

# 4th European Value-Based Procurement Conference

Working together on sustainable European health systems;  
focus on people, prosperity and planet

**15 December 2022 – The Hotel, Brussels**

## The Catalonia healthcare system journey towards the adoption of value-based contracts and the case of ADELE at the Bellvitge University Hospital to transform the care of patients with arrhythmias

**Rossana Alessandrello**

Value Based Procurement Director

AQuAS – Agència de Qualitat i Avaluació Sanitàries de Catalunya

**Ignasi Anguera, MD**

Director of the Arrhythmias and Electrophysiology Unit of the Cardiology Department,  
Bellvitge University Hospital

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# The Catalonia healthcare system journey towards the adoption of value-based contracts

## Compra pública d'innovació en salut.



La compra pública d'innovació és un element clau de modernització del sistema sanitari públic



Es destinaran 30 M d'€ a projectes de compra pública d'innovació per modernitzar els serveis assistencials



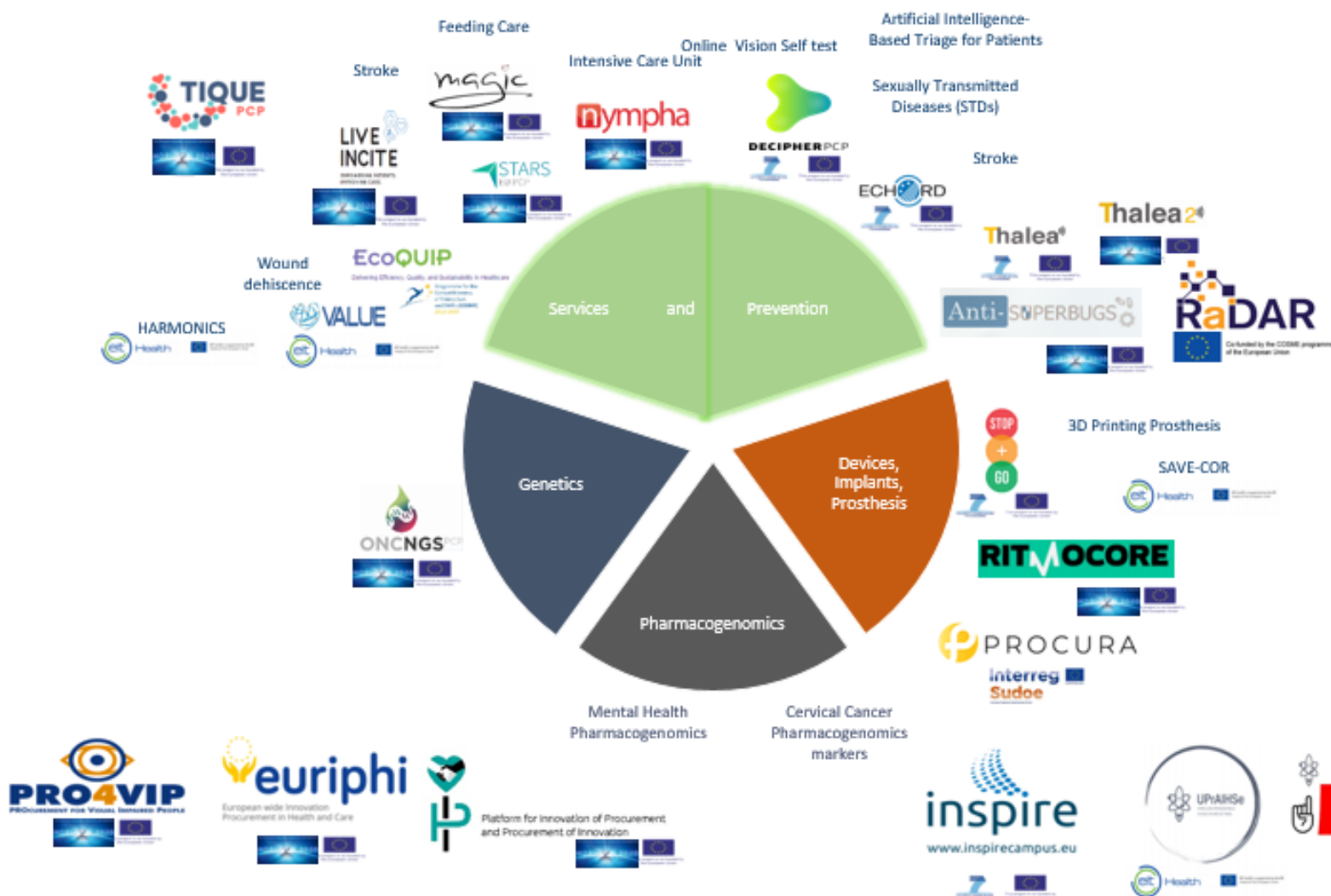
És la primera vegada que el CatSalut obre una línia d'ajuts, a través dels fons FEDER, per potenciar un ús més intel·ligent de la despesa pública



