



CONFERÊNCIAS  
DE **VALOR APAAH**  
2017

Ílhavo • **Porto** • Évora

2.<sup>a</sup> CONFERÊNCIA | 7 - 8 julho | Hotel Crowne Plaza



# MODELS FOR ELIMINATION OF WASTE AND COSTING SYSTEMS OPPORTUNITY

## Integrating logistics and point of care

**Andrea Masina**

**GVM Care&Research**

*CEO – Kronosan Srl*

*CIO – SIA Scarl*



# AGENDA

- GVM Care&Research
- Centralized approach
- Integrated logistics model



# GVM Care&Research

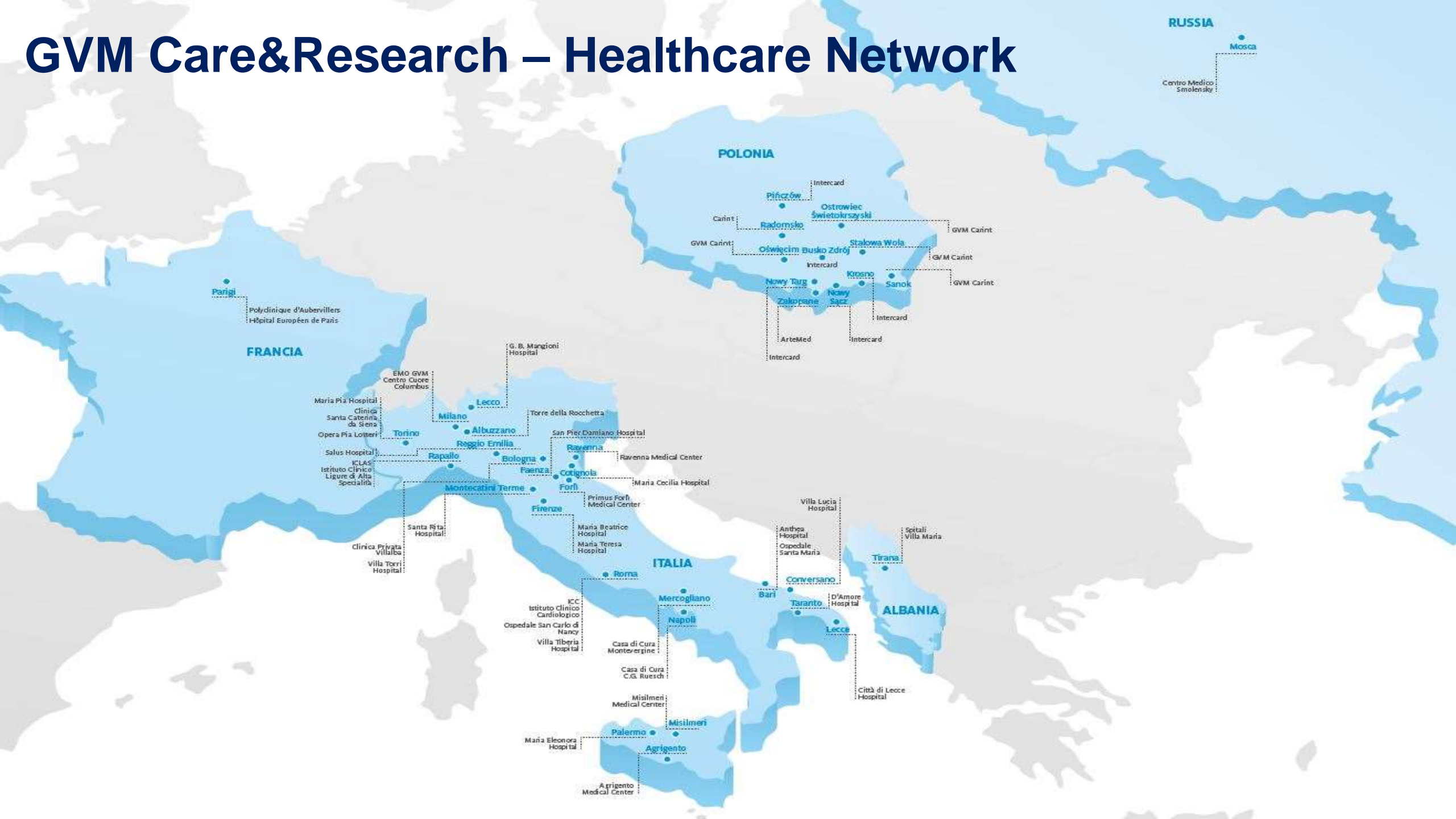
Established in 1973 by its President **Ettore Sansavini**, today GVM Care&Research is a holding managing operations in several sectors, including **healthcare, spa centres, medical-scientific research and training, the biomedical and food industry, the green economy and corporate services.**

