

---

## CONFERENCE ABSTRACT

### Building learning health systems on Real World Data

19<sup>th</sup> International Conference on Integrated Care, San Sebastian, 01-03 April 2019

Enrique Bernal-Delgado<sup>1,6</sup>, Anibal García-Sempere<sup>2,6</sup>, Ibai Tamayo-Rodríguez<sup>3,6</sup>, Francisco Estupiñán-Romero<sup>1,6</sup>, Felipe Aizupuru-Barandiaran<sup>4,6</sup>, Ana Toledo-Chavarri<sup>5,6</sup>

1: Institute for Health Sciences in Aragon, IACS, Spain;

2: FISABIO, Generalitat Valenciana, Valencia, Spain;

3: Navarrabiomed-CHN-UPNA, Navarra, Spain;

4: Osakidetza, Vitoria, Spain;

5: Servicio Canario de Salud, Tenerife, Spain;

6: REDISSEC, Spanish Network for Health Services Research

---

**Background:** Health systems are witnessing two transitions that rarely look at each other: a) the epidemiological shift that implies health systems to adapt from the delivery of acute fragmented services to the provision of coordinated chronic care; and b) the deep change in the medical knowledge paradigm whose main feature is the use of real world data (RWD) to produce meaningful evidence for decision-making.

The appropriate reutilization of the wealth of data routinely collected in the countless contacts with the health system offers the unrenounceable opportunity of linking both transitions throughout the implementation of learning health systems -systems where existing data are exploited and the evidence produced is shared with all relevant actors to enhance services performance and, ultimately, improve health outcomes.

**Aims and Objectives:** In this workshop, researchers from REDISSEC, the Spanish Network on Health Services Research, will reflect on how RWD reuse may foster the implementation of learning health systems. The workshop will cover three objectives: 1) Showcasing the capabilities of RWD to improve chronic care and patients' outcomes; 2) Raising current and future challenges when using RWD; and, 3) Discussing how to build learning health systems upon RWD.

**Methodology:** After a brief contextualization, this 90-minute workshop will develop on two core slots; in the first one, three case studies will provide a flavour of the potential of the routine use of RWD in the assessment of chronic care; in the second slot, presenters will reflect on cross-wise issues underlying the use of RWD, and eventually, in the development of learning systems. A 5-minute final remarks session will bring the workshop to its end.

Showcasing the potential of RWD in the assessment of chronic care

(40 min: 10 minutes each, 10 minute-overall debate)

1. Comparative effectiveness and safety of non-vitamin K oral anticoagulants and acenocoumarol in patients with atrial fibrillation in real-world practice, by Anibal García-Sempere

2. Predicting cardiovascular intermediate outcomes in patients with type 2 diabetes using Real World Data from the different levels of care, by Ibai Tamayo

3. Peeping through the Emergency ward keyhole to unravel the Stroke Code pathways of care using enriched process mining, by Francisco Estupiñán-Romero

Current and future challenges to build learning health systems on RWD.

(40 min: 10 minutes each, 10 minute-overall debate)

4. Developing interactive visualization techniques when using highly complex data, by Felipe Aizupuru-Barandiaran

5. The voice of patients: another kind of RWD to bring into learning health systems, by Ana Toledo-Chavarri

6. The elephant in the room: getting data processing trustworthy, by Enrique Bernal-Delgado

**Target audience:** Any people interested in real world data reutilization and the development of learning systems; in particular, decision-makers, at policy and clinical level.

**Lessons to take away:**

- There is an immense potential out of RWD reutilization in chronic care improvement;
- There are challenges to get trustworthy information out of RWD;
- Implementing a learning health system built on RWD requires more than RWD.

---

**Keywords:** real world data; big data; learning health systems; performance; health outcomes

---