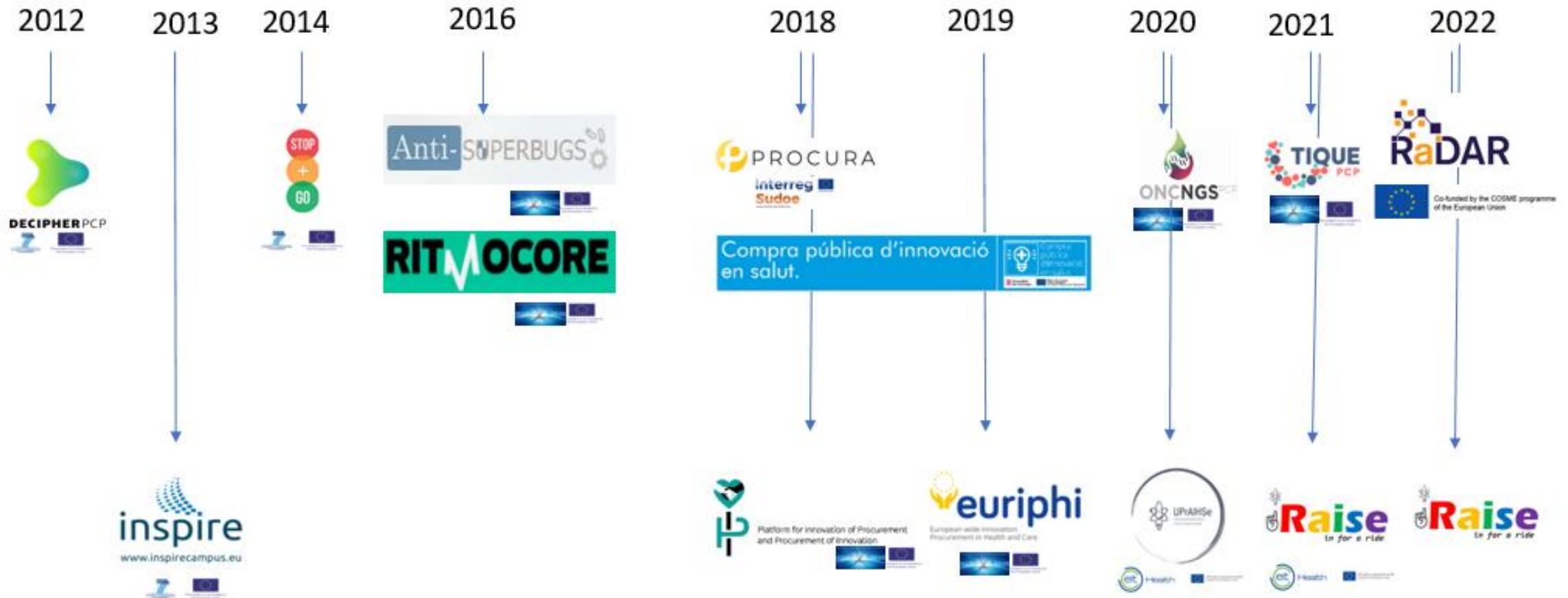
Els criteris d'avaluació i selecció dels projectes guanyadors s'han centrat en dues premisses: l'impacte i l'excel·lència



