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## ISS RIPI/RIAP, BVTech, Confindustria Dispositivi Medici and the National Joint Registry (NJR) meeting

Implementation of the MD identification and characterization dataflow for joint prostheses within the  $\pi$ -RIPI project and its interconnection/interoperability with the NJR Component Database

Istituto Superiore di Sanità, Rome - May 15 - 16, 2025



### Introduction

Marina Torre

Istituto Superiore di Sanità





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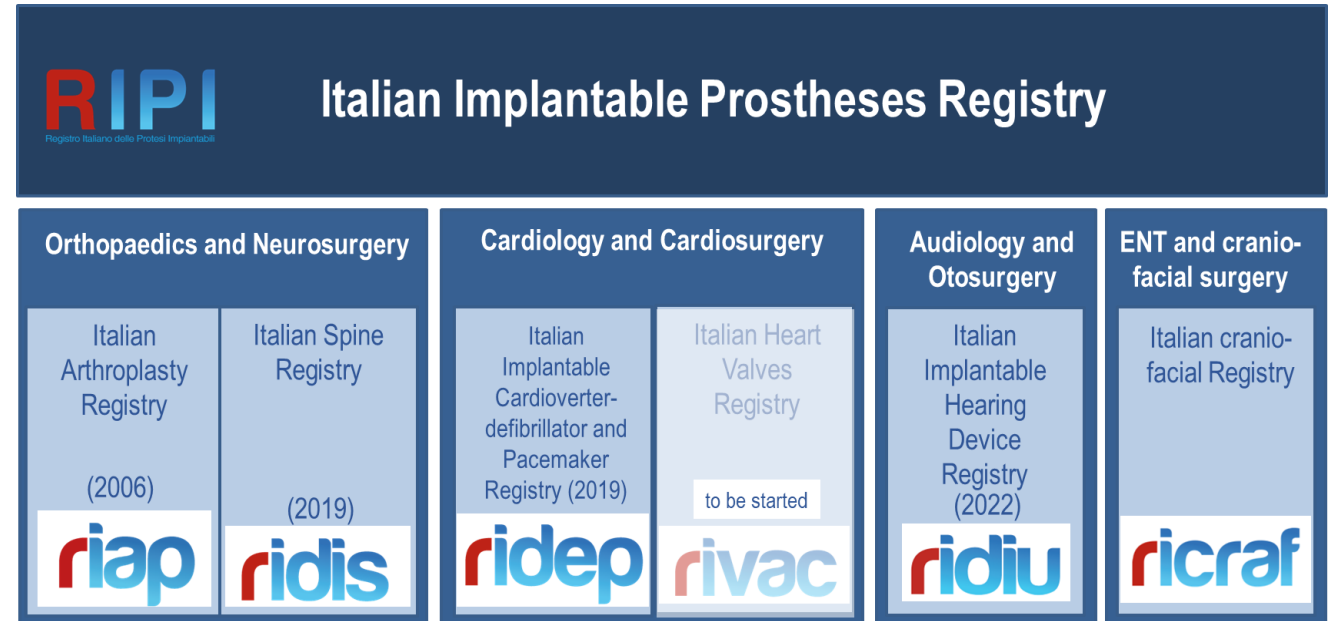
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# Registries implementation at ISS

Supported by the DG of Medical Devices and Pharmaceutical Service of the Ministry of Health:

- 2006: start of the first project to organise the Italian Arthroplasty Registry (RIAP)
- 2019: extension of the RIAP experience to the organisation of RIPI (implementation of DPCM 3/3/2017) organised as an umbrella structure



<https://ripi.iss.it/ripi/it/>



## 10/06/2021 Agreement signed between ISS e NJR

### Objectives:

- To link the RIAP-MD Dictionary with the NJR-Component Library in order to create a single international database of the orthopedic prostheses
- To allow RIAP and the regional registries participating in RIAP to access the Component Library to associate the technical attributes to a device
- To allow Manufacturers marketing prostheses in Italy to upload in the Component Library data of the devices not available yet but implanted in Italy, following the Library standards and classifications



National Joint Registry

[www.njrcentre.org.uk](http://www.njrcentre.org.uk)

