementation and alteration process (Lead: RIVM)

Harmonized population based health examination surveys (EHES)

- EHES **Manuals and related training materials** were updated and extended.
- **Reports** on
 - Inequalities in health information
 - Action to enhance the organization of national HESs
 - Blueprint for further development of EHES data transfer, management, quality assessment and reporting systemswere prepared.
- EHES **website** (<http://www.ehes.info>) was updated to have
 - Manuals and reports under publications section;
 - more information on previous national HESs, included measurements and their protocols.



WP5..

Better standards
for objective
health measures

Harmonized population based health examination surveys (EHES)



InfAct WP6:
tackling health
information
inequalities

Bringing
countries at the
same level on
the long run.

WP6.

Impacts of environmental chemicals on health (COPHES/DEMOCOPHES/ENRIECO)

Enhance
awareness
about the
importance

1. **Inventory of HBM programmes (cross-sectional and birth cohorts)** and summary of potential of HBM for information on impacts of environmental stressors on population health
2. **Analysis of** environmental and
3. **Overview of HBM approaches and data collections** in HBM, indicators, reports (WP7, WP8), and HES
4. **Roadmap for better reporting** on impacts of environmental chemicals on health in HI

HBM4EU project
InfAct: Collaborative stakeholder

Need an EU
observatory of
child health
research

Maternal, newborn, child and adolescent health (Euro-Peristat, Riche, Chicos)

The Euro-Peristat network:

- expanded to 31 member countries (+Bulgaria and Croatia)
- new data transfer protocol created and tested for core indicators of perinatal health in 2015
- knowledge generated and disseminated (11 publications; 8 international conferences)
- stakeholder links reinforced (conference with >60 attendees and new tri-annual newsletter to >2000 subscribers)



RICHE and CHICOS:

- updated participation in, content of, and dissemination of inventories
- developed a plan for a shared virtual child health observatory

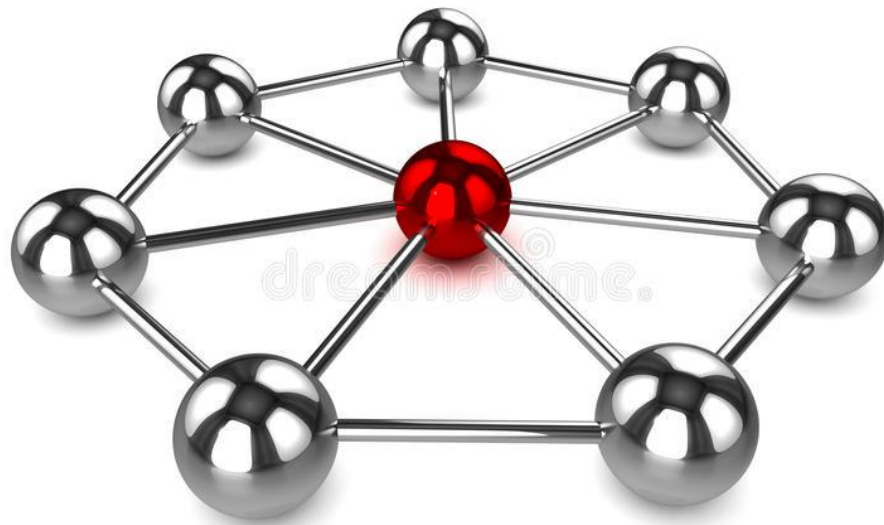
Identified needs for child health data by professionals and policy makers across Europe

Identified underutilized maternal and child health data in other BRIDGE health domains

WP7.