Es finançaran 18 projectes impulsats per entitats del Sistema sanitari públic orientats a la millora de la qualitat i l'eficiència de l'atenció sanitària



# The Catalonia healthcare system journey towards the adoption of value-based contracts



# The Catalonia healthcare system journey towards the adoption of value-based contracts

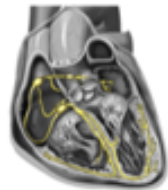
## RITMOCORE model's replicability and scalability



RITMOCORE  
Handbook & Guidelines



Policy Brief on  
regulatory issues and  
economic factors



### ADELE PPI project

Led by **Bellvitge University Hospital (HUB)**, it proposes an innovative change of the treatment for patients suffering from any alteration in their heart's electrical system.



### DAIS PPI project

**Sant Pau Hospital**, is applying RITMOCORE model in the adoption of innovative interoperable services to support active and healthy ageing and assisted living.



### MITMEVA PPI project

Lead by **Clinic Hospital**, this is a project to procure innovative solutions for the aortic valve stenosis management



DIABETES TYPE 1

### Diabetes PPI Project

**Hospital Parc Tauli** and **Hospital Sant Joan de Deu** are reengineering the current care process in Type 1 Diabetes maximizing remote care and concentrating the face-to-face assistance activity in the key points of the process.

# *The Catalonia healthcare system journey towards the adoption of value-based contracts*

THE EUROPEAN  
INNOVATION  
PROCUREMENT  
**AWARDS22**

**RITMOCORE**

#EUIPAwards



European  
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**WINNER**  
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Procurement  
Strategy

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## The case of ADELE at the Bellvitge University Hospital to transform the care of patients with arrhythmias

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Director of the Arrhythmias and Electrophysiology Unit of the Cardiology Department,  
Bellvitge University Hospital

## ***Bellvitge University Hospital***

- Tertiary referral centre (700 beds)
- Highest complexity Hospital
- Reference area of 1.3 million inhabitants (South of Barcelona)

### ***The Arrhythmia Unit***

- Integrated in the Cardiology Department (100 dedicated beds) with ICC, semi ICC, and conventional wards
- Reference area of 1.3 million inhabitants (South of Barcelona)
- The Unit performs all kind of interventional procedures for diagnoses and treatment of arrhythmia patients ( implantation of pacemakers, defibrillators, and resynchronization devices; diagnostic electrophysiological studies, catheter based treatment of all kind of arrhythmias; outpatient clinic for follow-up of patients and devices

## ***Baseline (2019) interventional activity***

	2019
Low output Devices (resynchronization pacemakers)	34
High-output devices (implantable defibrillators)	164
Diagnostic Electrophysiology studies	436
Catheter ablation procedures	314
Highest complexity ablations	96
Other procedures	.....
<b>TOTAL ACTIVITY</b>	<b>948</b>

## *The rationale of ADELE (1/3)*

- An ageing European population translates in a steady growth in the demand for devices (defibrillators) and catheter-based interventions for arrhythmias.
- Budgetary constraints in healthcare systems call for innovative solutions to meet this rising demand while safeguarding the quality of care.
- The current approach generally consists in reducing the price per device/catheter by aggregating purchases, but this creates a misalignment in the value chains of suppliers and healthcare providers.

## *The rationale of ADELE (2/3)*

- On the one hand, in a price-based market, device/catheter manufacturers are not motivated to invest on innovation, but rather to reduce their manufacturing costs, thereby offering hospitals a lower range of products than current technologies afford.
- On the other hand, clinicians seek to offer the best care to patients, and watch with frustration how the more advanced technologies available in the industry do not end up in the operating rooms.
- Hospital management, on their part, are constrained by annual budgets, which do not consider longer term benefits of higher range devices (defibrillators and catheters).