**Mission | For each person, the search for the best**

The main inspiration behind all GVM's activities is the **centrality of the individual**. High Specialty healthcare thus becomes people-oriented, thanks to methods and technologies that combine with the proximity to patients and attention to the comfort of the environment.



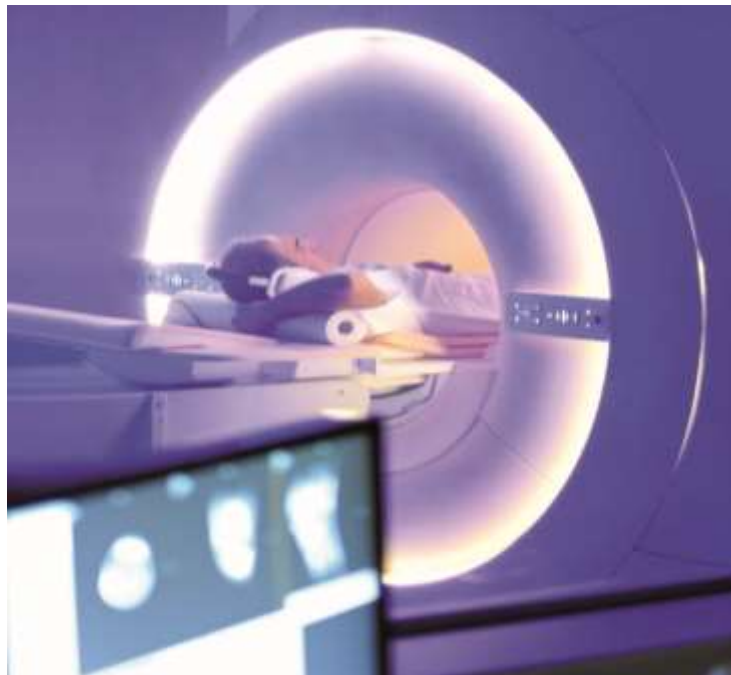
# GVM Care&Research – Healthcare Network



## CUTTING EDGE TECHNOLOGY

GVM annually invest enormous sums of money in research and development of **new technologies** aimed at improving the quality of healthcare.

- Purchase of state-of-the-art equipment for diagnostics and therapy: there is a total number of **2,940 beds**, **231 of which are for Intensive Care** and Resuscitation; there are also **14 Haemodynamics Laboratories** and **5 Linear Accelerators for Radiation Therapy**.
- In the Group Facilities, there are **20 CT scanners** active, together with **28 Digital angiography systems** (haemodynamics), **20 MRI scanners**, **2 Gamma Knife**, and **8 mammography devices**



## HIGH SPECIALTY

GVM have always aimed their activity at **High Specialty**, gaining credit as a pole of excellence for technologies and methods. Among GVM's sectors of excellence:

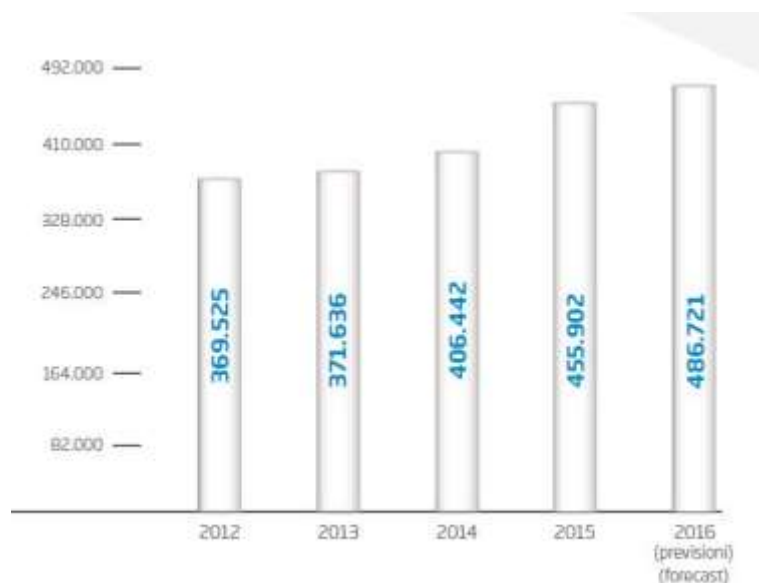
- **Arrhythmology** and **Electrophysiology** (specialist service dealing with the treatment of heart rhythm or cardiac conduction disorders).
- **Cardiology** (especially interventional and endovascular) and **Cardiac Surgery**.
- **Oncology**
- **Orthopaedics and Traumatology**, with innovative interventions mainly in the prosthetic area.
- **Neurosurgery**, specialising in advanced techniques, from **neuronavigation** to radiosurgery with **Gamma Knife**
- **Diabetic foot treatment**, with a complete reference centre for limb salvage



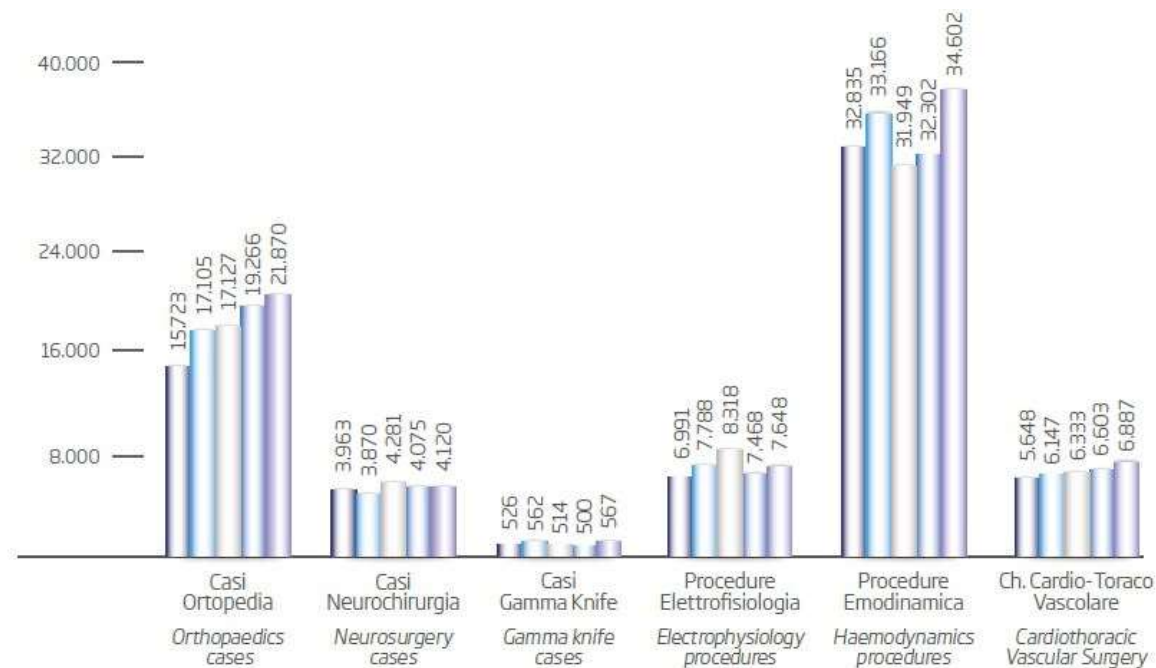
# TOTAL NUMBER OF BEDS AND ADMISSIONS

	2012	2013	2014	2015	2016
Posti letto autorizzati <i>Number of beds authorized</i>	2.499	2.488	2.460	2.858	2.940
Ricoveri totali <i>Total number of admissions</i>	80.519	80.114	80.154	91.040	104.885