Need an EU
observatory of
child health
research

Maternal, newborn, child and adolescent health (Euro-Peristat, Riche, Chicos)



InfAct WP7.1 Develop selection criteria for networks → Networks are the foundation of the HIREP-ERIC

Population based registries

- A network of experts of population-based registries was consolidated for monitoring time trends and geographical gradients of major chronic diseases within countries and across Europe
- A Community of Practice was created to interact and communicate
<http://wp8community.bridgehealth.eu/login/index.php>
- Registries of high-impact diseases or specific conditions which provided any indication on methodology applied to favour sustainability and implementation of a population-based registry were gathered
- A step-wise procedure has been identified to implement population-based registries aimed at producing disease occurrence and health care indicators
- Guidelines for training personnel including simple recommendations to implement and improve quality assessment methods are available at <http://www.cuore.iss.it/eng/bridge/default.asp> and at <http://www.hirs-research.eu/eubirod.html>

Manual of operations - Step-wise procedures for setting up a registry

- Formulate the purposes
- Define target and size population, events, data sources and time needed to answer specific questions
- Validate the routine databases
- Perform a pilot study
- Carry out record linkage of data bases
- Set up the registry
- Validate a random sample of events
- Assess indicators
- Disseminate results

Promote good
quality registries
and guidance for
implementation

Population based registries

InfAct

- WP8: Application in FAIR and INSPIRE
- WP9: optimise use of population registries through linkage and other indicators.
- WP10: integration in eHealth through case studies

WP9.

Support IP
research and
policy
development

Injury Surveillance

- Data on incidence and burden from 19+ countries, published to 2014
- Opportunities to expand (e.g. hospital discharge, child specific metrics, DALYs by subgroup)
- Contribute data towards **ECHI29b** and ECHI30b
- Data handling methods and tools could be **extended** to other diseases and conditions
- **Methodology manual**, Minimum (MDS) and Full (FDS) **data dictionaries** updated and available
- Rigorous **quality checks**, ensuring consistency across participating countries
- Tools also designed to facilitate **skills transfer** to MSs and production of national statistics
- Annual **training events for all MS staff provided**; 26+ countries attend

EuroSafe website: HLSS stats



<http://www.eurosafe.eu.com/home>

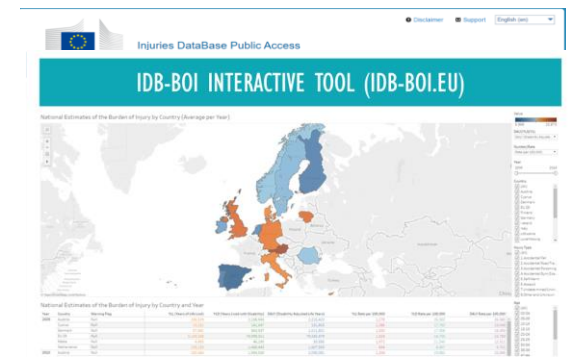
FDS Restricted Access

Injuries in the EU Report



IDB clearing house service

IDB Webgate (public access)



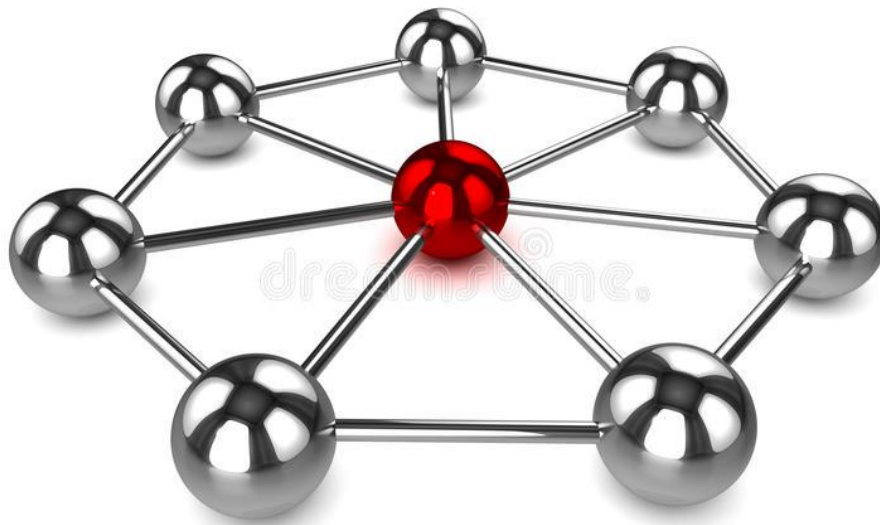
<https://idb-boi.eu>

Interactive Burden of Injury Tool

WP9.

Support IP
research and
policy
development.