Working for patients, driving forward quality



HQIP

Healthcare Quality  
Improvement Partnership

This licence is dated [June 10, 2021]

#### Parties

- (1) HEALTHCARE QUALITY IMPROVEMENT PARTNERSHIP incorporated and registered in England and Wales with company number 06498947 whose registered office is at 70 Wimpole Street, London, W1G 8AX (Licensor)
- (2) ISTITUTO SUPERIORE DI SANITA' an Italian Public Body VAT number 0365773100, based in Rome, Italy, 299, Viale Regina Elena, post code 00161, represented by Prof. Silvio Brusaferrò (Licensee)

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Manufacturers would be requested to provide the same information only once and all the parties involved in the arthroplasty registries data collection would benefit from the use of a shared and internationally verified component database



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Rome, 1<sup>st</sup> March 2018 – International workshop (ISS)

- 29 – 30/07/2019 Technical Meeting RIAP – NJR (ISS)
- 08/11/2019 Sessions in the SIOT Congress
- 12/11/2022 Sessions in the SIOT Congress
- **15-16/05/2025 Technical meeting RIPI/RIAP-  
BVTechRT-Confindustria DM and NJR within the  
NextGenerationEU project Rome Technopole**

Spoke 2 – FP4 meeting –  $\pi$ -RIPI project - May 15 -16, 2025

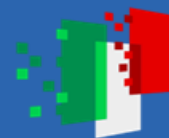




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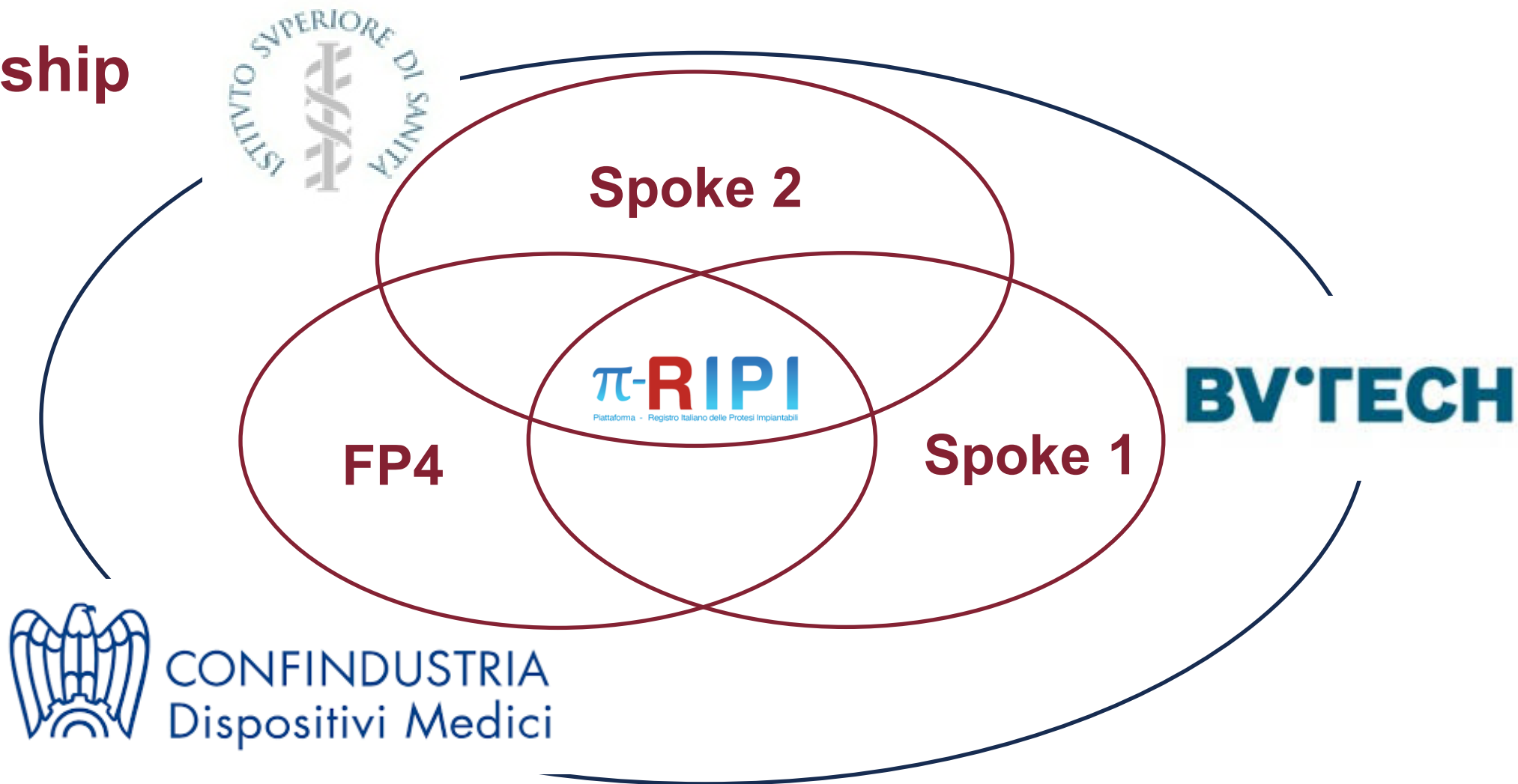
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# Partnership



