

**From  
the Catalan model of health  
to  
the Catalan healthcare system**



Generalitat de Catalunya  
**Departament de Salut**

# Socio-demographic characteristics of Spain

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**17 Autonomous Communities**

**Area: 504,750 km<sup>2</sup>**

**Population (2007): 46,158,000**

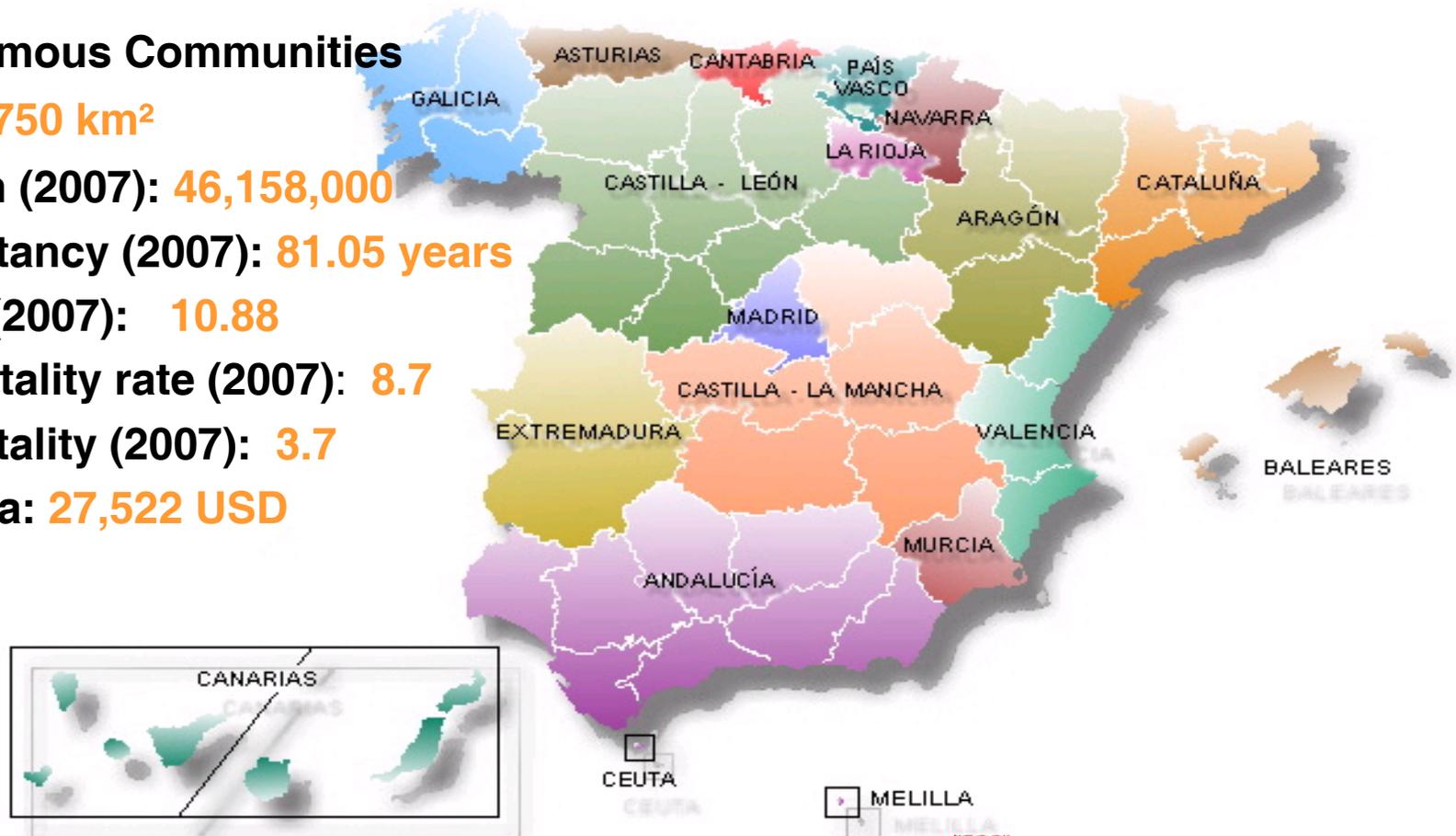
**Life expectancy (2007): 81.05 years**

**Birth rate (2007): 10.88**

**Gross Mortality rate (2007): 8.7**

**Infant mortality (2007): 3.7**

**GDP/Capita: 27,522 USD**



## Historical and political context:

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### 1. SOCIAL SECURITY REFORM: 1977

- Separation of economic services from healthcare services

### 2. CREATION OF AUTONOMOUS REGIONS

### 3. CATALUNYA'S AUTONOMY STATUTE: 1979

### 4. DECENTRALISATION OF THE STATE: 1981

- Transfer of responsibility for regional healthcare to the Catalan Autonomous Government



## Historical and political context:

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### **4. GENERAL HEALTHCARE ACT:1986**

National Healthcare system. Universal coverage

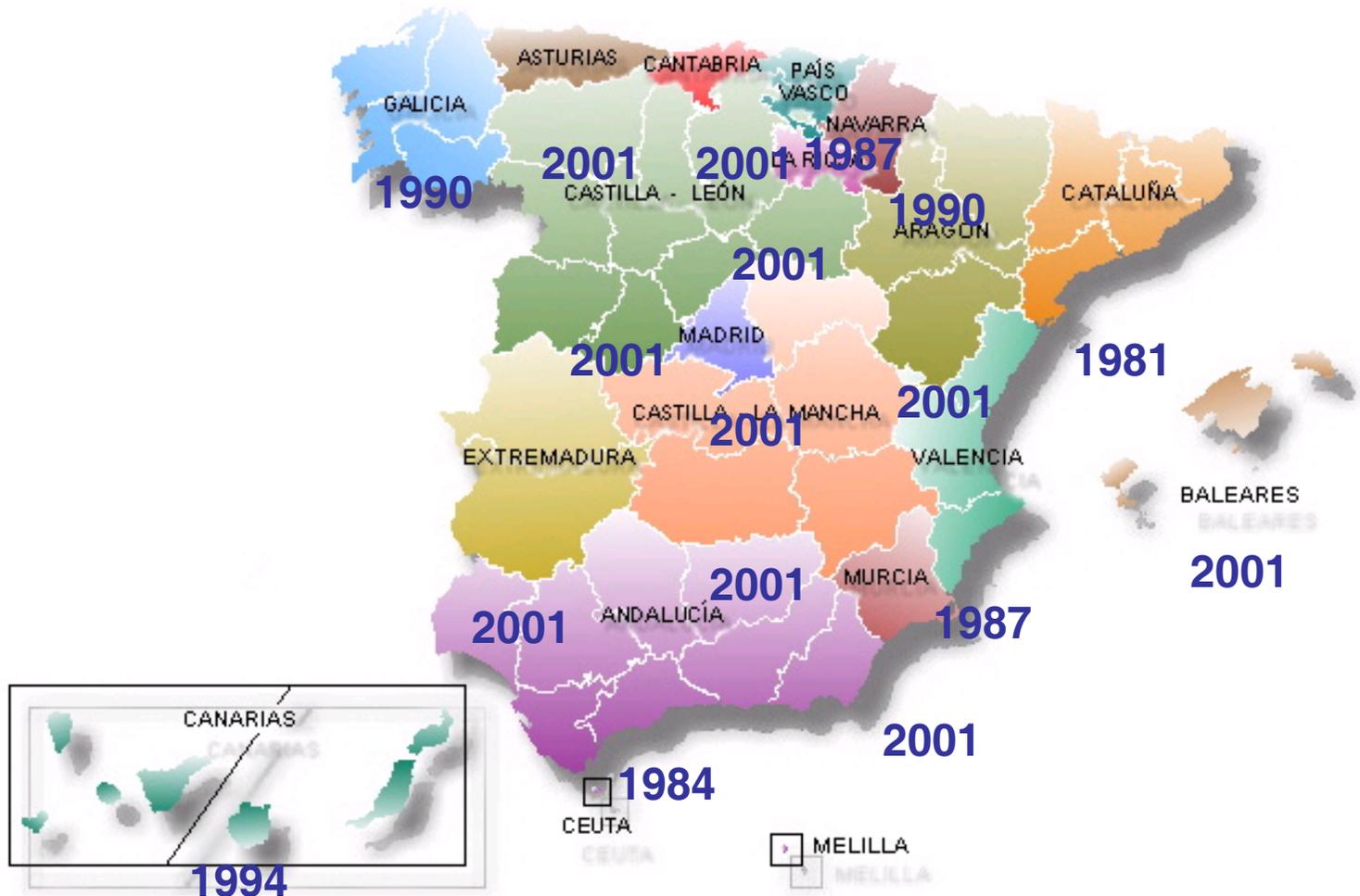
- Progressive change in the Financing system
- Merger of social security and charity: one treasury