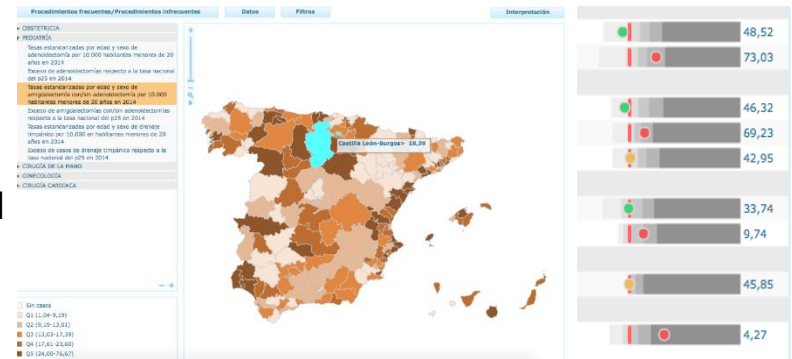
Injury Surveillance



InfAct WP7.1 Develop
selection criteria for
networks → Networks are the
foundation of the HIREP-ERIC

Administrative data on Health Care

1. The **mapping out exercise** elicited the potential of existing datasets to evaluate health care performance; however, international data sharing may be a big hurdle to do international comparison.
2. A **meaningful minimum common dataset** has been identified. Although there are some gaps, the information routinely collected may eventually allow cross-national health care performance assessment at meaningful levels of analysis
3. After harmonizing the original sources, building a **final data infrastructure** fed with data from **Denmark, Portugal, Slovenia and Spain**, a set of **performance indicators** are being produced, covering several care domains:
 - cardiovascular care
 - orthopaedic care
 - low-value surgical procedures
 - potentially avoidable hospitalizations and
 - quality and safety events.

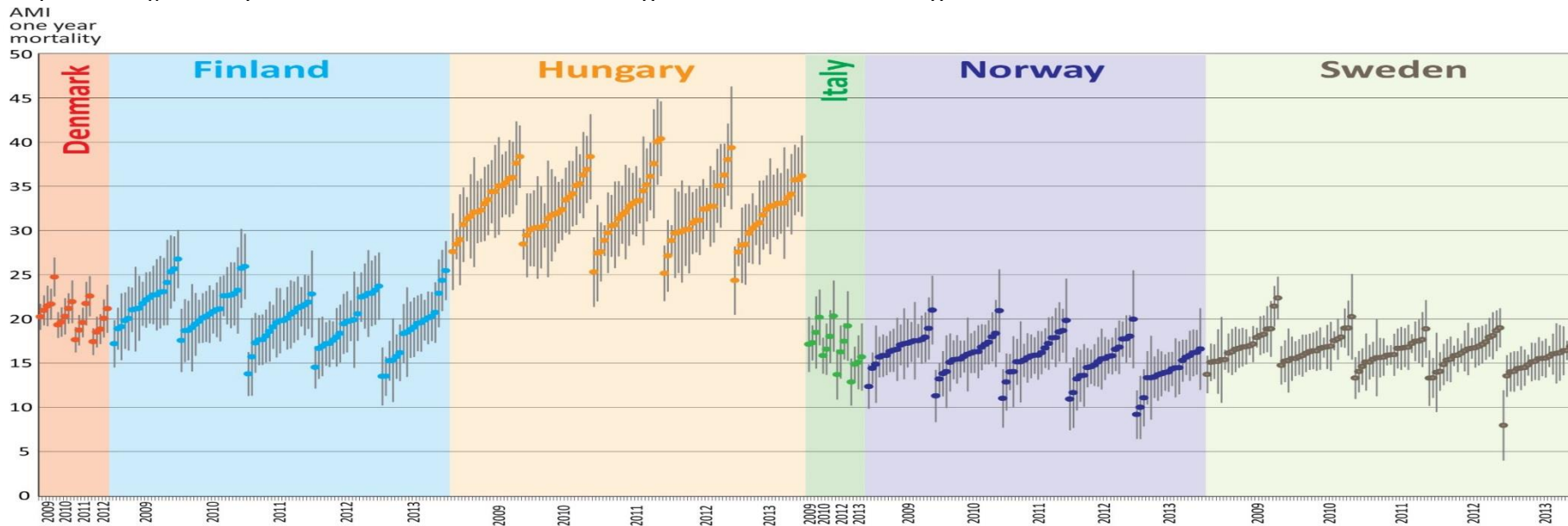


Develop coherent methods to integrate disjoint datasets

Integration of approaches for health monitoring and reporting – EuroHOPE

- Further development of the research infrastructure based on **register linkages**
- Comparison of **feasibility and quality** of performance information and assessment of **legal issues** related to the approaches
- **Data linkage infrastructure** capable of securely and safely managing health information from around the EU