## DAYS OF HOSPITALISATION



## HIGH SPECIALTY ACTIVITIES





## CENTRALIZATION

In order to support and complete the healthcare activity with quality and efficiency, GVM has developed **subsidiaries to provide services and complementary activities according to a centralized model.**

Main activities centrally managed and performed by subsidiaries:

- Procurement (Direct and Indirect)
- Logistics
- IT
- Clinical engineering
- HR Management
- Accounting and administration
- Finance
- Professional cleaning
- Facility management
- Building and restructuring



## CENTRALIZATION CAN BE EXPENSIVE...

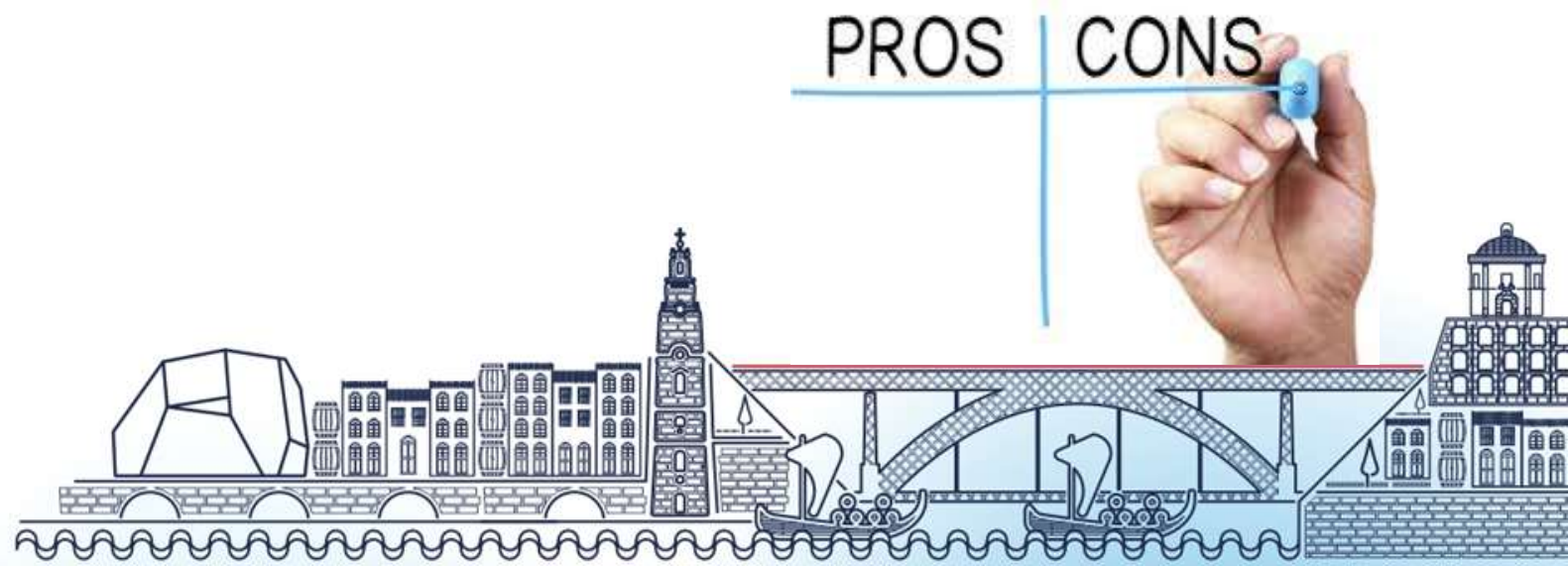
- Integration and network costs
- Organizational gap to fill
- One size never fits all

## ...BUT IT WORKS

- Monitoring and control
- Standardization
- Economy of scale

### **Example: Direct Procurement**

- Consumption yearly strategic plan definition and real time monitoring
- Same article list for all hospitals
- Savings...



