BRIDGE Health WP achievements

Health information in the EU - the ERIC as a tool
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BRIDGE Health
aims for topic-specific work packages

- Promote sustainability of past EU investments in health information
- Enhance synergy across existing health information activities
- Continue to work on improving health information
  - enhance its transferability and use
  - reduce health information inequality
  - promote information on inequalities and specific population groups
  - develop indicator standards, common methods and tools to enhance cross-country comparison of health and health systems
Participating projects and networks cover key areas of health and care

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

Patient-centric / population based
Patient-centric / trans-institutional
Mapped data availability
- Survey performed in 2016, results submitted as technical report
- Expert meeting planned in May 2017 to review of ECHI selection criteria, update requirements, work flows/procedures

Evaluated policy relevance of ECHI shortlist approach
- Online-survey closed, analysis underway, discussion of results in May 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.

Designed ECHI indicator repository
- Concept for content, structure and functionalities finalized, to be presented and discussed at expert meeting in May 2017
  - Provide access to ECHI-related (meta-) information for researchers, policymakers and the interested public; would include definitions, operationalizations, quality, availability and purpose of indicators, ...
  - Create long term institutional memory in the form of a sustainable web-based repository as a first step, possibly expanded by interactive interfaces
Harmonized population based health examination surveys (EHES)

- EHES Manuals were updated and published in December 2017. Freely available through EHES web site at [http://www.ehes.info](http://www.ehes.info)
- Related training material is been updated will be published by October 2017
- Site visits to national HESs have been conducted in 2016-2017
- Central coordination for the organization of national HESs which needs to be maintained
1. **Inventory of HBM data** and summary of potential of HBM for information on impacts of environmental stressors (chemicals) on population health

2. **Gap analysis** for using HBM data and environmental health information in HIS

3. Overview on **similarities and differences between existing** data collections (HBM, indicators (WP4) and registries (WP7, WP8) - including personal and population data

4. Summary of the **potential of recent research** (Omics, modelling)
Maternal, newborn, child and adolescent health *(Euro-Peristat, Riche, Chicos)*

- The Euro-Peristat network was strengthened:
  - Expanded to Bulgaria and Croatia to attain 31 member countries
  - Tested new data transfer protocol to improve quality
  - Produced new research on maternal and newborn health: 9 scientific publications/6 international conference presentations
  - Reinforced links with stakeholders through a conference with >60 European actors in April 2016 and a new tri-annual newsletter to >2000 contacts.

- RICHE/CHICOS updated the content and dissemination of their inventories; developed a shared research inventory

- Identification of maternal and child health data in other BRIDGE health projects
Population based registries

Steps for planning a population based registry:
• formulate the purpose(s)
• determine if a registry is the appropriate tool
• identify the stakeholders interested in the research question
• assess the feasibility
• build and train the team
• establish a governance
• define the duration, costs, clinical data needed
• define the data set, events, size and target population under surveillance
• establish the appropriate record linkage, quality and validation methods
• establish the data processing methods for computing indicators
• develop the protocol and the manual of operations
• plan the dissemination of results

Steps for setting up a registry:
• define the target population and the data sources
• validate the routine databases
• perform a pilot study
• carry out record linkage of data bases
• set up the population-based registry
• validate a random sample of events
• assess indicators
• disseminate results
- New opportunities to expand IDB (e.g. hospital discharge, child specific disability weights, enhanced DALY tool)
- Contribute data towards ECHI29b and ECHI30b
- Data handling methods and tools could be extended to other diseases and conditions

**IDB Manual**, MDS and FDS data dictionaries, annual training events and rigorous quality checks, ensure consistency across participating countries

*EuroSafe website: HLSS stats*

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

*Injuries in the EU Report*

IDB Webgate (public access)

https://webgate.ec.europa.eu/idb/public-access/

Interactive Burden of Injury Tool (in development)
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.
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.

Source: EuroHOPE, 2017 (http://www.eurohope.info)
Evaluation of Health Care Systems

- Established **BRIDGE Health HSI TF**: Health System Indicator Tasks Force to harmonize indicator documentation standards and needs
  - ECHIM / WP 4 partners
  - officials from EC, OECD and WHO-EURO
  - 3 meetings (Nov 15, Feb and Oct 16)
- Paper in AOPH on **mapping HSPA actors and actions** at the EU level
- Prepared a **list of 2148** health and health system indicators in **46 initiatives** at EU, OECD, WHO and Member States level
- Technical **report on priority setting** methods in health information
- Developed and launched european **Health System_Indicators (euHS_I) survey** 1st wave - list of 361 indicators: May - September 2016
  - 2nd wave - list of 95 indicators: March - April 2017 → **Your input will be highly appreciated!**
An overview of achievements

- Existing networks were strengthened and expertise was maintained, e.g. ECHIM, EHES, Euro-Peristat
- Health information quality and equality was improved through work on tools (manuals and training materials) and methods
- Indicators are being 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)
- Links were made across health domains, although more work to integrate across projects is needed
- These achievements constitute low-hanging fruits for an ERIC or another European health information system
Key recommendations
Optimize existing achievements

• Priority should be attached to **creating a sustainable web-based repository for ECHI** as a first step, possibly expanded by interactive interfaces. *(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.)
How to bring everything together?
A stylized view of an ERIC storehouse

The HealthDataNavigator as a nucleus of an ERIC storehouse?

Link to ERIC storehouse or similar

eg.
ECHI
EHES
euHS_headline indicators

Data & indicators

Surveys

HSPA framework and dimensions
(also by disease area & care sector)

Health system profiles

Projects

EC / OECD / OBS / WHO-EUR Performance assessment

Link to ERIC storehouse or similar

Source: @BRIDGE Health WP 12
Thank you for your attention