### **5.- INTERTERRITORIAL BOARD**

### **6. CATALUNYA'S AUTONOMY STATUTE: 2006**



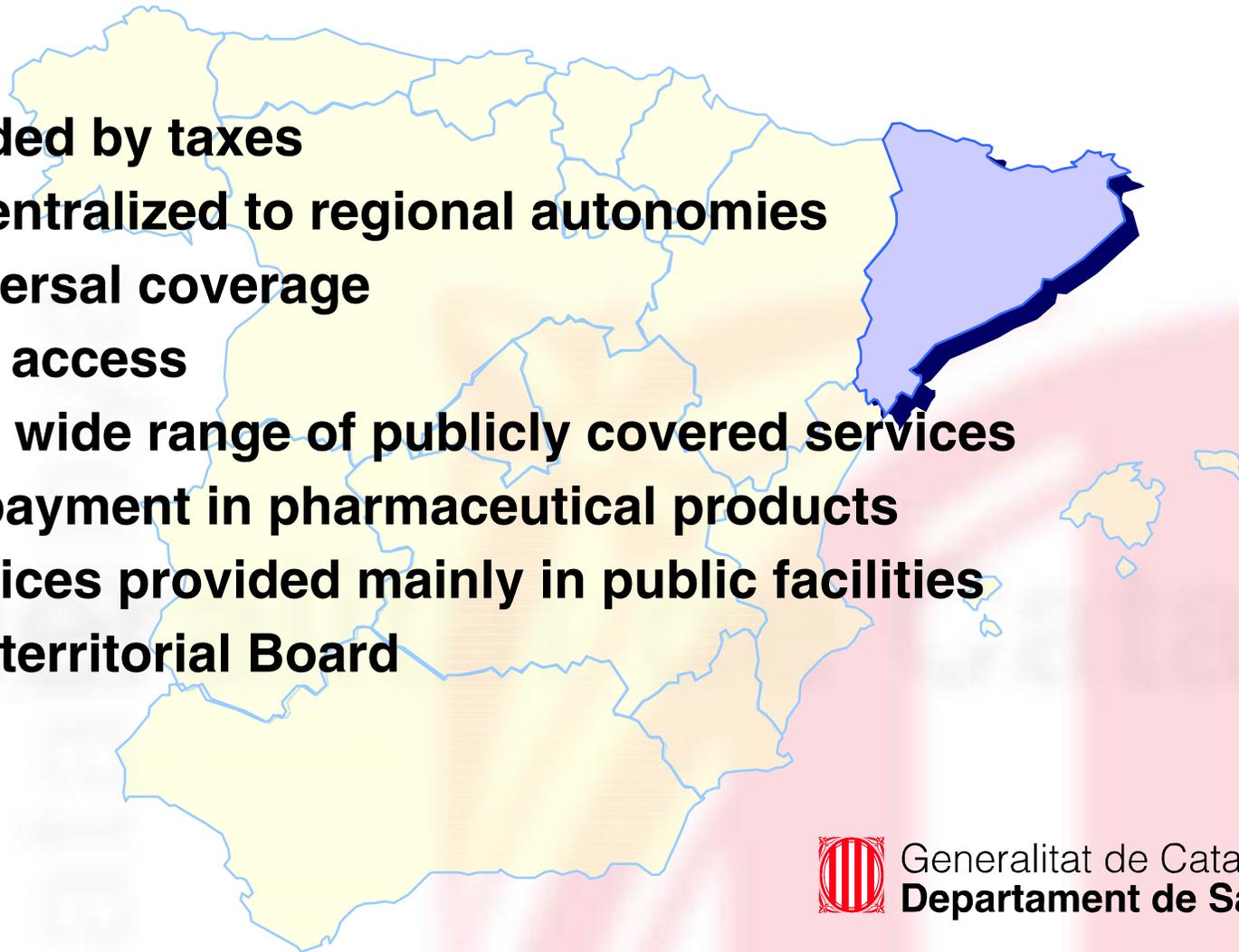
# Devolution process to AA CC



# The Spanish National Healthcare System

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- **Funded by taxes**
- **Decentralized to regional autonomies**
- **Universal coverage**
- **Free access**
- **Very wide range of publicly covered services**
- **Co-payment in pharmaceutical products**
- **Services provided mainly in public facilities**
- **Interterritorial Board**



# Autonomous Communities Health Budget (2006)

Autonomus Community	Public Health Budget euros(1)	Beneficiary Population of Health Care (2)	Expenditure/inhabitant (en euros) (1)/(2)
Andalucía	8.444.338.883	7.849.799	1.075,74
Aragón	1.526.077.187	1.269.027	1.202,56
Asturias (Principado)	1.314.859.753	1.076.635	1.221,27
Baleares (Islas)	1.037.670.553	983.131	1.055,48
Canarias	2.330.109.796	1.968.280	1.183,83
Cantabria	691.854.218	562.309	1.230,38
Castilla y León	2.848.479.959	2.510.849	1.134,47
Castilla-La Mancha	2.188.441.700	1.894.667	1.155,05
Cataluña	7.952.783.337	6.995.206	1.136,89
Comunidad Valenciana	4.609.283.740	4.692.449	982,28
Extremadura	1.334.560.349	1.083.879	1.231,28
Galicia	3.174.375.607	2.762.198	1.149,22
Madrid (Comunidad de)	6.071.416.268	5.964.143	1.017,99
Murcia (Región de )	1.418.765.594	1.335.792	1.062,12
Navarra (Comunidad Foral)	731.762.995	593.472	1.233,02
País Vasco	2.553.642.452	2.124.846	1.201,80
Rioja (La)	422.464.681	301.084	1.403,15
<b>Total</b>	<b>48.650.887.072</b>	<b>43.967.766</b>	<b>1.157,44</b>

(1) Information provided by the Autonomous Communities.

(2) Ministry of Health. Economic Resources of SNS. 2004-2005.



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# Health System Decentralization

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## **Central Government**

Basic legislation and coordination  
Financing  
Minimum package funded through NHS  
Pharmaceutical policy  
International health policy  
Educational requirements

## **Autonomous Government**

Subsidiary legislation  
Public health  
System's organizational structure  
Accreditation and planning  
Purchasing and service provision



# CATALONIA

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# CATALONIA

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## Autonomous Community

Area: **32,106 km<sup>2</sup>**

Population: **7,503,118 inhabitants**

Life expectancy: **81.34 years**

Birth rate (2007): **11.68/1.000 inhabitants**

Gross Mortality rate (2007): **8.28/1.000 inh.**

Infant mortality: **2.7 /1000 live births**

GDP/Capita: **US\$ 34,645**

High urban concentration

Own language and culture

Tourism: **22,990,000 visitors**

### Employment by sectors :

- Services **66.30%**
- Industry **20.90%**
- Construction **10.00%**
- Agriculture **2.10%**



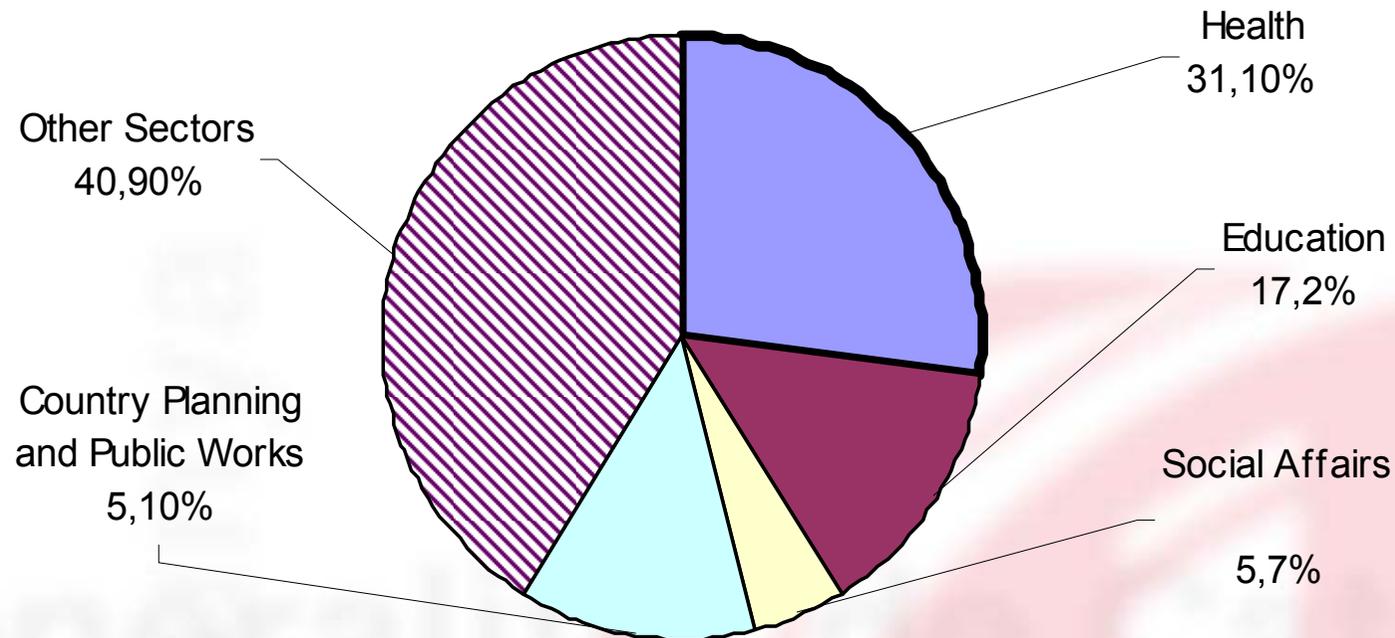
Source: IDESCAT.



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# Catalonia Government Budget 2009 ( 34,750 billion €)

