

# BRIDGE Health outcomes

Expert Group on Health Information 6th December

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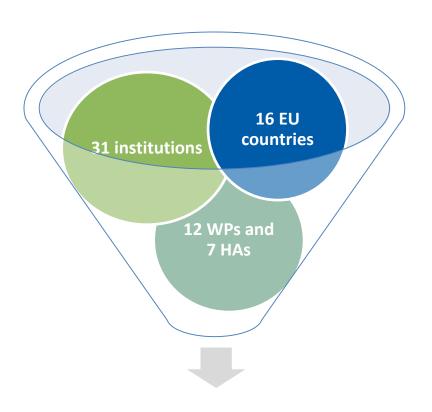
www.bridge-health.eu



### **BRIDGE Health activities**

- We promoted sustainability of past EU investments in health information by proposing a sustainable structure
- We enhance synergy across existing health information activities
- We improved health information by finding solutions for
  - enhancing its transferability and use
  - reducing health information inequality
  - promoting information on inequalities and specific population groups
  - developing indicator standards, common methods and tools to enhance cross-country comparison of health and health systems

# Bridge Health constitution





# BRIDGE Health working framework

### Sustainable EU Health Information Structure

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

Horizontal Activities 1-6



## 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 <u>www.bridge-health.eu</u>









## 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 🥝

### How?

- Operates under strict Member State governance
- At the core of health information in the EU
- Benefit from relevant EU funding opportunities at a relatively low cost to its members
- Functions as a house of network linking networks
  - Member States = national node
  - Research = domain specific node









# What is next?





# **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



# 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 systems

were prepared.

- EHES website (<u>http://www.ehes.info</u>)
   was updated to have
  - Manuals and reports under publications section;
  - more information on previous national HESs, included measurements and their protocols.





about the importance

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

- 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 for gaps and potential for using HBM data and environmental health information in HIS
- 3. Overview on similarities and differences between approaches and data collections in HBM, indicators, registries (WP7, WP8), and HES
- 4. Roadmap for better reporting on impacts of environmental chemicals on health in HI





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 counties (+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 triannual 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









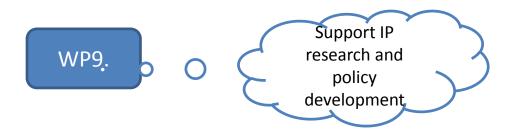
Promote good quality registries and guidance for implementation

# **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 <a href="http://wp8community.bridgehealth.eu/login/index.php">http://wp8community.bridgehealth.eu/login/index.php</a>
- 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 <a href="http://www.cuore.iss.it/eng/bridge/default.asp">http://www.cuore.iss.it/eng/bridge/default.asp</a> and at <a href="http://www.hirs-research.eu/eubirod.html">http://www.hirs-research.eu/eubirod.html</a>

# 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



## **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



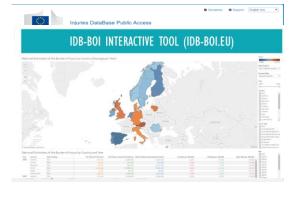
http://www.eurosafe.eu.com/home

## Injuries in the EU Report



https://idb-boi.eu

### IDB Webgate (public access)



Interactive Burden of Injury Tool

FDS Restricted Access

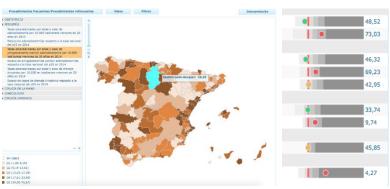
IDB clearing house service

WP10.

