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Smarter Healthcare



ARGOS – The modernization program of the Institut Català de la Salut

June 2009



Generalitat de Catalunya
Departament de Salut



Institut Català
de la Salut

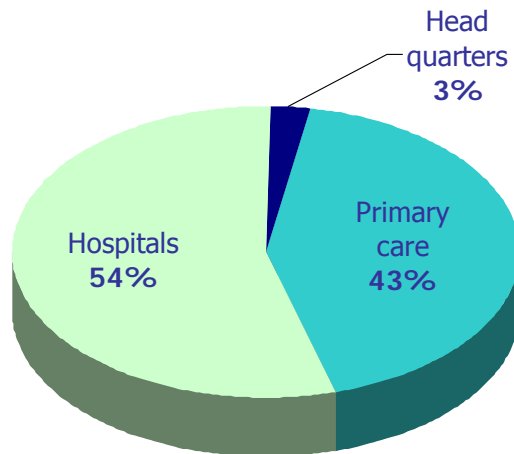
1. Institut Català de la Salut



ICS, A health service provider



- ICS is a **public** health services provider of Catalonia in Spain
- It is the **reference** of the health system in Catalonia
- **83%** coverage of the Catalan population (6M people among a 7,5M population).
- More than **40.000 professionals**.



2009 Budget

2.720 Millions €

Healthcare Offering

Acute Care

- **8 Hospitals:**
 - ✓ More than 4.000 inpatient beds
 - ✓ More than 130 Surgery theaters
 - ✓ More than 7000 outpatient rooms
- Constitutes **32% of the public hospitals inpatient beds and 50% of the high-technology beds in Catalonia.**
- **2008:**

215.262	Inpatient visits
122.454	Surgeries
703.424	Urgencies
2.661.390	Outpatient visits
412	Transplants

Research

- Constitutes **40% of the scientific production in Catalonia.**

Primary care

- More than **450 productive units:**
 - ✓ 274 primary care teams
 - ✓ 40 centers of extra-hospital specialties.
 - ✓ 32 emergency centers
 - ✓ 8 laboratories
 - ✓ 32 image diagnosis services
 - ✓ 15 rehabilitation services
 - ✓ 8 mental health centers, ...
- It manages **80%** of the whole primary care teams in the region
- **46 millions of outpatient visits a year**

Education

- Annual training of more than **1.500 masters.**
- More than **4.300 pre-grade students** (medicine and nursery).
- Training of **56%** of General Practitioner and **66%** of the specialists of Catalonia

2. The Modernization Project



The modernization project

The Challenge: Modernize, Why and What for?



- To improve care delivery **quality**
 - More advanced medical technology
 - Clinical coordination
 - Electronic health records
- To improve **efficiency**
 - Cost reduction
 - Resource allocation
 - Shared services
 - Centralized Procurement organization
- To implement **Private sector best practices** in a Public Healthcare Organization
- To provide a **citizen** based care delivery at the highest level.

The modernization project

The main components that build the modernization program are the following:

ICS Law

NEW TERRITORIAL MODEL



Project to transform the Back-Office functions



Project to renew the Information Systems on the Hospitals area (HIS)
(June 2009: 5 out of 8 done)



Project to redefine the HR function

Unique and integrated technology - SAP

The modernization project

Principles of the new model

HEALTH SYSTEM SUSTAINABILITY

Greater efficiency, cost reduction, realignment of resources, shared services, central procurement

HEALTHCARE QUALITY

Advanced technologic equipments, health coordination, Electronic clinical records

HEALTH SYSTEM ACCESIBILITY

For the citizen to receive the best healthcare



USE OF TECHNOLOGY

- Processes reengineering and functions centralization, no matter where they are performed:
 - Aggregated purchasing
 - Shared Services Centers
 - Logistic operator
- Processes and systems Unification for whole ICS
- Care Delivery standardization, Analysis, Evaluation and Optimization

BENEFITS

- Operational improvements: from 5% and 10% in
 - Aggregated purchasing
 - Stock reduction
- Third-party billing improvement: up to 18%.
- Return on investment: 100% of the project.

USE OF TECHNOLOGY

- Real-time clinical process integration and the related information
- On-line information for all the agents in the process:
 - Imaging
 - Lab results
 - Clinical tests
 - Continuum of care
 - Antecedents
- Process and Systems Standardization for whole ICS

BENEFITS

- Patients receive the same service regardless its location
 - Electronic Health Records
 - All the clinical entities share the same information
 - Integration with EHR tools at regional and country level: Shared Clinical Record, electronic prescription
- Health quality Improvement
- Patient safety Improvement:
 - Minimizing of errors
 - Duplicated tests avoidance
- Quality care delivery improvement for professionals:
 - Better diagnosis tools
 - Collaboration tools to share information with other professionals
 - Prescription alerts

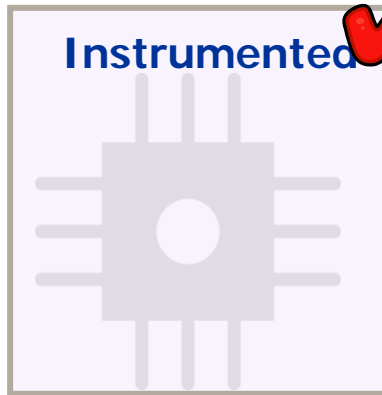
USE OF TECHNOLOGY

- Sharing information with all the clinical stakeholders
 - Electronic health records
- It allows Health System sustainability, optimizing limited resources (supply) to address the need for healthcare resources (demand)

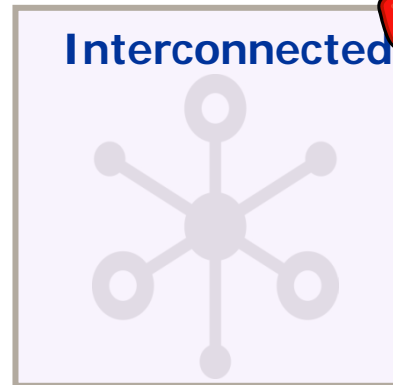
BENEFITS

- Patients receive the same service regardless its location
 - Large Cities
 - Villages
 - Countryside
- Waiting lists management Improvement:
 - Surgery
 - Outpatient
 - Clinical Test

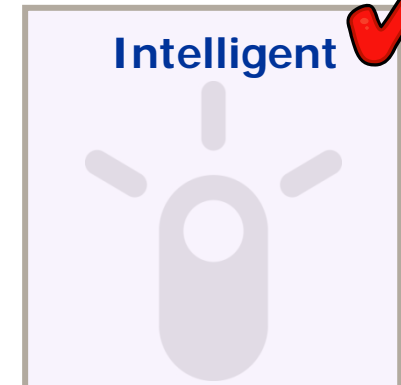
ICS makes smarter healthcare



- **Unique and integrated information systems**
- **Longitudinal clinical process Automation**
- **Accessible clinical information throughout the patient centered clinical network**
- **Mobility systems**



- **End-to-end care delivery processes**
- **Electronic health records for all the clinical levels of assistance**



- **Intelligent management of the demand/supply**
- **Tips for better diagnosis**
- **Prescription alerts**
- **Clinical knowledge tools**
- **Research**



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