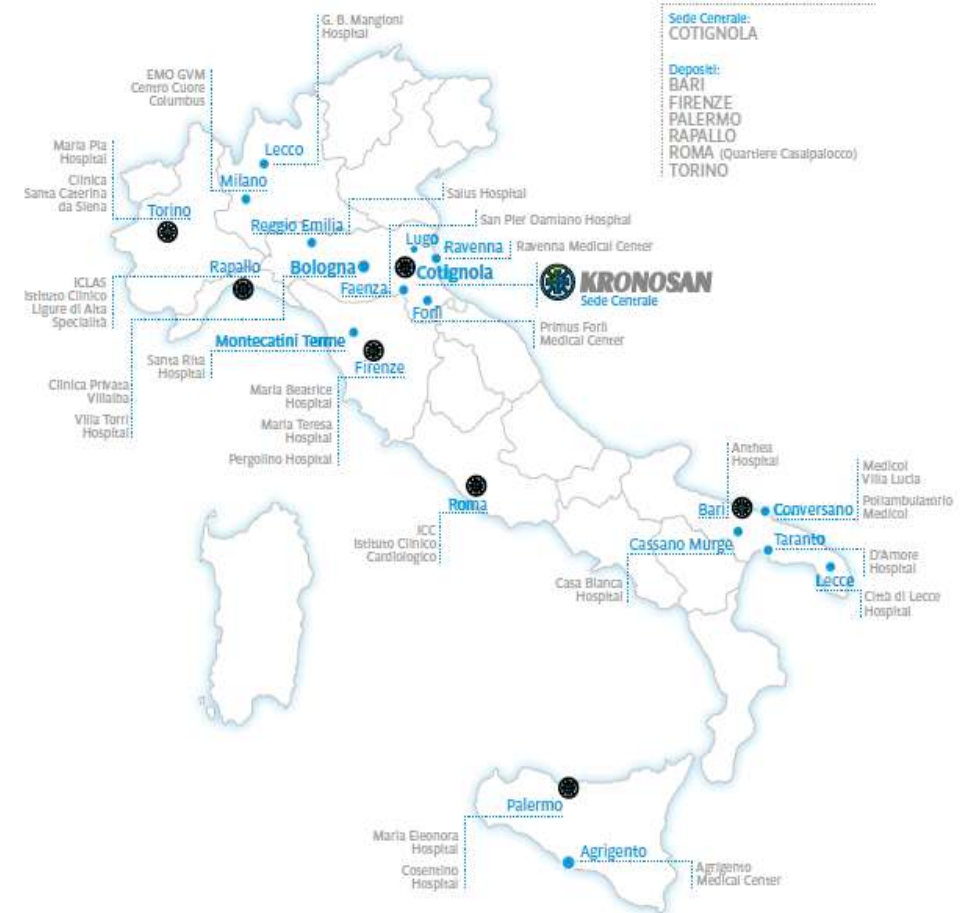
## Services

Procurement (direct)  
Supply chain management  
Clinical Engineering  
Health Technology Assessment  
Document Archiving

## Figures

30 years of activity  
87 Mio€ turnover  
8 regional branches  
59 collaborators (47 employees)

## Network



In 2013 Kronosan started a project to:

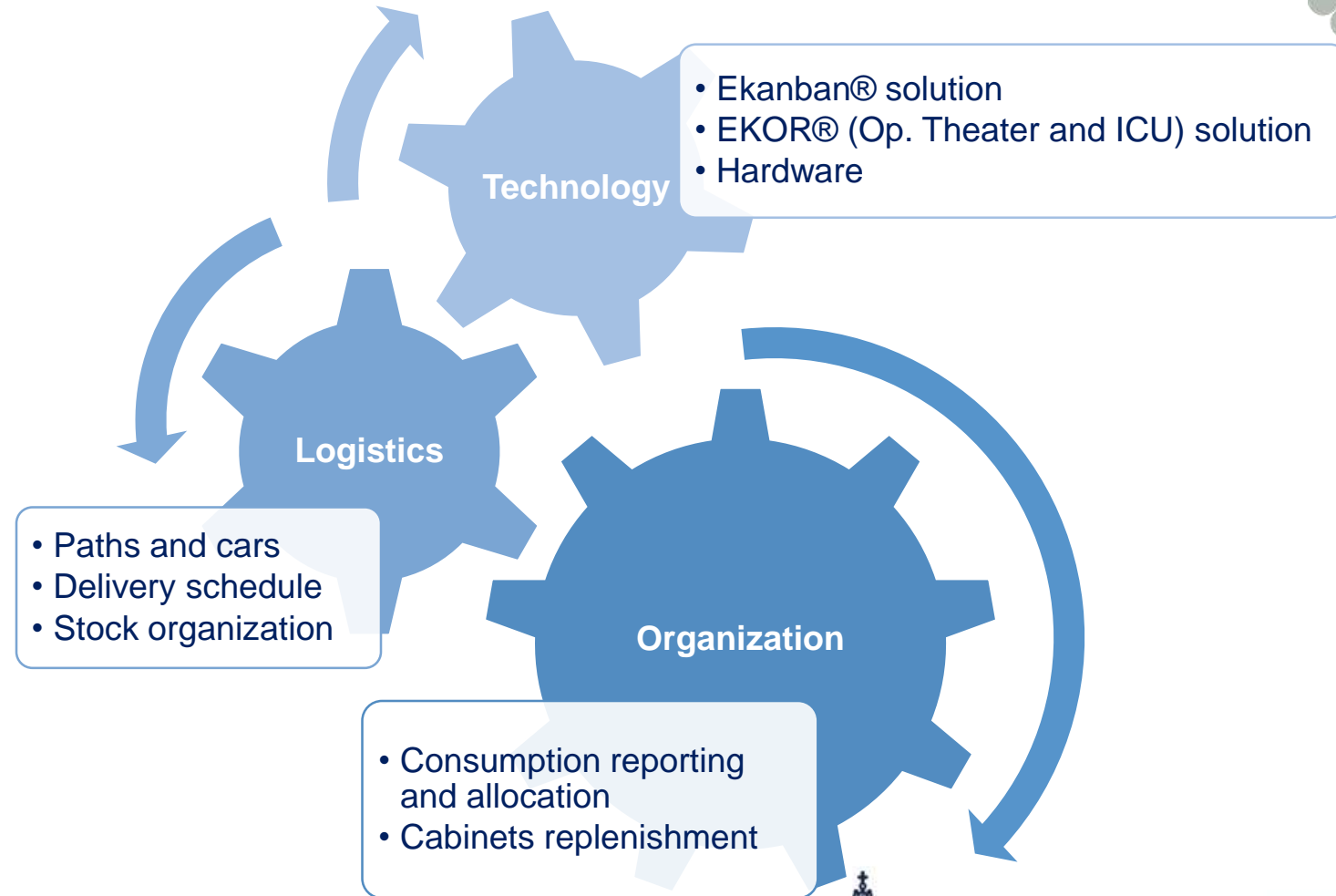
- Implement a **new integrated logistic model** (GVM perspective)
- Develop a new service called Ward Logistic Management (Kronosan perspective)