Spoke 2 – FP4 meeting – π-RIPI project - May 15 -16, 2025



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# Research group



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Francesca D'Amato  
Luca Pattarini  
Alessandro Mentuccia  
Martina Zanforlini



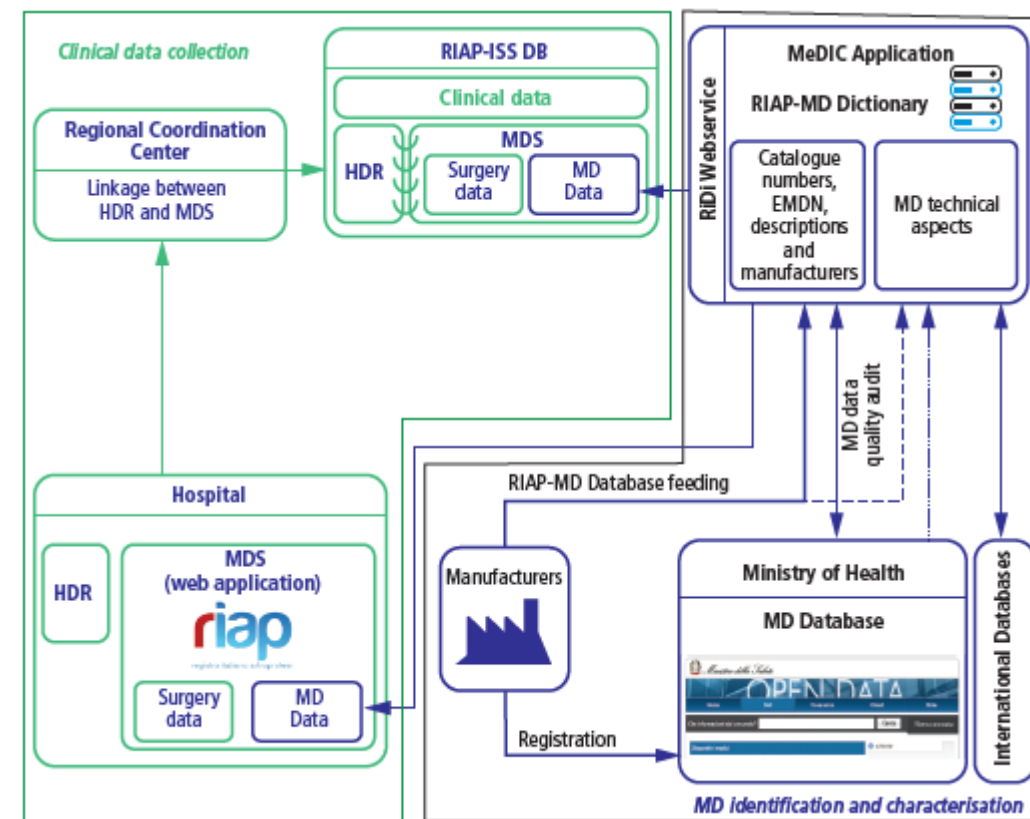
CONFINDUSTRIA  
Dispositivi Medici

Valeria Glorioso  
Fernanda Gellona  
Johnny Della Giustina  
Matteo Botta

# Registry architecture

### 3 pillars:

- **Structure:** federation of regional registries coordinated by a supranational public health institution (ISS)