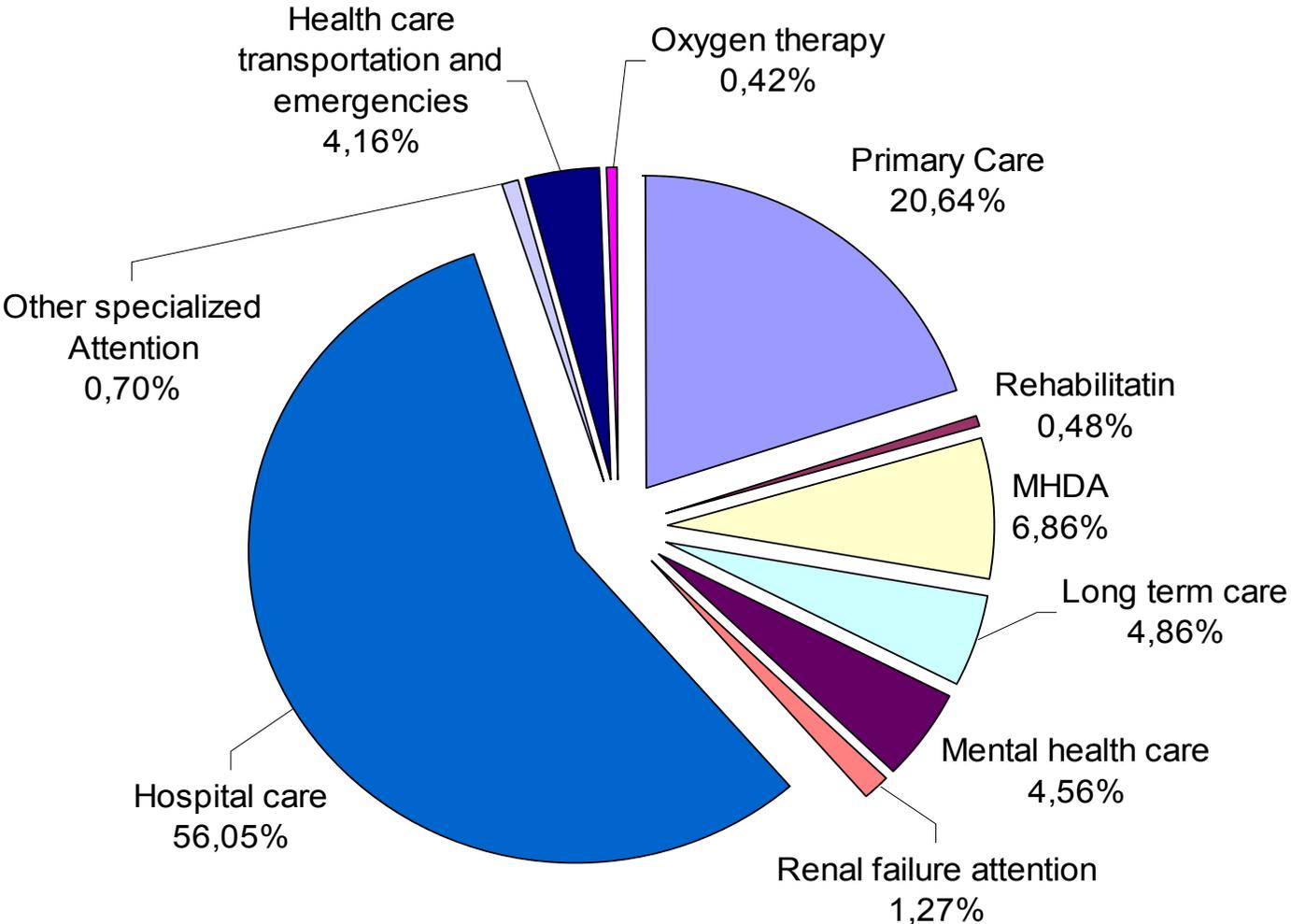
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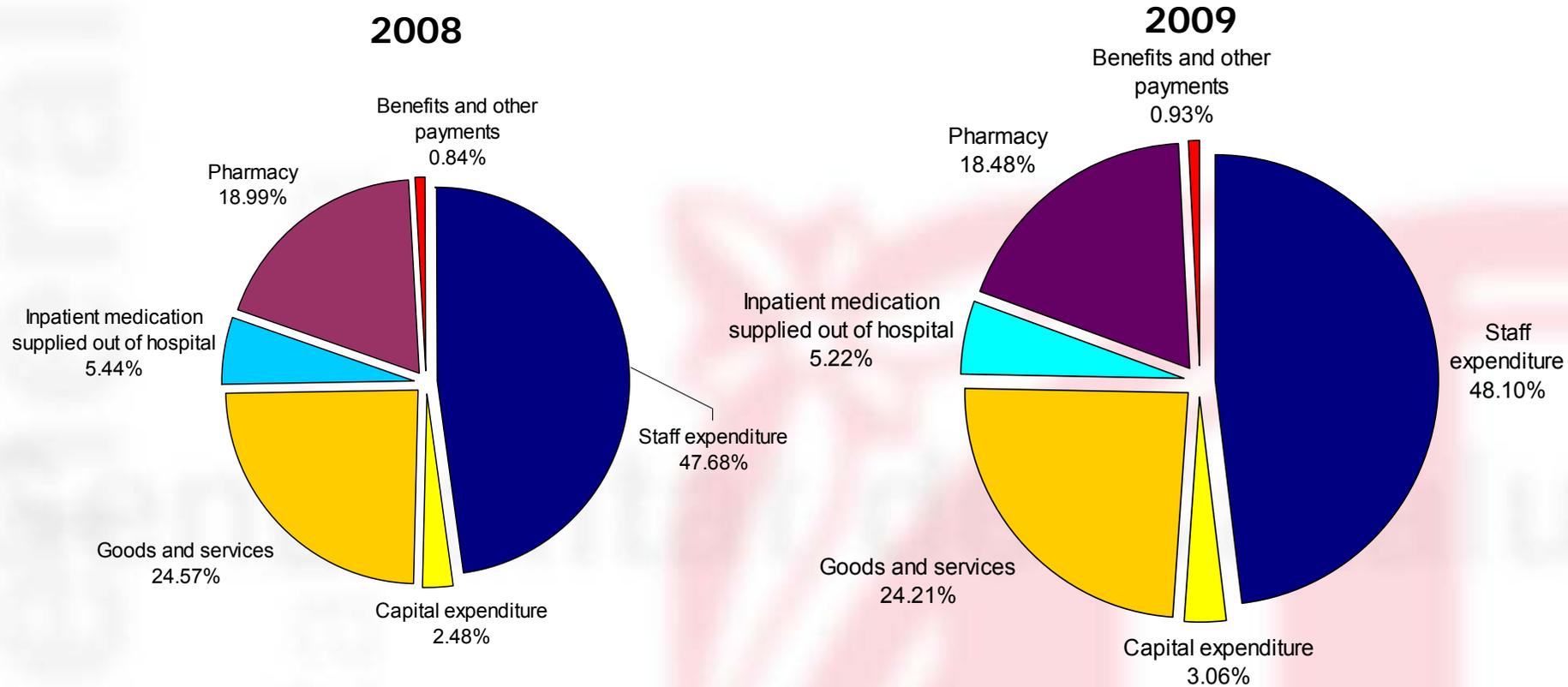
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# Healthcare Budget by service range CatSalut/ICS 2009

9.412,90 € billion euros



# Health budget 2008-2009



# Evolution expenditure / inhabitant

Evolution of healthcare budget	2003	2007	2011
Population	6.506.440	7.324.047	7.600.000
Budget	5,6 B €	8,831 B €	11,4 B €
Budget/GDP	3,6%	4,2%	4,7%
Private expense/GDP*	1,6%	1,8%**	1,8% / 2%
Per capita public expenditure	860 €	1.184,86 €	1.500 €
Per capita private expenditure	363 €	470€**	560 € / 625 €

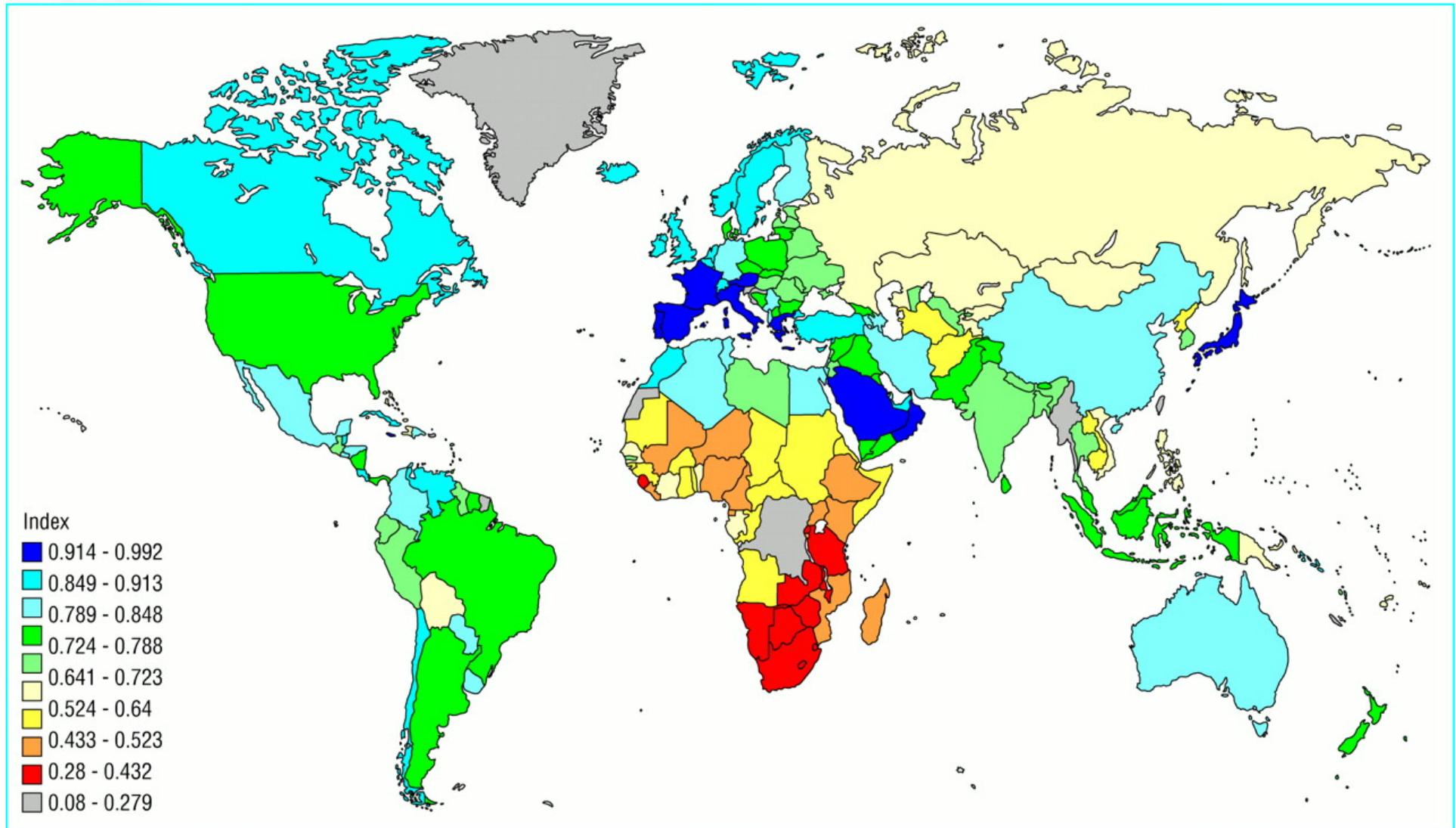
\* Source: internally generated using the data on private expenditure divided by the total healthcare expenditure as stated in the "ACES report on the financial sustainability and territorial balance of the Spanish healthcare on the 2015 horizon".

