From the Catalan model of health to the Catalan healthcare system
Socio-demographic characteristics of Spain

17 Autonomous Communities
Area: 504,750 km²
Population (2007): 46,158,000
Life expectancy (2007): 81.05 years
Birth rate (2007): 10.88
Gross Mortality rate (2007): 8.7
GDP/Capita: 27,522 USD
Historical and political context:

1. SOCIAL SECURITY REFORM: 1977
   • Separation of economic services from healthcare services

2. CREATION OF AUTONOMOUS REGIONS

3. CATALUNYA’S AUTONOMY STATUTE: 1979

   • Transfer of responsibility for regional healthcare to the Catalan Autonomous Government
Historical and political context:

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

- 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)

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

(1) Information provided by the Autonomous Communities.
## Health System Decentralization

| 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
Catalonia

Autonomous Community
Area: 32,106 km²
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.
Catalonia Government Budget 2009
(34,750 billion €)

- Health: 31.10%
- Education: 17.2%
- Social Affairs: 5.7%
- Country Planning and Public Works: 5.10%
- Other Sectors: 40.90%
Healthcare Budget by service range CatSalut/ICS 2009
9.412,90 € billion euros

- Hospital care: 56.05%
- Primary Care: 20.64%
- Mental health care: 4.56%
- Long term care: 4.86%
- MHDA: 6.86%
- Rehabilitatin: 0.48%
- Oxygen therapy: 0.42%
- Other specialized Attention: 0.70%
- Health care transportation and emergencies: 4.16%
- Renal failure attention: 1.27%
- Health care transportation and emergencies: 4.16%
- Transport and emergencies: 4.16%

Generalitat de Catalunya
Departament de Salut
Health budget 2008-2009

2008
- Pharmacy: 18.99%
- Inpatient medication supplied out of hospital: 5.44%
- Goods and services: 24.57%
- Capital expenditure: 2.48%
- Staff expenditure: 47.68%
- Benefits and other payments: 0.84%

2009
- Pharmacy: 18.48%
- Inpatient medication supplied out of hospital: 5.22%
- Goods and services: 24.21%
- Capital expenditure: 3.06%
- Staff expenditure: 48.10%
- Benefits and other payments: 0.93%
## Evolution expenditure / inhabitant

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>6.506.440</td>
<td>7.324.047</td>
<td>7.600.000</td>
</tr>
<tr>
<td>Budget</td>
<td>5,6 B €</td>
<td>8,831 B €</td>
<td>11,4 B €</td>
</tr>
<tr>
<td>Budget/GDP</td>
<td>3,6%</td>
<td>4,2%</td>
<td>4,7%</td>
</tr>
<tr>
<td>Private expense/GDP*</td>
<td>1,6%</td>
<td>1,8%**</td>
<td>1,8% / 2%</td>
</tr>
<tr>
<td>Per capita public expenditure</td>
<td>860 €</td>
<td>1.184,86 €</td>
<td>1.500 €</td>
</tr>
<tr>
<td>Per capita private expenditure</td>
<td>363 €</td>
<td>470€**</td>
<td>560 € / 625 €</td>
</tr>
</tbody>
</table>

*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
### Public expenditure in health as a percentage the GDP

<table>
<thead>
<tr>
<th>Country</th>
<th>Public</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU average (1)</td>
<td>6,9%</td>
<td></td>
</tr>
<tr>
<td>Spain (1)</td>
<td>5,9%</td>
<td></td>
</tr>
<tr>
<td>Catalunya (2)</td>
<td>4,25%</td>
<td></td>
</tr>
</tbody>
</table>

(1) OECD data
(2) Ministerio de Sanidad y Consumo

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

<table>
<thead>
<tr>
<th>Country</th>
<th>Public</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>45,1</td>
<td>54,9</td>
</tr>
<tr>
<td>Spain</td>
<td>71,4</td>
<td>28,6</td>
</tr>
<tr>
<td>EU (*)</td>
<td>75</td>
<td>25</td>
</tr>
<tr>
<td>OECD (*)</td>
<td>72</td>
<td>28</td>
</tr>
</tbody>
</table>

(*) OECD data 2007
The Catalan Healthcare
Catalan Healthcare System

- 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

Funding
Resources / Objectives

Parliament

Assigns budget

Draws up Health Plan
Transfers economic resources Plans

Department of Health

Guarantees healthcare

Servei Català de la Salut

Insurance (purchase of services)

They provide healthcare

Network of providers

Provision

Resources / Objectives

Insurance (purchase of services)
Priorities of the model

- Citizen
- Model
- Territory
- Professional
Big Steps

- 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
Basic Health Areas
Health Regions
General diagram of the Catalan Healthcare System

**Insurance**
- **SERVEI CATALÀ DE LA SALUT** 100%
- **SUPPLEMENTARY PRIVATE INSURERS** 20%

**Services**
- **INSTITUT CATALÀ DE LA SALUT** 20%
- **CONTRACTED PROVIDERS** 70%
- **PRIVATE CENTRES** 10%

**User**
Customer-oriented organization

- Emergency Services
- Primary Health Center
- Long-Term Care
- Mental Health Center
- Hospitals (H1, H2, H3)