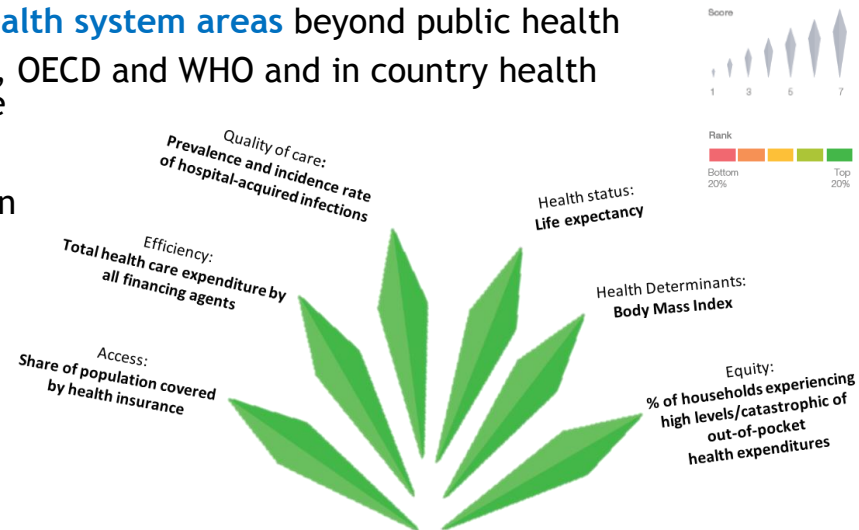
Example of the results: One-year mortality of hospitalised new AMI patients by region in Denmark, Finland, Hungary, Italy (four provinces), Norway and Sweden from 2009 to 2013. Age and sex standardised figures and their 95 % confidence intervals.



Derive „headline“ indicators, their criteria for policy relevance

Evaluation of Health Care Systems

- Established **BRIDGE Health HSI TF**: Health System Indicator Tasks Force to harmonize indicator documentation standards and needs with ECHIM / WP 4 partners, and officials from EC, OECD and WHO-EURO; 3 meetings (Nov 15, Feb and Oct 16)
- Appraises **health system performance (HSP) reports in Member States** at EU and international level
- Establishes an **inventory of 2168** health and health system indicators by organising indicators used in 43 performance reports
- Surveys the relevance of HSP indicators in performance domains and the importance of their information content (european Health System_Indicators - **euHS_I - survey**)
- Proposes a **set of headline** HSP indicators for the first time
- Highlights the **importance** of indicator development in **health system areas** beyond public health
- Suggests that **headline indicators** are **marked** in Eurostat, OECD and WHO and in country health profiles like the ‘State of Health in the EU cycle’ initiative
- Summarizes **priority setting** methods in health information
- Disseminates **3 papers**
 - **Health system performance assessment landscape at the EU level: A focused synthesis of actors and actions.** 2017, *Archives of Public Health*, 75 (5)
 - **Headline indicators for monitoring the performance of healthcare systems: Findings from the european Health Systems_Indicator (euHS_I) survey.** *Forthcoming, AOPH*
 - **Headline indicators for structured monitoring of health system performance in Europe.** *EuroHealth Dec 2017*