## *The rationale of ADELE (3/3)*

- In this new model of procurement, **hospitals** :

**do not get a supplier  
of devices**



**they gain a partner to support them  
through the entire care pathway**

- With the experience of RITMOCORE PPI, the model proposed by ADELE represents a shift:

**from purchasing  
devices**



**to purchasing  
services where payments are outcome based,  
and where services are supported by  
advanced ICT systems.**

## ADELE (Arrhythmias Defibrillators and Electrophysiology)

*The project of improving comprehensive care for patients with arrhythmias using innovative digital solutions*

The object of the contract is the **comprehensive approach to patients with arrhythmias** at the Bellvitge University Hospital (HUB), which includes:

- the supply of **material and equipment**,
- the **management of incidents and complications** arising from the implantation of the devices and of interventional EP procedures,
- the **universal implementation of remote monitoring** of patients.
- **Diagnostic and treatment tools** for intermittent and complex arrhythmias are also included,
- as well as the **reorganization of the spaces for the interventional activity** of the unit (building of two dedicated EP laboratories in the Cardiovascular Interventional Area)

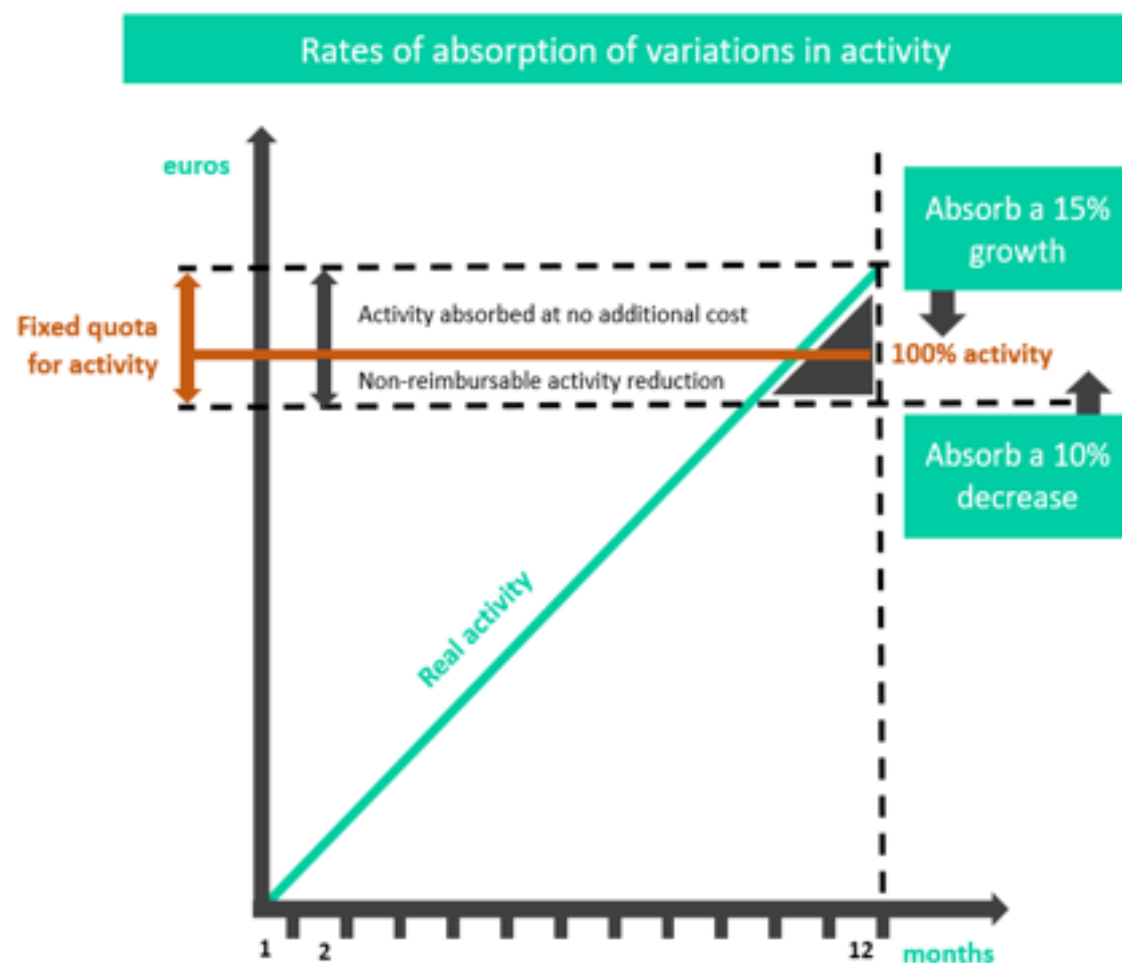
## *The contract*

- Total tender budget of €37 million (6-year contract) + VAT
- The tender designed with a single lot
- The contract has been awarded to Biotronik
- Signature of contract in November 2021
- 1 million grant from ERD funds

## A risk- sharing payment per population

In this contract modality, the hospital (ADELE) offers suppliers a fixed payment to help them service a given population (the population of the reference area).

This population is translated into an estimated level of activity (of pacemakers to be implanted) agreed to by both parties (defined in the contract), and the supplier guarantees the provision of services and devices for this estimated level of annual activity plus/minus an agreed annual percentage of fluctuation



## *Outcome-based payments*

A **percentage (5%) of payments** to suppliers is made **dependant on meeting a set of Quality Indicators**.

These **indicators** are **designed to ensure** that the service provision is oriented towards **obtaining the outcomes that best represent the interests of patients and are based on high quality standards**

## Baseline (2019) and forecast annual activity (2022-2027)

	2019	Annual activity 2022-2027
Low output Devices (resynchronization pacemakers)	34	43
High-output devices (implantable defibrillators)	164	242
Diagnostic Electrophysiology studies	436	601
Catheter ablation procedures	314	457