## TARGETS OF THE PROJECT

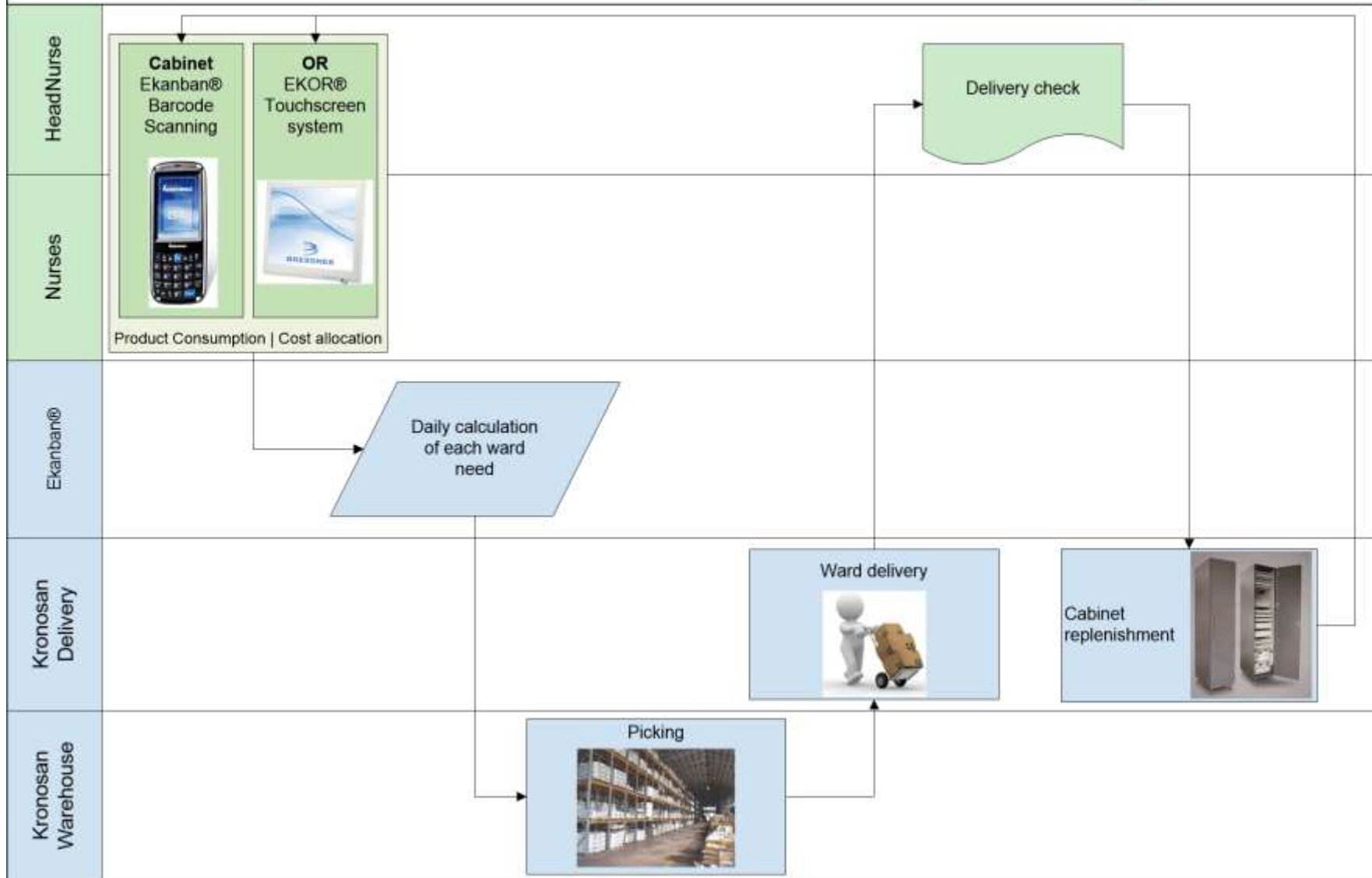
- **Optimization**
  - Optimize logistic flows
  - Reduce stocks and storage areas within hospitals
- **Monitoring**
  - Reduce waste
  - Introduce ward stock management
- **Cost allocation**
  - Enforce full traceability of consignment
  - Allocate consumption to patient (clinical and economical reasons)



# Logistic ward project ingredients



# Ward Logistic Service – Supply Workflow



Before



Now



Consigned item discharge



Product picking



# MAIN RESULTS

## Ekanban®

- ✓ 20 hospitals fully implemented and 188 ward warehouses managed
- ✓ 2,2 Mio consumptions made with Ekanban
- ✓ 56.000+ orders generated automatically (**9000 head nurse hours saved**)
- ✓ **Optimization of space up to 30%**
- ✓ **Stock reduction of 5%**
- ✓ **Waste reduction up to 5% of stock consumption**

## EKOR®

- ✓ 257.600 records for implants and 78.000+ procedures recorded
- ✓ 118 touch screens installed in operating rooms
- ✓ **Up to 95% ward material consumption allocated to patients**
- ✓ Over 1,2 million consumptions associated to patients