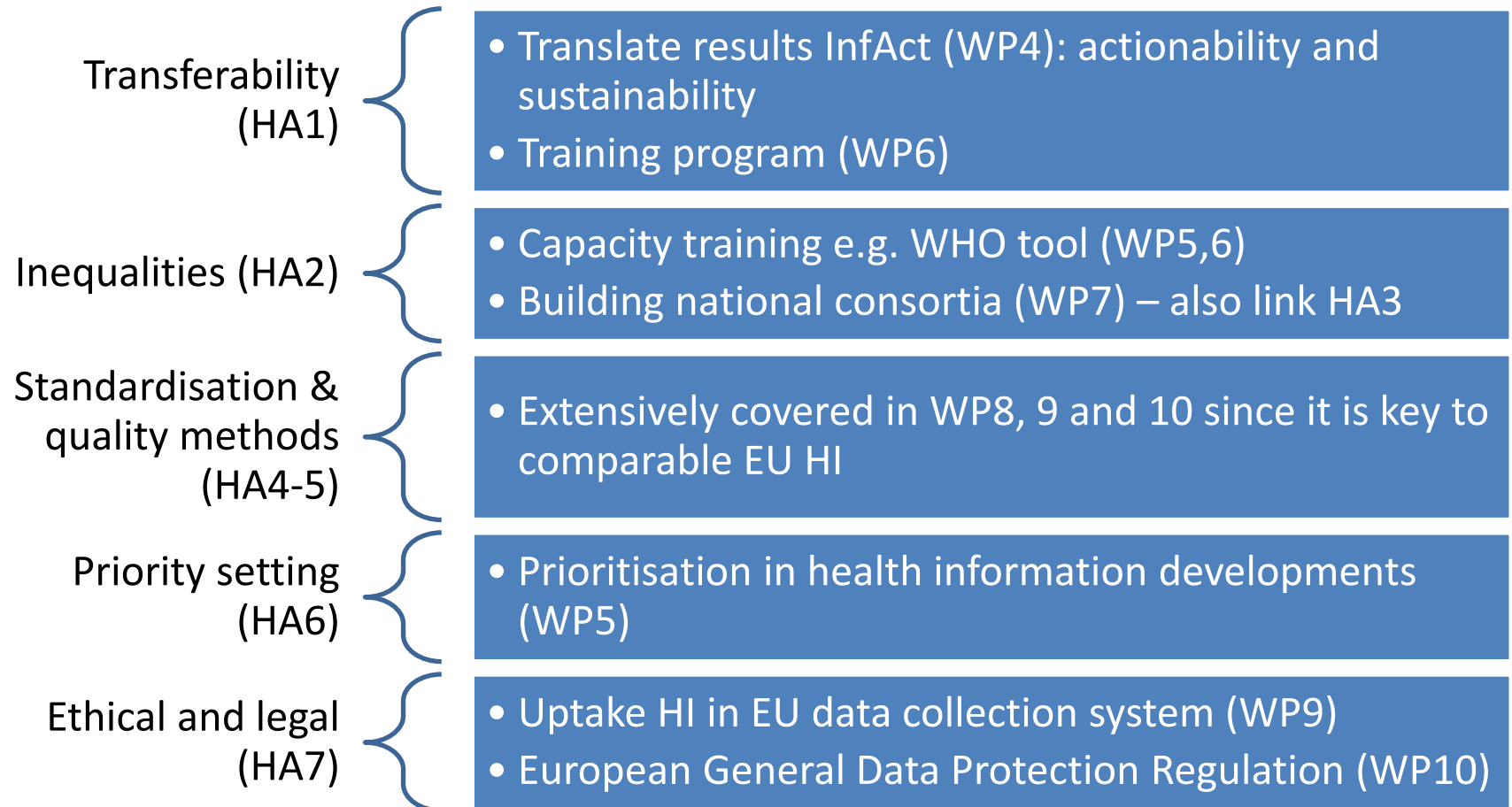
Link with InfAct



BRIDGE Health
WP10, 11 & 12

- WP8 Task 1. Generating knowledge on data collection methods, and availability and accessibility of health information
- WP9 Task 2. Develop and propose methods, best practices and standards from new data sources in addition to health data from registries, death certificates and surveys (EHIS, SILC
- WP9 Task 4. Development of composite indicators to a) monitor the burden of disease at population level and b) monitor the health system
- WP10 Task 1. Mapping exercise: identification of inspirational experiences