\*\* 2006



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# Comparative efficiency



Source WHO

## Public expenditure in health as a percentage the GDP

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EU average (1)	6,9%
Spain (1)	5,9%
Catalunya (2)	4,25%

(1) OECD data

(2) Ministerio de Sanidad y Consumo

## Healthcare spending (as a percentage of the total health budget)

Country	Public	Private
USA	45,1	54,9
Spain	71,4	28,6
EU (*)	75	25
OECD (*)	72	28

(\*) OECD data 2007



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# The Catalan Healthcare

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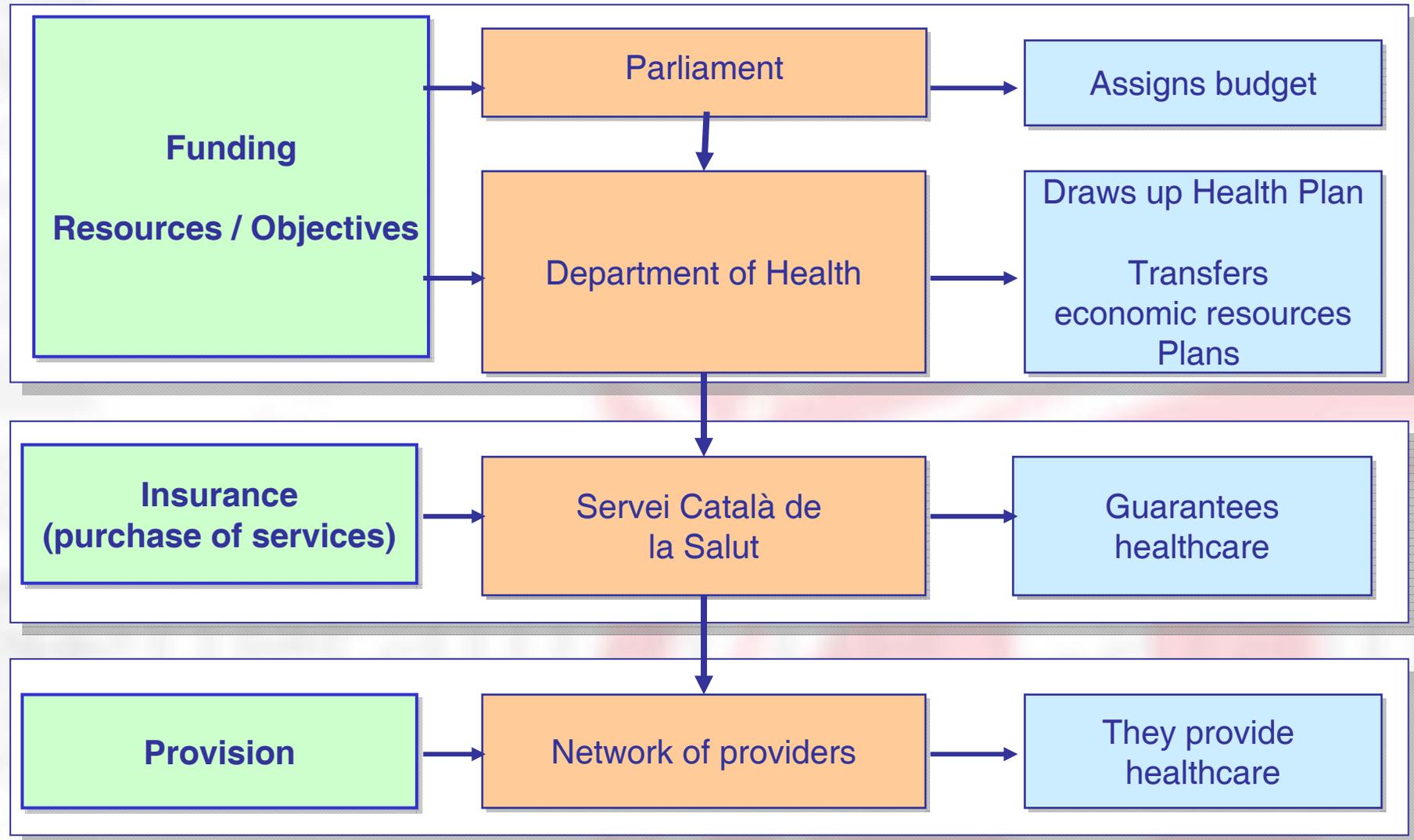
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# Catalan Healthcare System

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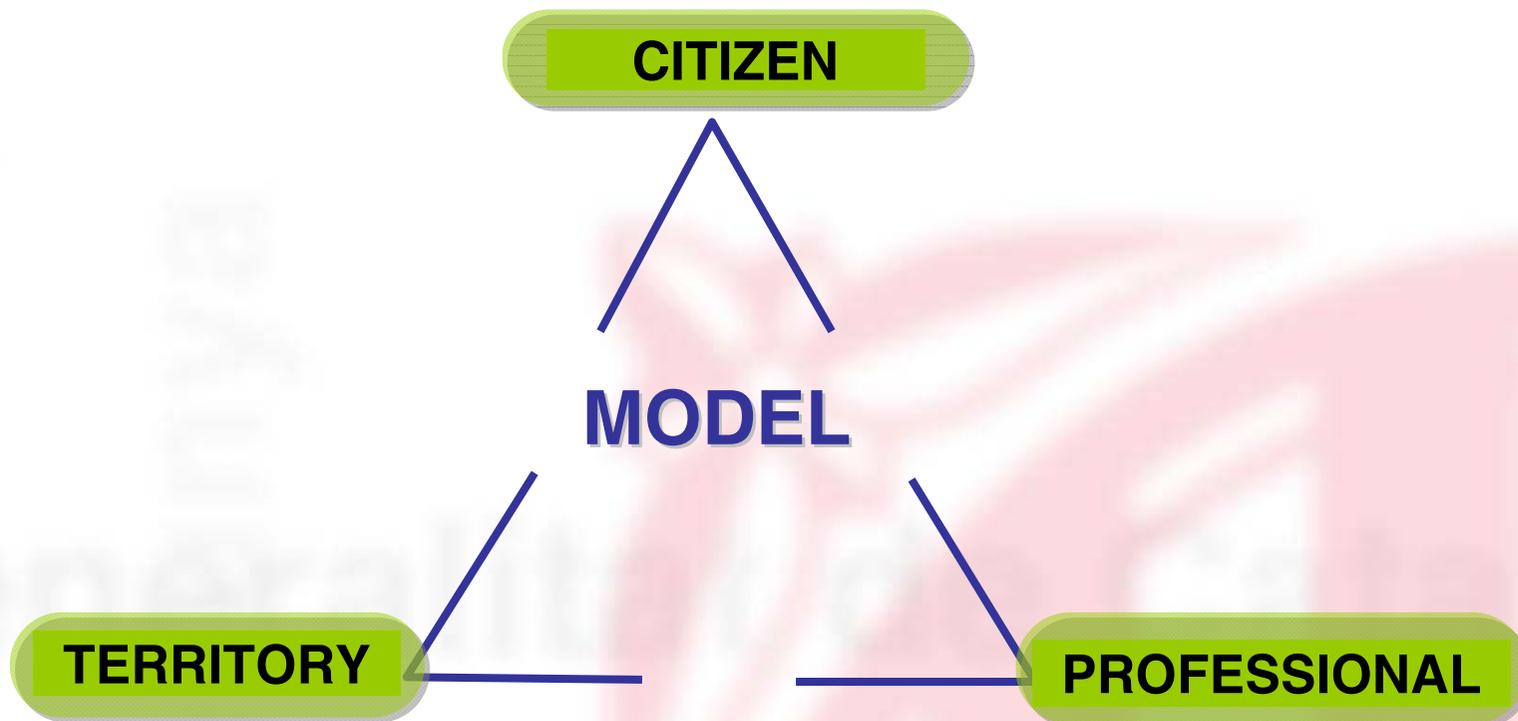
- Universal coverage
- Public financing of the services
- **Separations for Purchaser and Provider**
- **Civil society participation**
- Access equity (68 hospital centers)
- Continuity of care
- Integration and coordination

# Scope of functions



# Priorities of the model

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# Big Steps

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- **Health Map 1984 .Resources**
- **Health Map 2008 Public Health and Social Services**
- **Health Plan**
- **Master Plans**
- **Purchasing System. Contracts**
- **Central Results Warehouse**
- **Quality Assurance Agency**