- **Data Collection:** routinely collected data (HDR) integrated by an additional minimum data-set (MDS)
  - Detailed clinical information not available in HDRs but essential for the Registry
  - Information about DM (Manufacturer, Ref code, lot) (green line)
- **Implanted device:** set up of dedicated data collection flow and database (MD Dictionary) to identify and characterize the implanted MD (blue line)



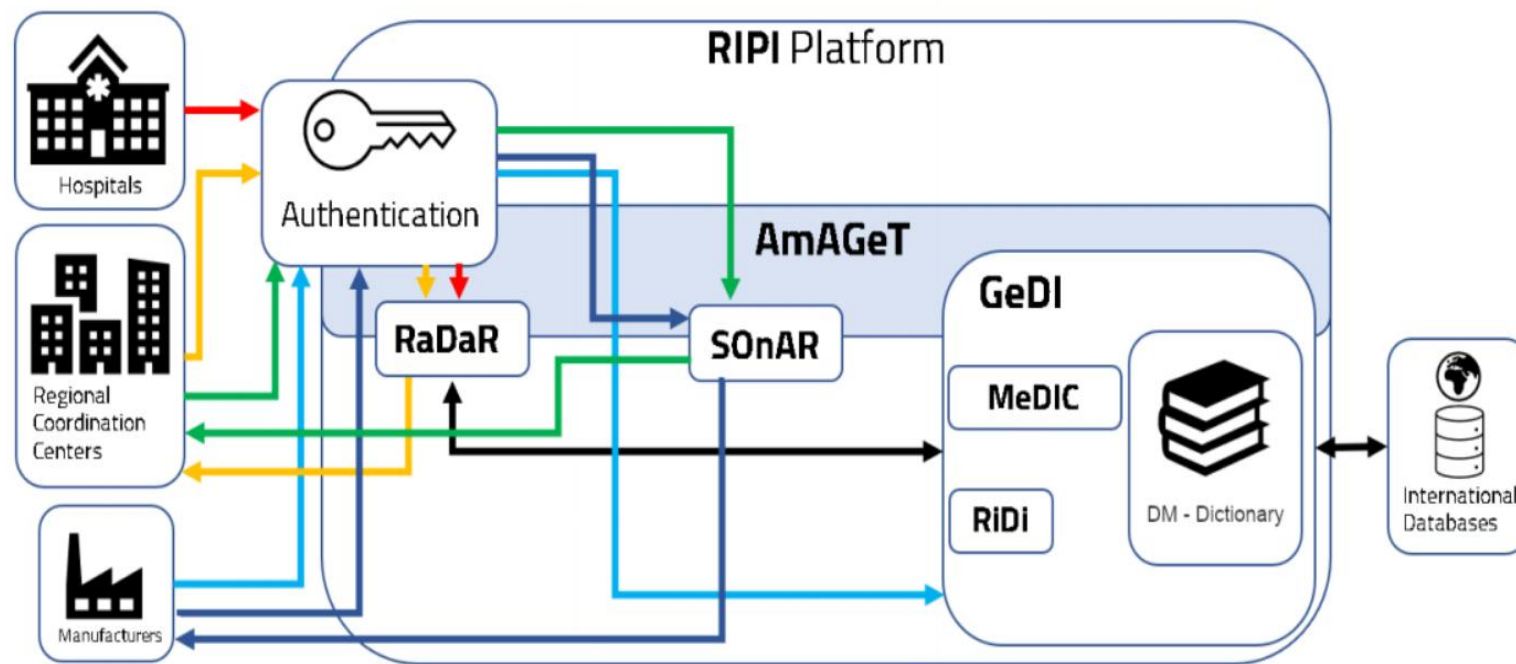
### RIP1: Data collection flow of RIAP

Torre M, et al, eds. Registro Italiano ArtroProtesi. Report Annuale 2023. Roma: Il Pensiero Scientifico Editore, 2024.