Continuity of Horizontal Activities in InfAct





An overview of achievements

- 🎯 Existing networks were strengthened and a model was developed on how networks can function in a EU HIS, e.g. ECHIM, EHES, Euro-Peristat, IDB
- 🎯 Health information quality and equality was improved through work on tools (manuals and training materials) and methods
- 🎯 Indicators were updated, e.g. ECHI, ECHO, EuroHOPE, Euro-Peristat and a framework of a health system indicator repository established, euHS_I survey
- 🎯 Knowledge on health and health care was generated (scientific publications, workshops)
- 🎯 Research potential and link to policy was presented
- 🎯 Links were made across health domains, *although more work to integrate across projects is needed*
- 🎯 Pragmatic solution for setting up a sustainable health information system: HIREP-ERIC



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InfAct: Joint Action on Health Information

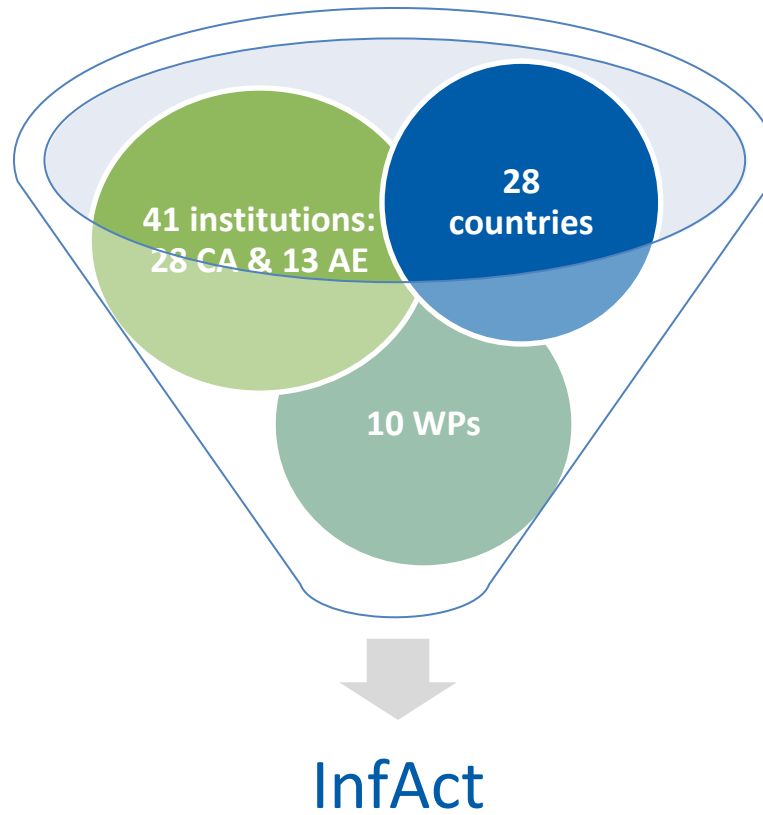
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InfAct constitution



Sustainable solid infrastructure on EU Health Information to improve availability of comparable, robust and policy-relevant health status data and health system performance information.