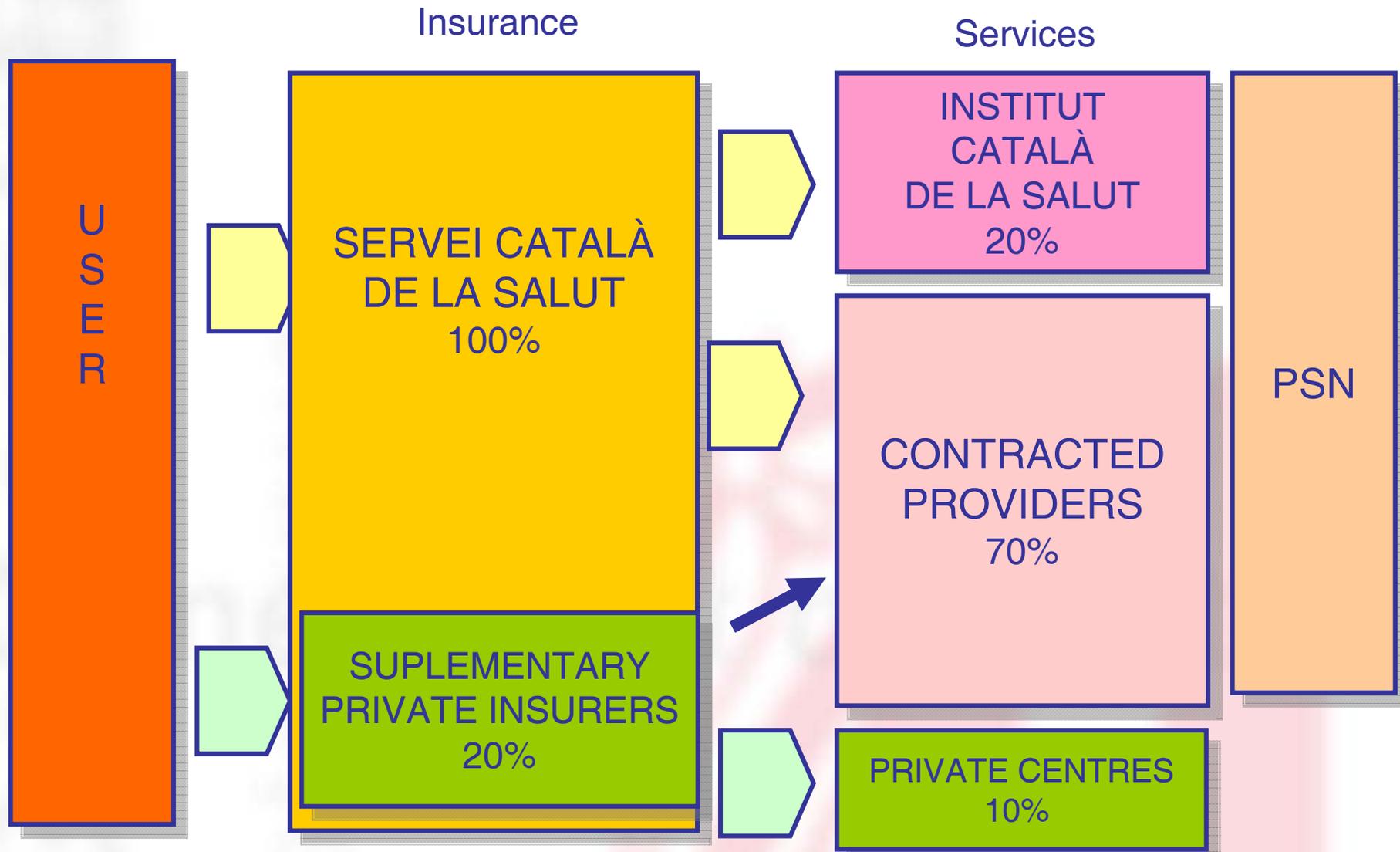




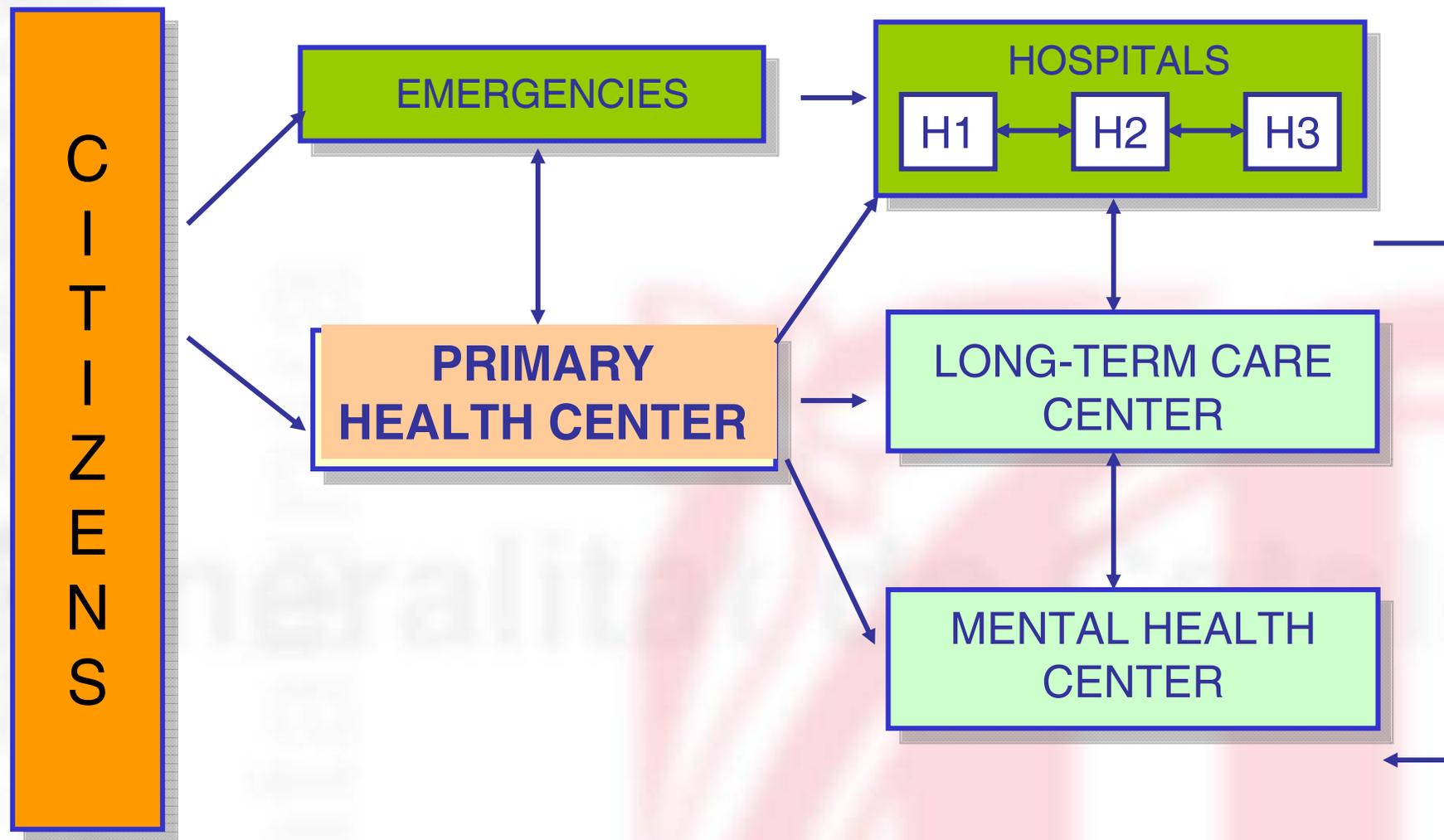
# Health Regions



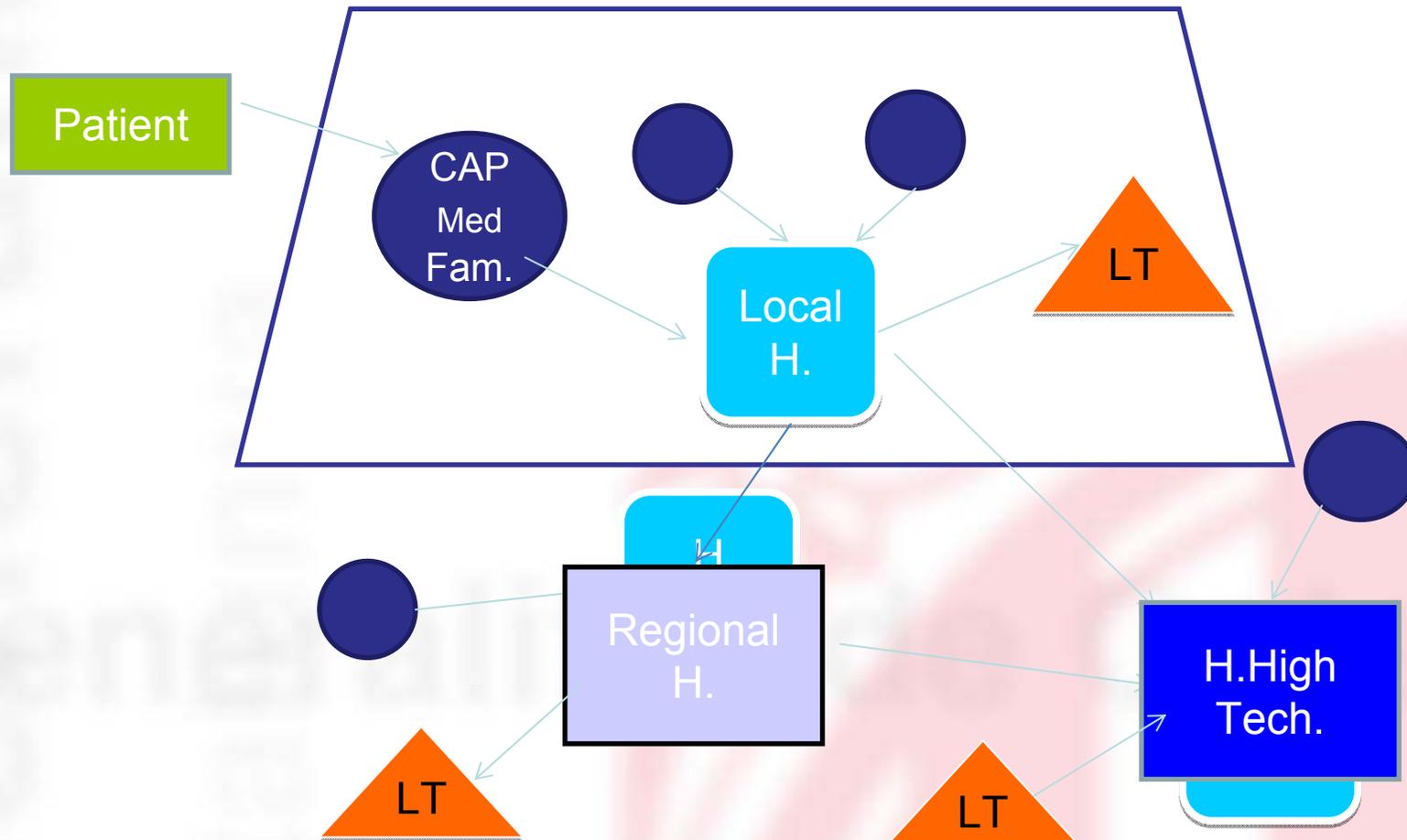
# General diagram of the Catalan Healthcare System



# Customer-oriented organization



# Health Network



# Primary Healthcare

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- Health promotion, prevention and care
- Primary Healthcare and Homecare
- Emergencies
- Research and specialist training

# Ressources/Population

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- Ressources of CAP per population:
  - 1 family doctor per 1600-2000 inhab. >14 years
  - 1 pediatrician per 1500 children < 14 years
  - 1 dentist per 11000 inhab.
  - 1 nurse per M.D.
  - 1 social worker
  - 1 support officer / 5000 inhab.



# Primary health care centers

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## Primary Care Teams

- FD (family doctor)
- Pediatrician
- Dentist
- Nurse
- Social worker

Close to point of residence

25.000 inhabitants / health care center (CAP)

Possibility to choose FD

High level resolution

Appointment



# CAP Team

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- Team Work
- Team led by a medical coordinator and a nurse coordinator
- Open morning to afternoon
- Doctors are specialist in family medicine (4 years)



# Primary Health Care Centers

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**CAP Lleida**



**CAP Sort**



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# Primary Health Care Centers

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# Primary Health Care Centers

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## CAP Larrard (Barcelona)



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# Hospitals

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## Local H.