Provide guidance for a common dataset using patient-level data

### **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.

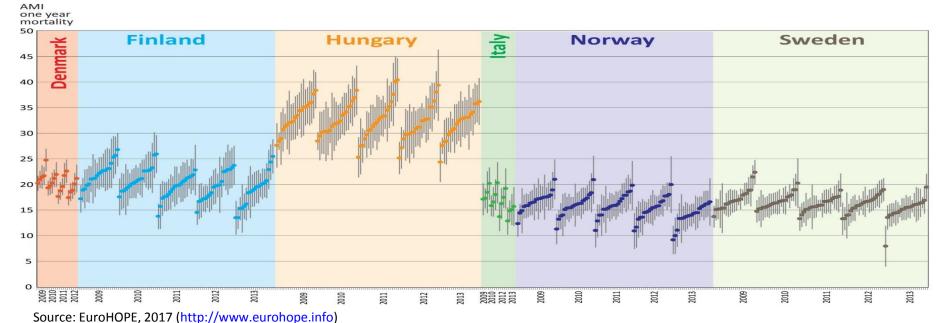


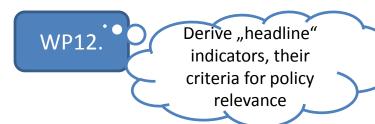
Develop coherent methods to integrate disjoint datasets

# 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.





# **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



# Key recommendations Optimize existing achievements

- A sustainable process is needed to ensure ECHI is technically up-to-date, policy relevant and usable; the may be facilitated by an ECHI web space (WP4)
- Central coordination of the supporting actions for the organization of national HESs is needed (WP5)
- Population based registries are extremely useful, but require considerable resources, high costs and efforts, to be implemented and maintained (WP8)
- Resources are needed to ensure routine reporting and analysis of maternal and newborn health within the Euro-Peristat network (WP7)
- Continued and enhanced injury surveillance essential for supporting national and EU policies (WP9)

# Key recommendations (2) Make best use of knowledge and expertise

- Recognise the need to include information on environmental health in HIS aligning with Agenda 2030; SDG3. (WP6.)
- Health data infrastructure (HDI) curators on routinely collected data need to ensure comparability through harmonization and standardization. (WP10.)
- Linked individual level health care data can be used safely to improve patients' health outcomes, the quality and the performance of health care systems. (WP11.)
- Highlight headline indicators in respective international databases to ensure guidance on policy relevance and standards for cross-country comparisons and use Health Data Navigator to facilitate a ERIC-HIREP. (WP12.)

# 2. HA achievements





# Horizontal activities reports

#### **Horizontal Activities**

- 1) Transferability of health information and data for policy
- 2) Health information inequality within the EU and within MS
- 3) Information at regional level (ECHI indicators, health inequalities) and for specific population groups
- 4) Standardisation methods of the collection and exchange of health information
- 5) Data quality methods including internal and external validation of indicators
- 6) Priority setting methods in health information
- 7) Ethical and legal issues in health information

Reports are available on the website: www.bridge-health.eu





## 3. Coordination achievements

- 7 Steering Committee Meetings
- 2 General Assemblies
- Final Meeting: Health information in the EU the ERIC as a tool
- Visibility though conferences:
  - European Public Health Conference 2015-2017
  - European Health Forum Gastein 2015-2017





## 3. Coordination achievements

- Interaction with stakeholders for the ERIC
  - 2 Meetings with IANPHI
  - 2 National Public Health Institute consultation meeting
  - Presentation at Working Party of Public Health at Senior Level at Council
  - Various meetings with Expert Group on Health Information and one jointly with Expert Group on Health System Performance
  - 8 meetings with drafting group for the ERIC
  - → First final draft of Technical and Scientific Description on ERIC and statutes are finalised.





## 3. Coordination achievements

- BRIDGE Health interactions with EU institutions
  - DG JRC -Joint Research
  - DG ESTAT Eurostat
  - DG SANTE Health and Food Safety
  - DG RTD Research and innovation
- International organisations
  - OECD Organisation for Economic Co-operation and Development
  - WHO Europe World Health Organisation
    - Interaction with the European Health Information Initiative (2 F2F +2 TC)
  - European Observatory for Health systems and Policies







# 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 in needed
- Pragmatic solution for setting up a sustainable health information system: HIREP-ERIC



# www.bridge-health.eu

