



# Platform on administrative data meant to evaluate health care

Milan, 2015 17th October

Enrique Bernal-Delgado on behalf of WP#10 team  
**[ebernal.iacs@aragon.es](mailto:ebernal.iacs@aragon.es)**



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



**ABOUT** ▾ **PARTNERS** **TOOLS** ▾ **PUBLICATIONS** ▾ **NEWS & EVENTS** ▾ **CONTACTS**

## ... What is the ECHO Project?

The **European Collaboration for Health Optimization** (ECHO) project is an international effort to bring together the hospital databases of several European countries and make the data available via an online summary tool.



... [Continue reading](#)

### ECHO Tool



The ECHO Tool will process data from several countries in the EU, making it accessible for scientists and health policy makers.

[read more on ECHO Tool](#)

### e-HANDBOOK



This manual aims at describing the methods and techniques used in the ECHO Project, unifying methods...

[more info on the e-HANDBOOK](#)

### ECHO Publications



The Atlas of Variations in Medical Practice is a specialist publication aimed specifically at clinicians, managers and health policy.

[more about ECHO Publications](#)

### MOVING FORWARD



The ECHO team has joined efforts with other EU projects to design a European Health Information System.

[more about BRIDGEHealth](#)



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

- ECHO employs **routinely collected administrative data** - hospital discharges, demographic and socioeconomic data, supply features.
- ECHO has set about the task of bringing together **patient-level data** from *Austria, Denmark, England, Portugal, Slovenia and Spain*, making them **comparable** - 200 million episodes, 922 health care areas and 850 hospitals.
- ECHO is expanding the usual approach in healthcare performance international comparison (built upon average values and average benchmark), adding **variation within and across** countries.
- Unwarranted variation is shown for a variety of **comparable performance indicators** ...