MSO+ Specialists

Techn. Platform

Emergencies

Research

Medical Training

## Regional H.

Local H.+ ICU

Specialities

Research

Medical Training

## H.Tech. H.

Regional H.+  
Neurosurgery

Cardiac surgery

Transplants

Burned

Research

Medical Training



# Ownership of healthcare facilities

Type of centre	State		Non State	
	Property	Management	Property	Management
<b>Hospital care</b>	25,94%	21,43%	74,06%	78,57%
<b>Primary care</b>	95,40%	87,72%	4,60%	12,28%
<b>Mental Health care</b>	28,87%	27,38%	71,13%	72,62%
<b>Long-term health care</b>	68,63%	62,75%	31,37%	37,25%

*Source: Office of General Direction of Healthcare Resources. Department of Health of Catalunya*



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# Ownership Public Hospitals Network

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- 18 Private Foundations/Municipal Societies
  - 4 Church
  - 5 Mutual Companies (Insurances)
  - 11 Private Companies
  - 18 Consortia and Public Companies
  - 12 Institut Català de la Salut (State)
- 

68 Total



# Hospitals

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**Hospital de Sant Pau  
(Barcelona)**



**Hospital de Santa Caterina  
(Girona)**



# Hospitals

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**Hospital de Vilafranca**



**Hospital de Mataró**



# Hospitals

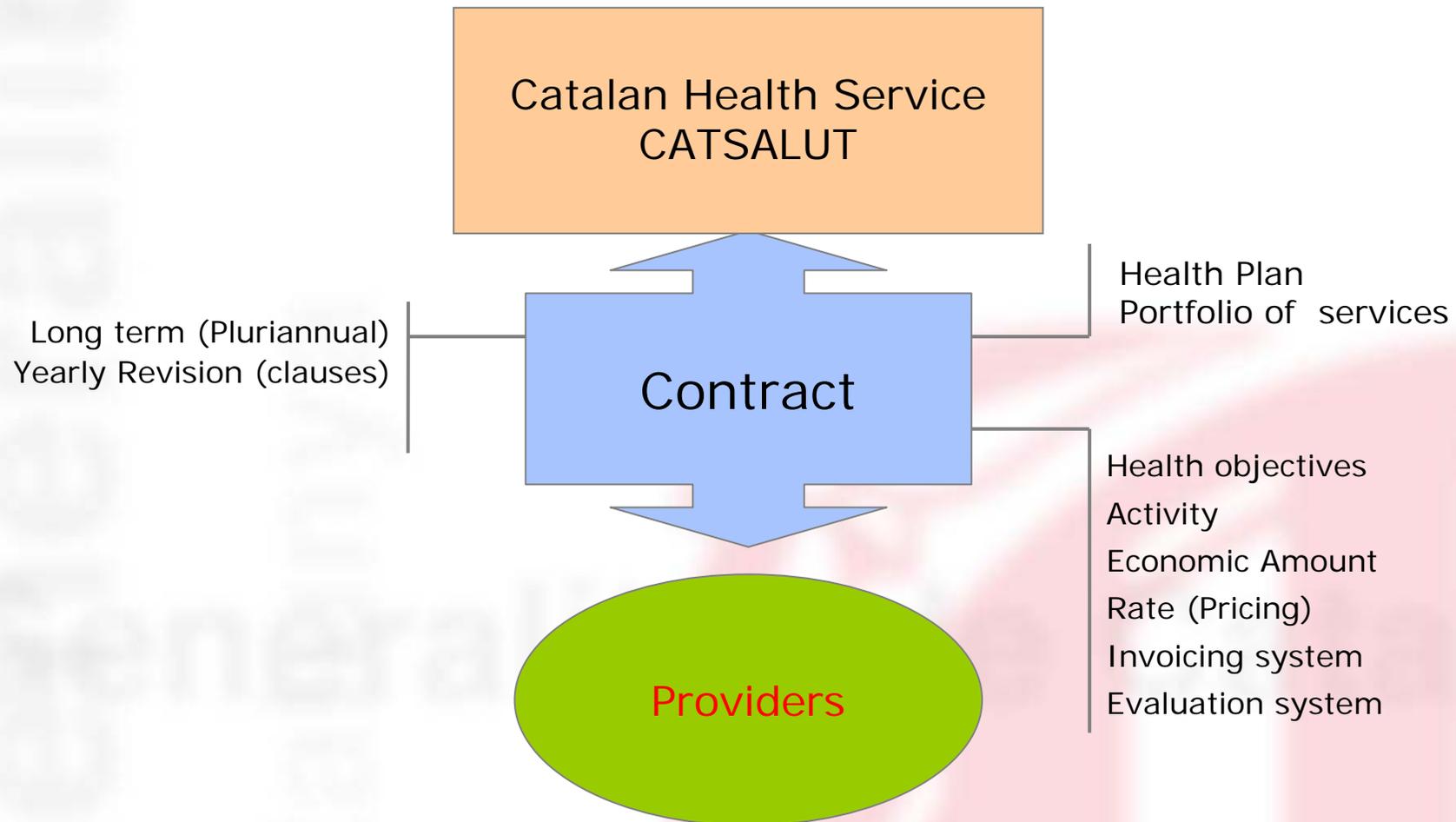
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## Hospital d'Igualada

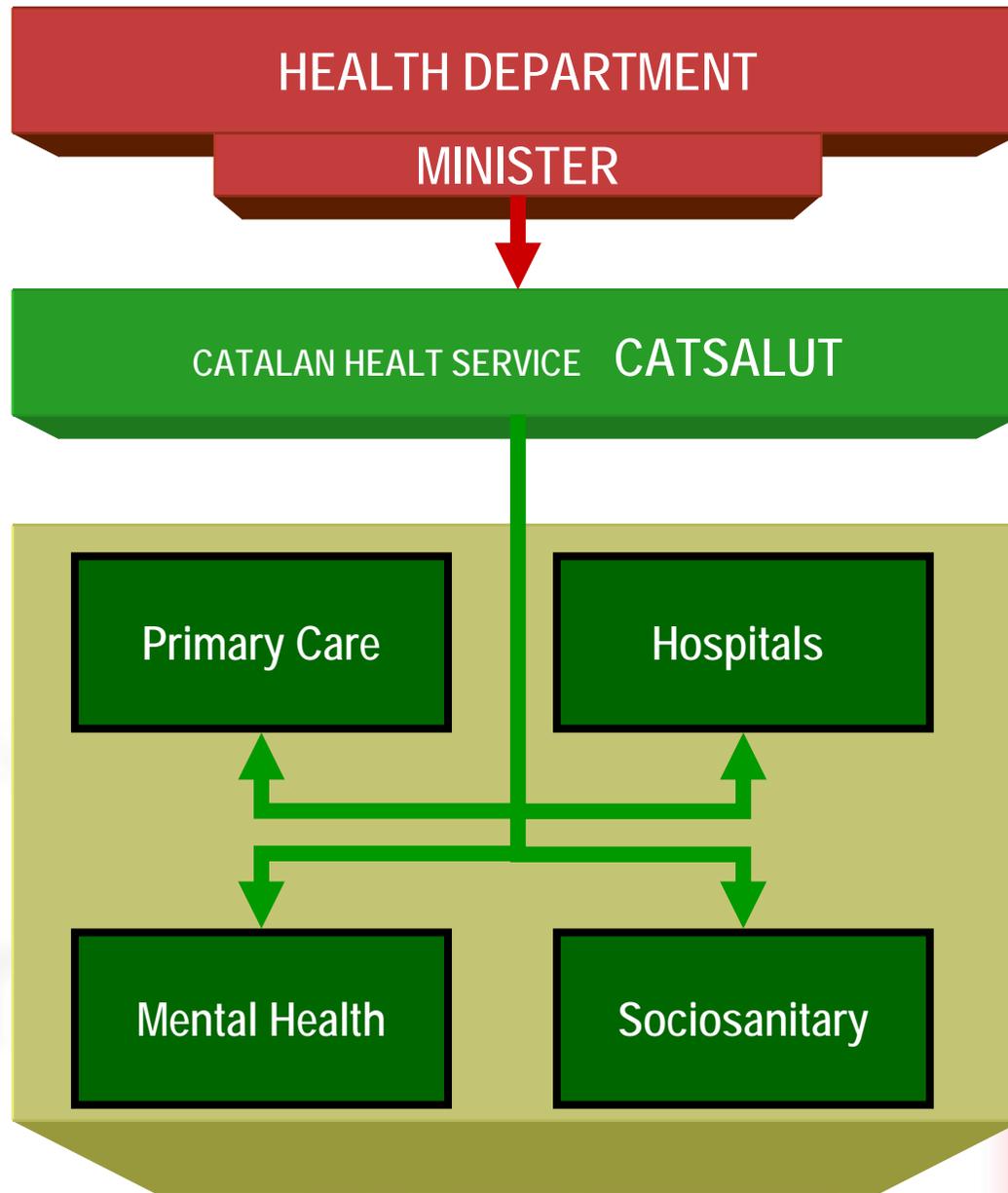


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# Contract of health services



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# Contract Elements

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**Objectives of Health Plan**

**Amount of care**

**Quality + Satisfaction**

**Payment System**

**Survey and Evaluation:**

Registers

Audit systems

Double satisfaction survey

# Contract: One example

<i>objectius part variable comuns</i>	<i>Contractació</i>	
	<i>grau d'assoliment</i>	<i>ponderació econòmica</i>
AP01. Assolir un determinat percentatge mínim de pacients hipertensos atesos amb control acceptable de la pressió arterial	50 %	8 %
	<i>prevalença mínima exigida:</i> 17	
AP02. Assolir un determinat percentatge mínim de pacients diabètics atesos amb control metabòlic	60 %	8 %
	<i>prevalença mínima exigida:</i> 6	
AP03. Assolir un determinat percentatge mínim de pacients de 35 a 74 anys i amb colesterol total >200 mg/dl atesos amb càlcul del risc cardiovascular	70 %	8 %
AP04. Assolir un determinat percentatge mínim de població atesa i assignada d'entre 6 i 14 anys amb avaluació del sobrepès i l'obesitat	70 %	7 %
AP05. Assolir un determinat percentatge mínim de població atesa i assignada major de 14 anys amb cribatge sobre el consum d'alcohol	60 %	7 %



# Health Scores (results)

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	March 06	Setember 06	Improvement
Control of Hipertension	30,01	36,47	<b>22%</b>
Control of Type II Diabetes Mellitus	45,94	49,13	<b>7%</b>
Anticoagulant or antiplaquetary treatment for Ischemic Cardiopathy	67,49	74,2	<b>10%</b>
Betablockers tratement for Ischemic Cardiopathy	35,81	39,7	<b>11%</b>
Cardiovascular risk measure in >35 years old	20,55	29,38	<b>43%</b>
Congestive Heart Failure treated with IECA	44,65	52,06	<b>17%</b>

# Clinical Management

- Clinic Guides



1. Hypercholesterolemia
2. Dyspepsia – H. Pylori
3. Pressure ulcers
4. Urinary incontinence
5. Diabetes capillary glucose self-monitoring
6. Arterial hypertension
7. Lumbar spine pathology in adults
8. Idiopathic scoliosis
9. Emergency contraception
10. Vascular ulcers
11. Low respiratory tract infectious disease

# Payment to professionals

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## Hospital :

Salary + variable (bonus) (related to objectives and results)

## CAP (PHC):

Common Base

Capitation

Indexed by population characteristics conferred (age, rurality, dispersion etc.).