# $\pi$ -RIPI implementation in Rome Technopole

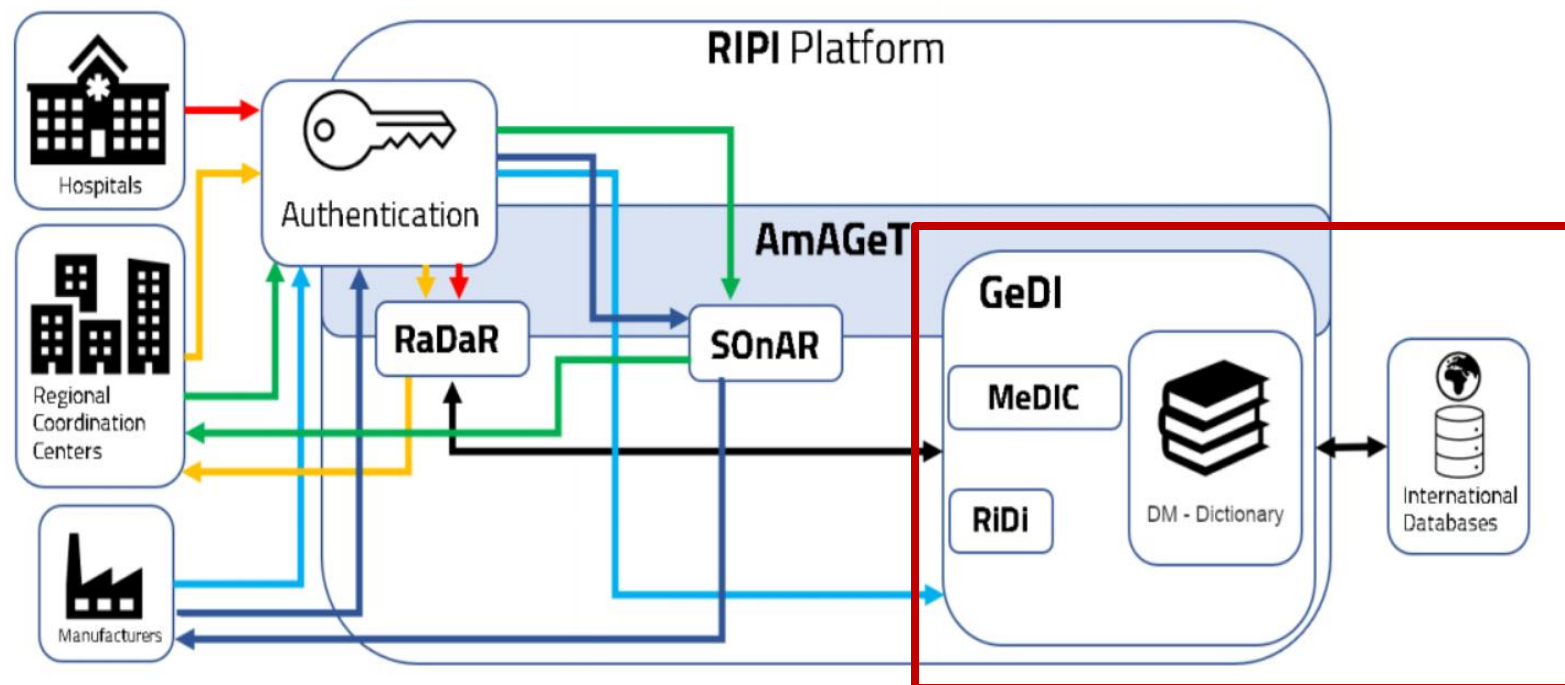


- Feasibility study
- Implementation (PoC) of the GeDI component for RIAP
- Study of AI algorithms to automatically retrieve information about MD

Bacocco DL, et al. Design and implementation of the new Italian healthcare digital interoperable registry for implantable medical devices. *Softw Pract Exper.*2022;52(11):2368–2392



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