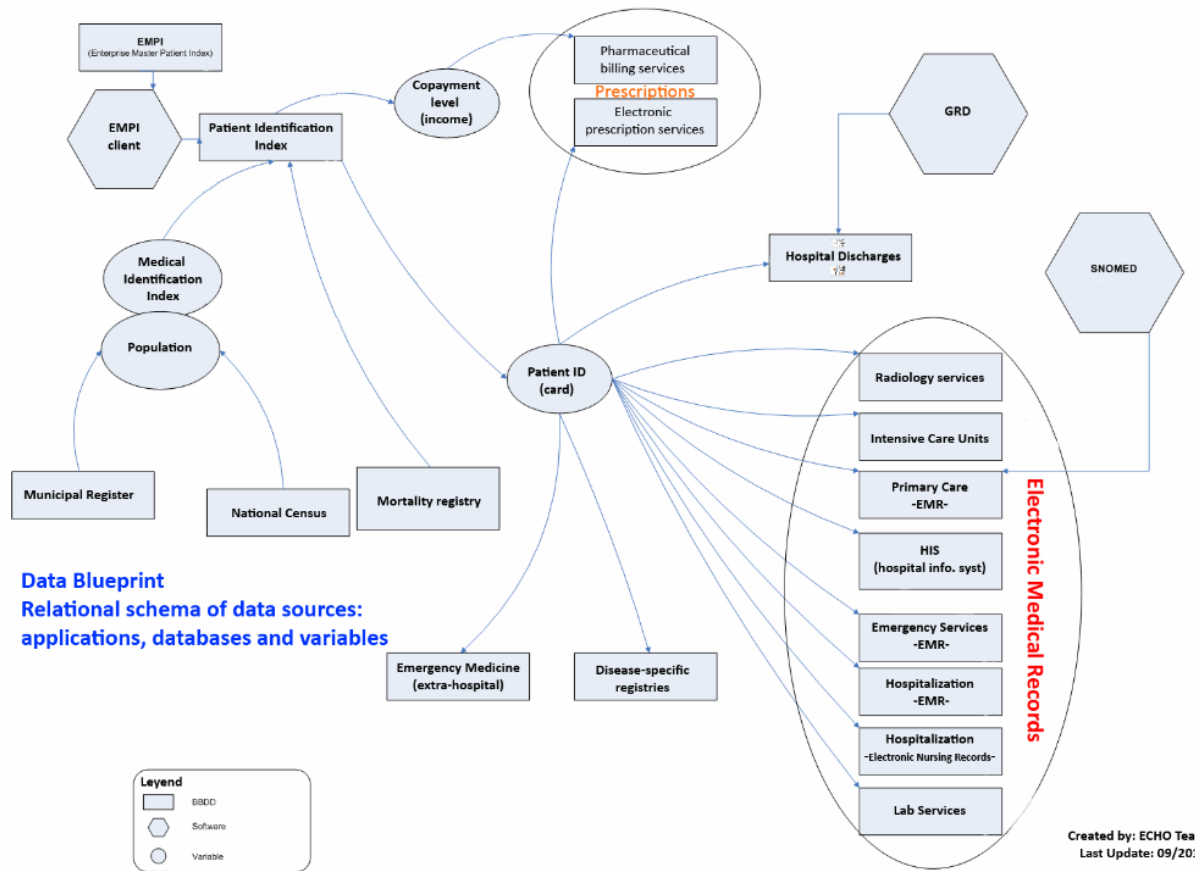
# Some methodological keys

- Building a **homogeneous knowledge infrastructure**  
<http://www.echo-health.eu/handbook/infrastructure.html>
- **Developing comparable indicators** across different languages  
<http://www.echo-health.eu/handbook/getting-indicators.html>
- Dealing with **population size heterogeneity**  
[http://www.echo-health.eu/handbook/unit\\_analysis.html](http://www.echo-health.eu/handbook/unit_analysis.html)
- Measuring differences in hospitals rather than differences in patients (**risk adjustment measures**)  
[http://eurpub.oxfordjournals.org/content/25/suppl\\_1/15](http://eurpub.oxfordjournals.org/content/25/suppl_1/15)
- Using **proper analyses** meant to elicit systematic and unwarranted differences in performance  
<http://www.echo-health.eu/handbook/metrics.html>

# What's new in BRIDGEHEALTH?

1. Not all administrative datasets were assessed in ECHO
2. ECHO data-model enabled episodes follow-up; however, not patients tracking (e.g. readmissions, etc.)
3. Expand privacy-by-design elements.
4. New countries - i.e. more varied set of health systems.
5. More indicators and population subgroup analyses.
6. Updated data - Longer series - i.e. more robust reporting & more effective transfer to policy-making.

# Data sources schema



# What's new in BRIDGEHEALTH?

1. Not all administrative datasets were assessed in ECHO
2. ECHO data-model enabled episodes follow-up; however, not patients tracking (e.g. readmissions, etc.)
3. Expand privacy-by-design elements.
4. New countries - i.e. more varied set of health systems.
5. More indicators and population subgroup analyses.
6. Updated data - Longer series - i.e. more robust reporting & more effective transfer to policy-making.

WP#10 is meant to provide insight on how to build a data infrastructure, exploring the integration of individual-level routinely collected administrative data, from different European experiences, with a view of producing relevant information for healthcare performance assessment, at different levels of interest (i.e. patient, provider, healthcare area, region, country).



# Main deliverable

- **Introduction**
  - Health systems institutional context
  - In-country legal provisions
  - Health care performance assessment (HPA) using administrative data
- **National health information systems inventory and analysis**
  - Sources of information: description and usefulness
  - Dimensions of health care performance that could be studied
  - Accuracy, coverage, timeliness, etc. in the study of those dimensions
- **What is feasible to do in the short-term?**
  - Description of the empirical exercise
  - Barriers and opportunities (*e.g., Linkage, Legal and ethical aspects*)
  - Technical approach - Case study (Data model and quality report)
- **What should be done in the long run?**
  - Recommendations



[www.bridge-health.eu](http://www.bridge-health.eu)



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