Bonus related to health results

(15% 5 + 5 + 5)

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# Healthcare data

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## **Total beds available:**

4,8 (per 1.000 inhabitants)

## **Beds in Acute Care:**

2,6 approx. (per 1.000 inhabitants)

## **Medical Doctors:**

3,7 (per 1.000 inhabitants)



## **Per capita expenditure 2009:**

1,254 Euros / inhabitant

## **Discharges**

98 (per 1.000 inhabitant)



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## Healthcare data (II)

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### Public System Network:

- 410 primary healthcare areas + 821 local health centers
- 68 acute care hospitals (15,143 beds)



- 96 long-term centers (7,539 beds)

# Reform process evolution

Process	Starting point “80”	Intermediate Stage “90”	Current Stage “00”
<b>Base line</b>	Possibilism	Structure and organization	Capacity to assume new demands
<b>Knowledge level</b>	Data collect: Health map	Acting globally on health: General Health Care act	Acting on the territory
<b>Action focus on</b>	Supply	Supply	Demand
<b>Objectives</b>	To rationalize	Quality assurance : Accreditation	Promote prevention
<b>Care levels</b>	Primary Care reform	Consolidation levels of care	Continuity of care in an integrated health system
<b>Services provision</b>	Introduction professional management	Coordination with providers	Alliances among providers. Management based on territory
<b>Payment system</b>	Payment by length of stay Global budget	Payment by procedures	Payment by health objectives



# Challenges:

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# Challenges

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- **Demographic and cultural changes:**
  - Aging → Dependency
  - Immigration
  - Birth rates
- **Sociological and epidemiological changes**
- **Scientific and technological advances**
- **Economic sustainability**



# Public Health Agency

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- **Extending the Financer / Provider Split into Public health**
- **Inducing coordination and cooperation among the different administrations**
- **Provider's accreditation**
- **Inducing transversality and integrality, specially with primary healthcare**
- **Quality orientation**
- **Transformation and renewal of technical and management teams**



# Law of the Catalan Health Institut

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- **To become a public company**
- **To reinforce the separation of functions: purchasing and providing**
- **To improve the management capability**
- **To improve the responsibility for the results**



# Promoting a new territorial allocation formula

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## **WHY a system of per capita financing?**

1. To favor the creation of integrated healthcare systems, based on the care needs of the population.
2. To improve the efficiency of the system, promoting a more coordinated management of the healthcare system.
3. To stimulate improvements in the quality of healthcare services, delivering the most appropriate level of care.
4. To share responsibilities among the various levels of care, transferring a part of the risks to the providers.



# Promoting health territorial governments

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**Objective:** To create a stable collaboration body among Regional Government and Municipalities

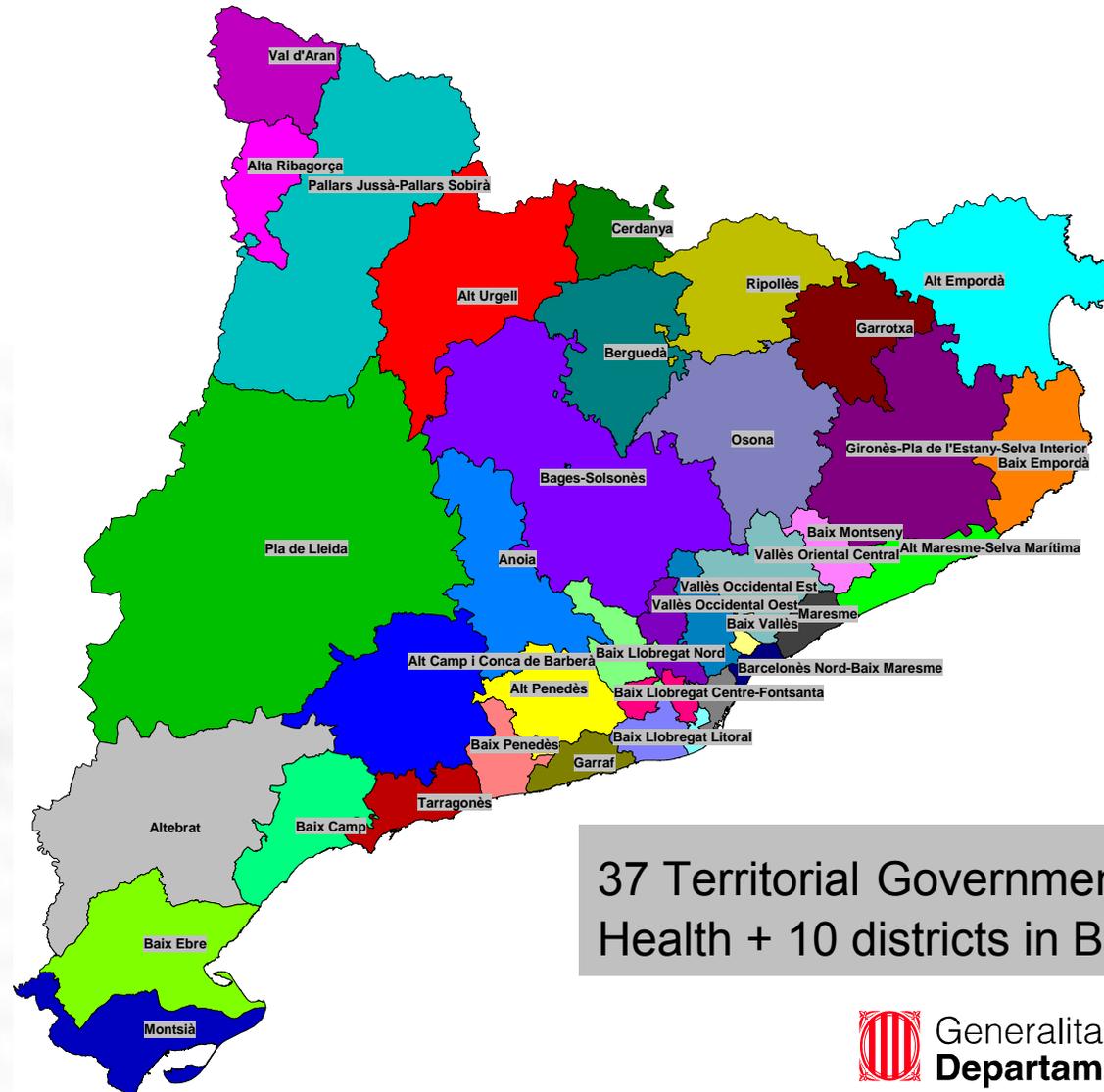
**Legal status:** consortium

**Specific Objectives :**

- Equity. Reduction of disparities.
- Transversality of interventions
- Integration of care (from public to healthcare)
- Sustainability
- Response to demographic challenges
- Participation
- Transparency
- Increase subsidization



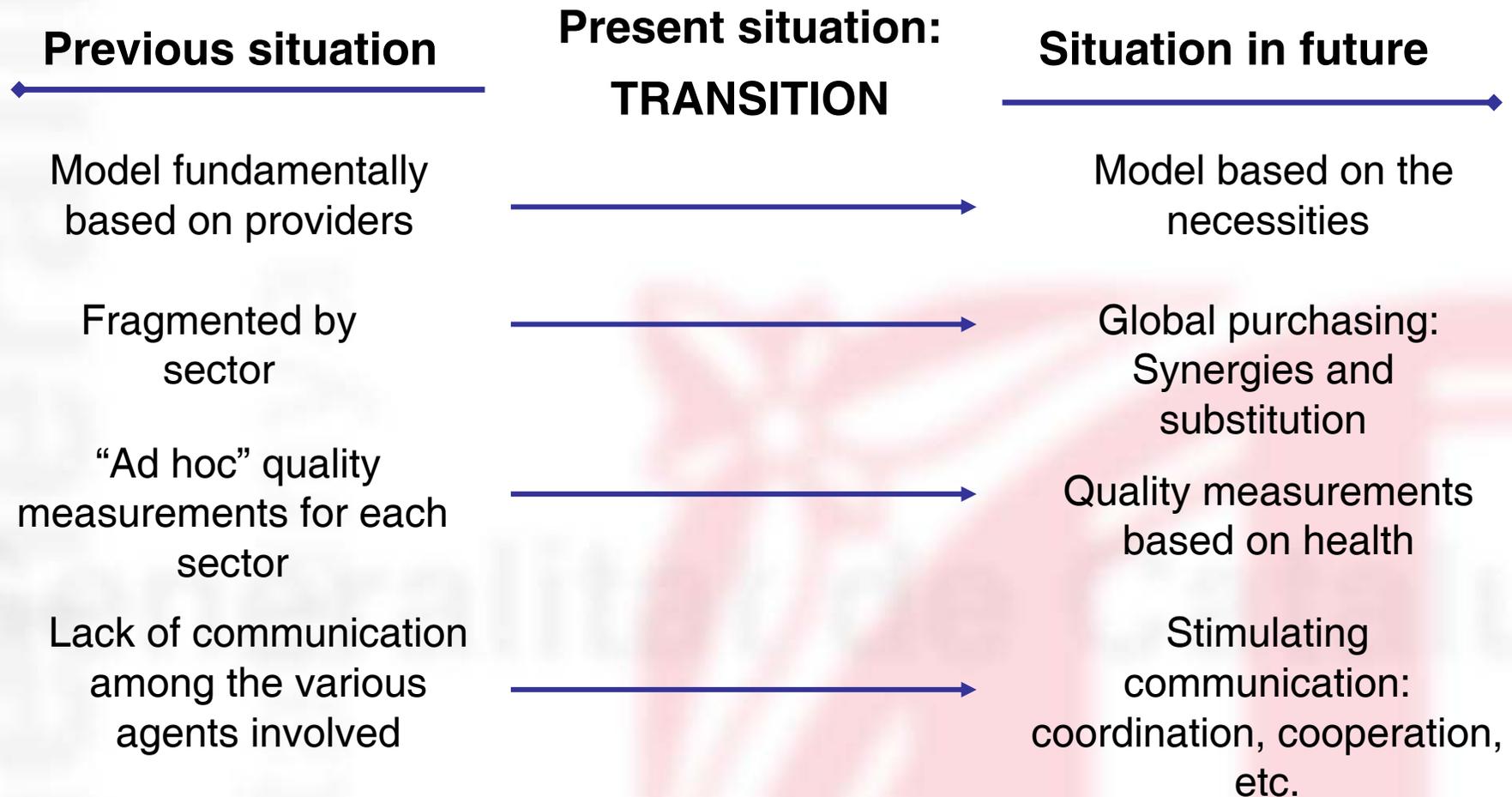
# Health Territories: GTS



# Per Capita Financing (I)

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Paradigm shift in the current systems for the purchasing of services