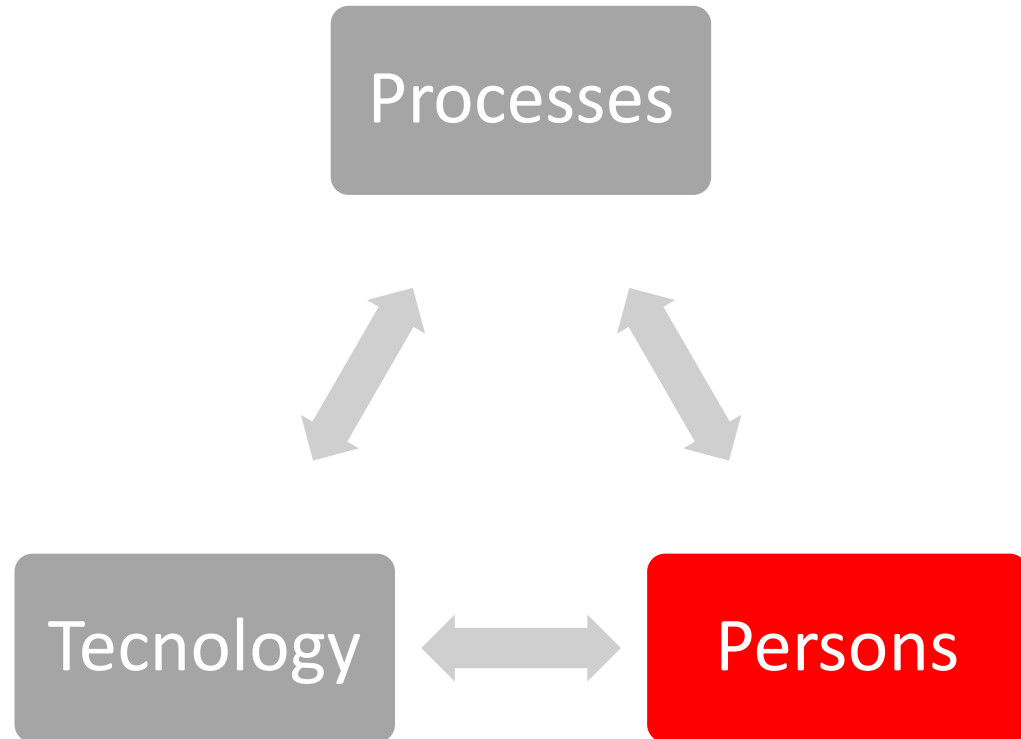


# VALUE CREATION

- ✓ **Quality of care**  
More time to perform actual nurse activity and improve quality of care
- ✓ **Savings** in terms of:
  - Space
  - Capital
  - Waste reduction  
(Allowing a ROI < 12months)
- ✓ **Cost controlling**, enabling effective analytics by:
  - Patient
  - Procedure
  - Physician
  - ...







Looking at the 3 main elements concurring to the success of an innovation project, main **PROJECT CHALLENGES** came from people resistance to adopt new tools and processes.



A lot of **project and change management** is needed to deploy the service.  
**Monitoring** is needed to assure proper use and continuous improvement.



# LOOKING AHEAD

- **Full consignment supply.** Development of a new service aiming at providing stocks owned by the supplier up to the actual consumption.
  - ✓ Great financial advantages for clients
- **Unidose supply.** Implementation of a centralize repackaging machine to deliver unidose medications to Kronosan regional warehouse and then to hospital ward stocks. The new service will include the MAPP® system to manage the close loop medication.
  - ✓ Medication full traceability and patient safety
- **Surgical instruments and sterilization management.** Introduction of a new system able to track and manage sterilization activities and surgical instrumentation logistics.
  - ✓ Sterilization activity management and tracking
  - ✓ Instrumentation lifecycle management and traceability for patient safety



# THANK YOU

**Andrea Masina**  
GVM Care&Research  
*CEO – Kronosan Srl*  
*CIO – SIA Scarl*

[amasina@gvmnet.it](mailto:amasina@gvmnet.it)  
+39 054579111