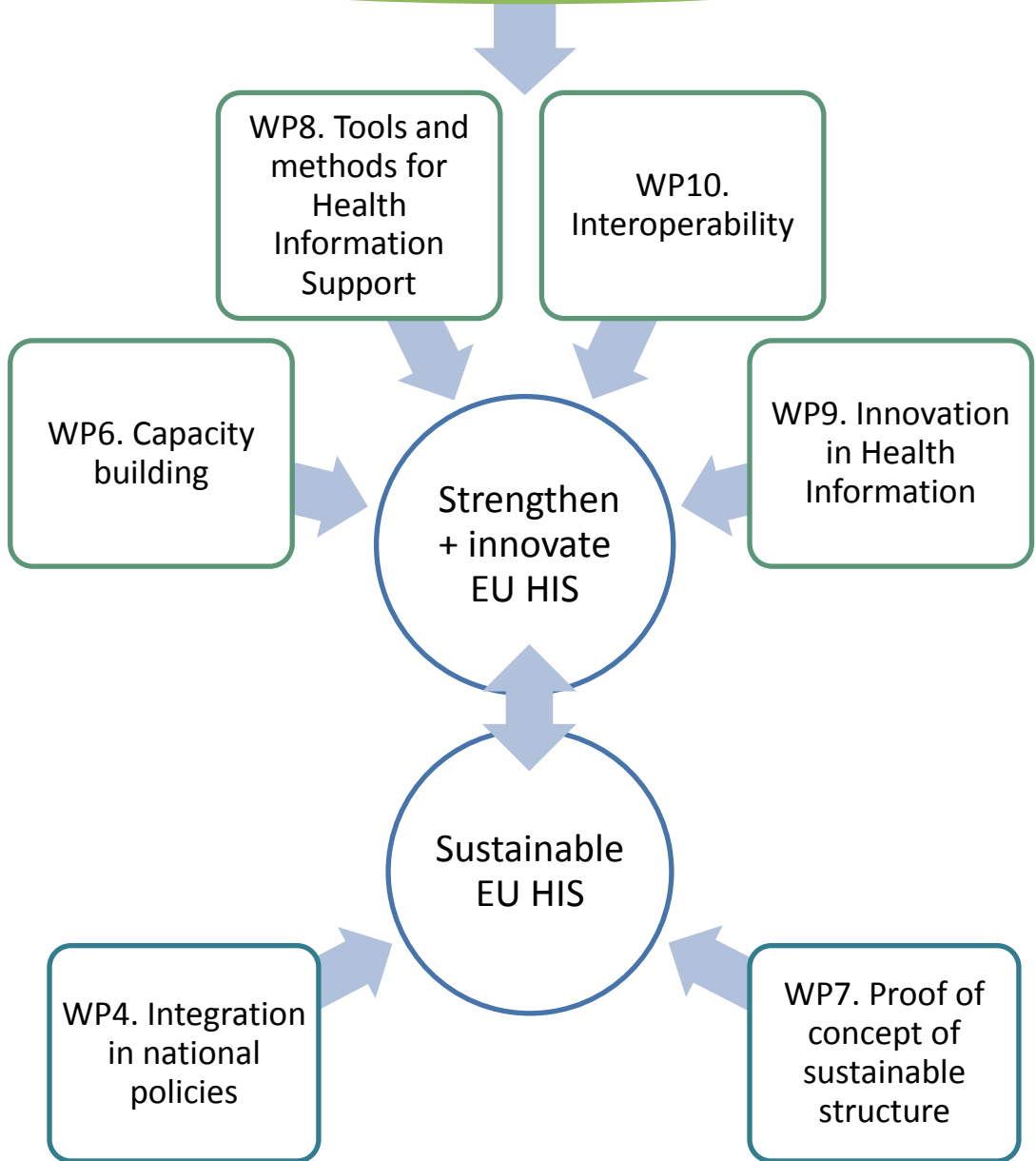
Specific objectives

1. To prepare MS for the start of the HIREP-ERIC (ERIC on Health Information for Research and Evidence-based Policy) → sign memorandum of understanding
2. To reduce the health information inequality between and within EU MS
3. New methods of understanding and targeting health information

Participating countries

- 28 participating countries:
Austria, Bosnia Herzegovina, Belgium, Croatia, Cyprus, Czech Republic, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovenia, Spain, Sweden, United Kingdom
- Collaborating countries
Bulgaria, Iceland, Denmark, Slovakia and Switzerland
- 3 years with budget of €4 million EU co-funding

WP5. Status of health information systems in MS and regions



- WP1-3: Coordination, dissemination and evaluation
- Management of the action, disseminate its activities to the target audience and evaluate the action (internal, external evaluation and impact assessment)

WP4 Integration in national policies and sustainability



Activities

- Support countries to implement activities and results from Joint Action.
- Inform policies with relevant and comparable information.
- Guide public health research in support of public health policy needs.