Gràcies  
Thank you

[www.gencat.cat/salut](http://www.gencat.cat/salut)

[enric.mayolas@gencat.cat](mailto:enric.mayolas@gencat.cat)



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# Per Capita Financing (II)

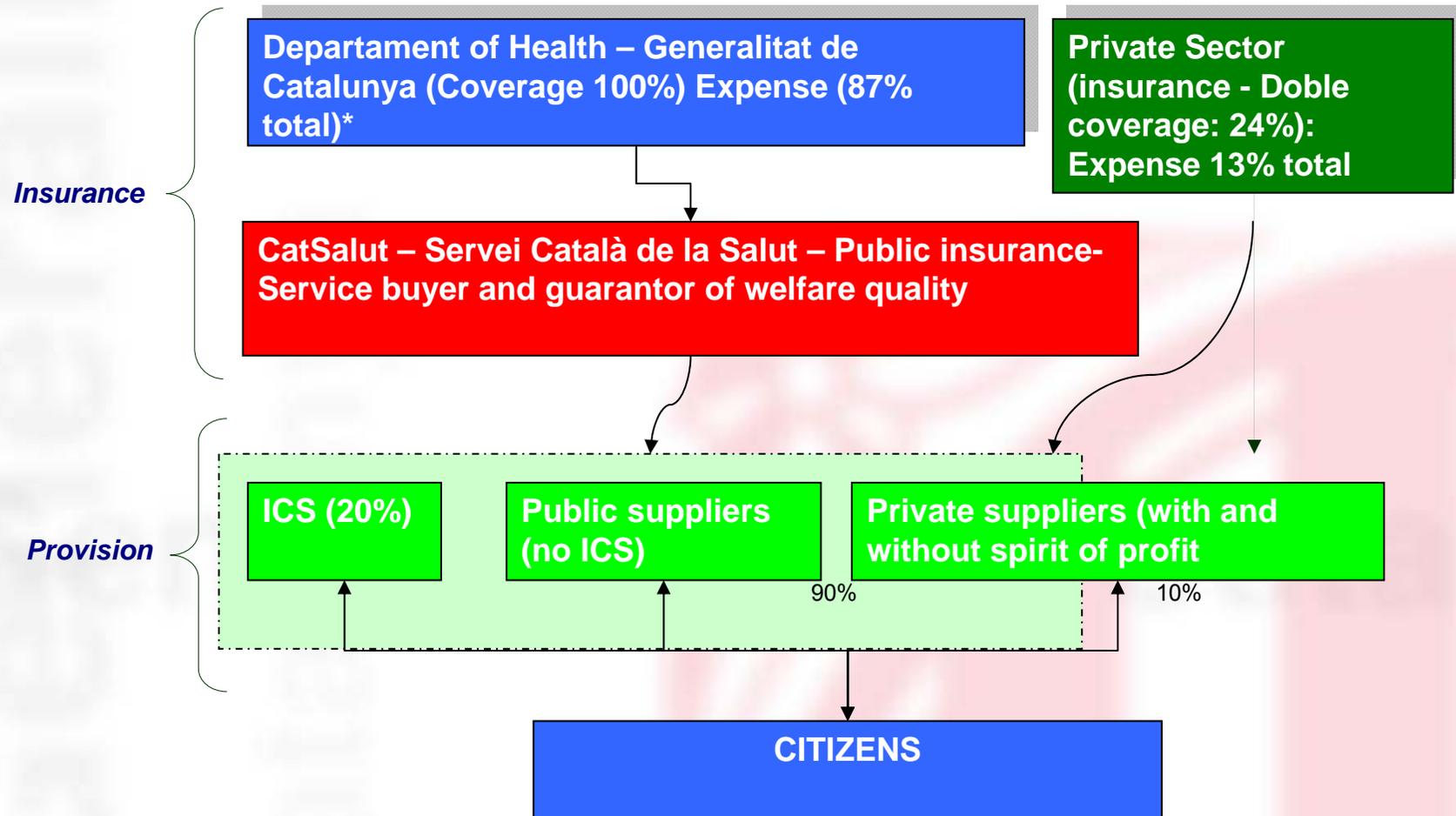
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## Future elements

- Extension of the model (harmonized with the development and implementation of the Territorial Governments of Healthcare [GTS]):
  - 2005 six new territories (22%)
  - 2006 to reach 50 %
  - 2007 to reach 100 %
- Formula for adjustment:
  - Increasing the accuracy of the formula for allocations (variable by needs, equity, etc.)
  - Minimize incorrect incentives (variables connected to installed structures...)
    - » All staff: incentives for coordination



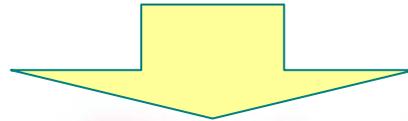
# Main agents within the healthcare system



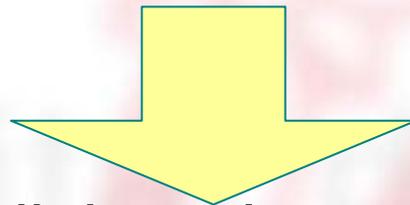
# Promoting health territorial governments

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**“ Sharing competence government among the Generalitat and the Municipalities”**

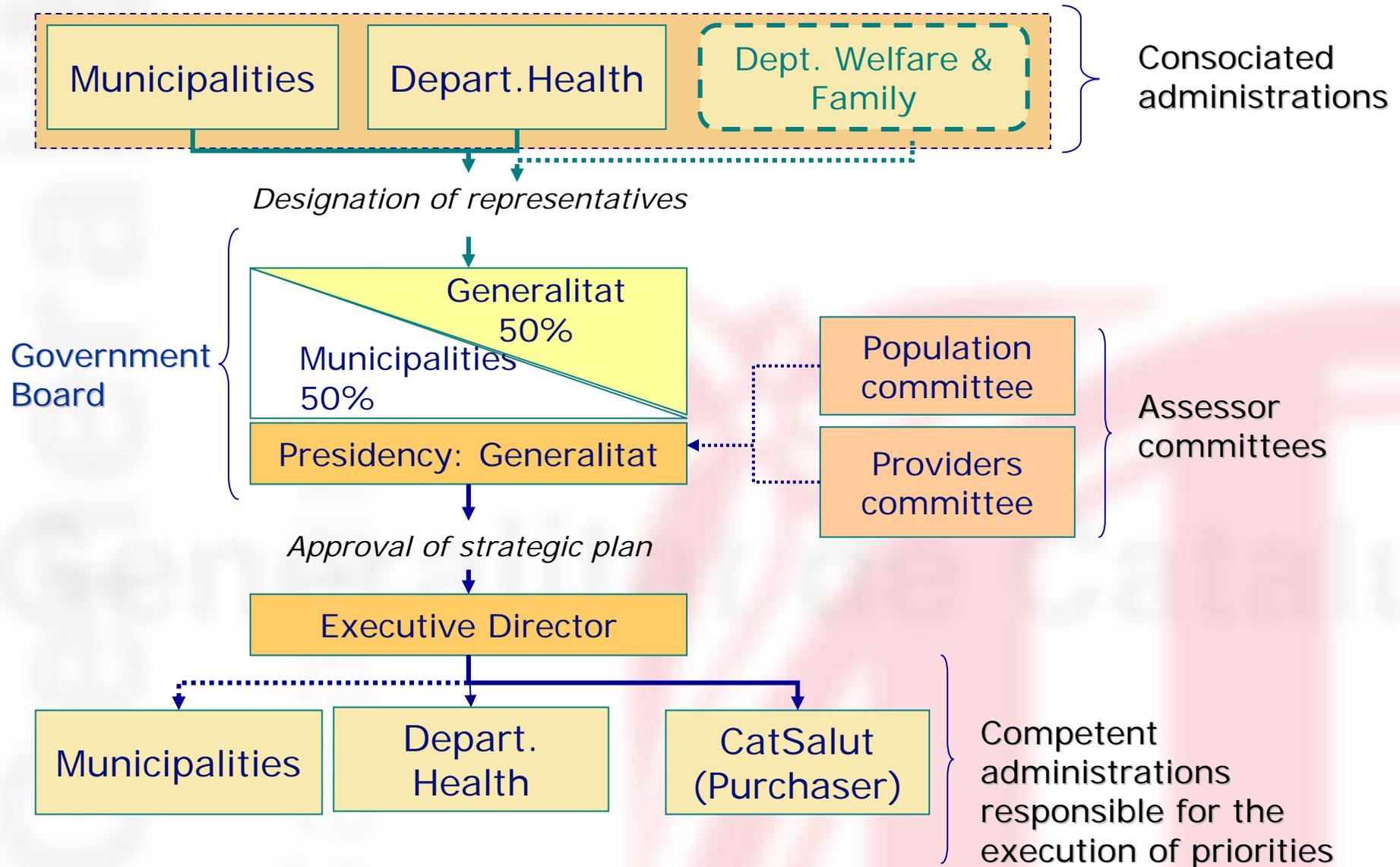


No management capacity  
No competence transfer



Creating a stable collaboration setting without altering the Catalan Healthcare Organization Act





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