Highest complexity ablations	96	170
Other procedures	.....	.....
<b>TOTAL ACTIVITY</b>	<b>948</b>	<b>1343</b>

**Increase in 41% in total annual activity**

# The Pillars



## Personalized treatment

Provision of devices and catheters that best suits each patient at any time

Complete and updated range of devices (ICD) and catheters from different manufacturers throughout the duration of the contract

The supplier will need to close commercial agreements with its competitors to offer the Hospital a complete and updated catalogue of products

## Remote Monitoring

All devices need to offer the possibility of remote monitoring

The supplier is required to develop an Assistance Centre for Remote monitoring to answer and resolve non-technical queries from patients, and to collect and review all transmissions

## Reorganization of the spaces for the interventional activity of the unit

(building of two dedicated EP laboratories in the Cardiovascular Interventional Area)

## New ICT system

To help monitor the project

New database for clinical use

Integration of information from all manufacturers

The information system should be able to interoperate with the electronic health system of the hospital

## Change management

Introduction to Lean Management technology

## Patient empowerment

Patient education program

App, educational,

Leaflets, educational videos accessible with QR

<https://adelearritmias.com>

Patient satisfaction survey

## Support tools for interventional procedures

(non-invasive mapping systems)  
new tools for detection of intermittent arrhythmias

### *Low influence of awardee on outcome*

- Adherence to current guidelines of clinical practice
- Reduction in in-hospital waiting time for patients scheduled for device implantation
- Reduction in ambulatory waiting time for patients scheduled for device implantation
- Reduction in ambulatory waiting time for patients scheduled for complex ablation
- Reduction in complication rate after ablation of complex arrhythmia
- Reduction in the need for repeat ablation following ablation of complex arrhythmia

### *High influence of awardee on outcome*

- Degree of satisfaction of patients undergoing remote control of devices
- Inclusion of at least 95% of patients with device implantation in the remote control program
- Fast and accurate transmission to the hospital of serious events detected with the remote control surveillance (serious events defined as those that need urgent face-to-face visit, change in medication or change in device programming)
- Reduction in number of in-hospital routine device checks (with very low-added value)
- Degree of satisfaction of patients included in the Patient empowerment program

# Thank you!!