Outcomes: Assembly of Members, fact sheets, 2 workshops, sustainability plan

- Lead: Spain
- Co-lead: France

WP5 Status of health information systems in MS and regions

Activities:

- Map and assess health information systems (WHO toolkit): peer-review.
 - Create the information base in which stakeholders can find and contact international expert networks, projects and indicator collecting bodies regarding comparable health data on public health issues or health system performance; collaborate with WHO/Euro and OECD in reducing reporting burden.
 - Engage in prioritisation of health information developments.
-
- Lead: Germany
 - Co-lead: Malta



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WP6 Strengthen EU countries health information capacity

- Aim: Capacity strengthening baseline program in population monitoring and health system performance assessment
- Activities
 - Summarize current programmes
 - Design program
 - Evaluate program
 - Roadmap for sustainable program
- Lead: Portugal
- Co-lead: Finland



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WP7 Proof of concept of sustainable structure on health information

Activities

- Develop national and domain specific networks
 - Develop business case and roadmap for implementation of ERIC
 - Develop governance structures
 - Health Information web platform
-
- Lead: Belgium
 - Co-lead: Netherlands

WP8 Tools and methods for health information support

Activities

- Provide overview of data collection methods and procedures for input in web based platform
 - Sustainability of ECHI-shortlist
 - Best practices in accessibility, availability and reporting in health information
 - Coordinate networks of experts
-
- Lead: Italy
 - Co-lead: Netherlands, Slovenia



This project is funded by the Health Programme of the European Union

WP9 Innovation in health information for public health policy development



- Identify and share best practices on emerging indicators, sources of data and modelling techniques
- Develop and propose new methods on emerging indicators and sources of data.
- Apply best practices
- Develop composite indicators (BoD and HSPA)
- Uptake of data in the regular EU data collection system.

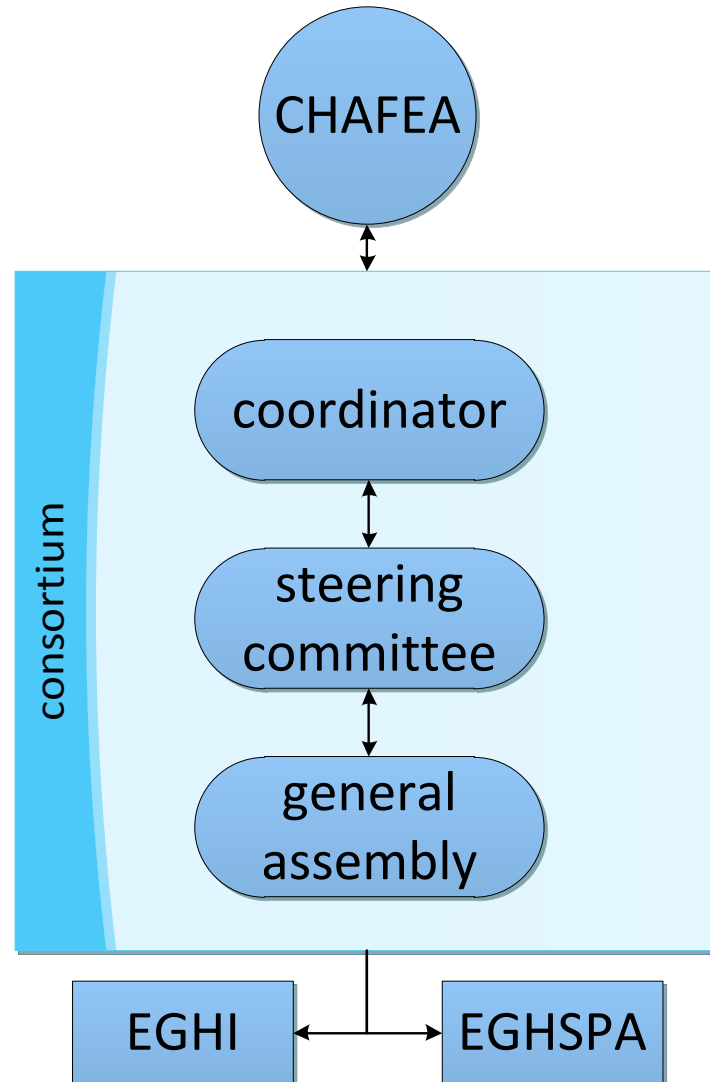
- Lead: France
- Co-lead: Lithuania

WP10 Interoperability of health information systems and supporting digital assets

- Identify inspirational cases
- Map legal and organisational interoperability
- Map semantic and technical interoperability
- Empirical studies

- Lead: Croatia
- Co-lead: IACS Spain

Governance Structure



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