Citizens flow through the system to access services.
Health Network

- Patient
  - CAP Med Fam.
  - Local H.
- Regional H.
  - LT
- H. High Tech.
Primary Healthcare

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

- 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

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

- Team Work
- Team leaded by a medical coordinator and a nurse coordinator
- Open morning to afternoon
- Doctors are specialist in family medicine (4 years)
Primary Health Care Centers

CAP Lleida

CAP Sort
Primary Health Care Centers
Primary Health Care Centers

CAP Larrard (Barcelona)
<table>
<thead>
<tr>
<th>Local H.</th>
<th>Regional H.</th>
<th>H.Tech. H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSO+ Specialists</td>
<td>Local H.+ ICU</td>
<td>Regional H.+ Neurosurgery</td>
</tr>
<tr>
<td>Techn. Platform</td>
<td>Specialities</td>
<td>Cardiac surgery</td>
</tr>
<tr>
<td>Emergencies</td>
<td></td>
<td>Transplants</td>
</tr>
<tr>
<td>Research</td>
<td>Research</td>
<td>Burned</td>
</tr>
<tr>
<td>Medical Training</td>
<td>Medical Training</td>
<td>Research</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medical Training</td>
</tr>
</tbody>
</table>
# Ownership of healthcare facilities

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

*Source: Office of General Direction of Healthcare Resources. Department of Health of Catalunya*
Ownership Public Hospitals Network

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

Hospital de Sant Pau (Barcelona)

Hospital de Santa Caterina (Girona)
Hospitals

Hospital de Vilafranca

Hospital de Mataró
Hospitals

Hospital d’Igualada
Contract of health services

- Catalan Health Service CATSALUT
- Contract
- Health Plan
- Portfolio of services
- Long term (Pluriannual)
- Yearly Revision (clauses)
- Health objectives
- Activity
- Economic Amount
- Rate (Pricing)
- Invoicing system
- Evaluation system
- Providers
Catalan healthcare system

HEALTH DEPARTMENT

MINISTER

CATALAN HEALTH SERVICE

CATSALUT

Primary Care

Hospitals

Mental Health

Sociosanitary
Contract Elements

Objectives of Health Plan

Amount of care

Quality + Satisfaction

Payment System

Survey and Evaluation:
- Registers
- Audit systems
- Double satisfaction survey
### Contract: One example

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

Generalitat de Catalunya
Departament de Salut
# Health Scores (results)

<table>
<thead>
<tr>
<th>Health Score Description</th>
<th>March 06</th>
<th>September 06</th>
<th>Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control of Hypertension</td>
<td>30.01</td>
<td>36.47</td>
<td>22%</td>
</tr>
<tr>
<td>Control of Type II Diabetes Mellitus</td>
<td>45.94</td>
<td>49.13</td>
<td>7%</td>
</tr>
<tr>
<td>Anticoagulant or antiplaquetary treatment for Ischemic Cardiopathy</td>
<td>67.49</td>
<td>74.2</td>
<td>10%</td>
</tr>
<tr>
<td>Betablockers treatment for Ischemic Cardiopathy</td>
<td>35.81</td>
<td>39.7</td>
<td>11%</td>
</tr>
<tr>
<td>Cardiovascular risk measure in &gt;35 years old</td>
<td>20.55</td>
<td>29.38</td>
<td>43%</td>
</tr>
<tr>
<td>Congestive Heart Failure treated with IECA</td>
<td>44.65</td>
<td>52.06</td>
<td>17%</td>
</tr>
</tbody>
</table>
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

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)
Healthcare data

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)
Healthcare data (II)

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

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

- Demographic and cultural changes:
  - Aging → Dependency
  - Immigration
  - Birth rates

- Sociological and epidemiological changes

- Scientific and technological advances

- Economic sustainability
Public Health Agency

- 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

• 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

**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

**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

37 Territorial Governments of Health + 10 districts in Barcelone
Paradigm shift in the current systems for the purchasing of services

**Previous situation**
- Model fundamentally based on providers
- Fragmented by sector
- “Ad hoc” quality measurements for each sector
- Lack of communication among the various agents involved

**Present situation: TRANSITION**

**Situation in future**
- Model based on the necessities
- Global purchasing: Synergies and substitution
- Quality measurements based on health
- Stimulating communication: coordination, cooperation, etc.
Gràcies
Thank you

www.gencat.cat/salut  enric.mayolas@gencat.cat
Per Capita Financing (II)

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

- **Departament of Health – Generalitat de Catalunya (Coverage 100%) Expense (87% total)**
- **CatSalut – Servei Català de la Salut – Public insurance-Service buyer and guarantor of welfare quality**
- **Private Sector (insurance - Doble coverage: 24%): Expense 13% total**
- **ICS (20%)**
- **Public suppliers (no ICS)**
- **Private suppliers (with and without spirit of profit)**
- **CITIZENS**
Promoting health territorial governments

“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
The Catalan healthcare system is structured around several key components and principles. The Department of Health (Depart. Health) and the Department of Welfare & Family are central to this system. Municipalities play a significant role, with 50% ownership in both departments. The Government Board oversees these operations, ensuring that the system is effectively managed.

- **Designation of representatives**: Representatives from Municipalities and the Generalitat (Regional Government) are designated to the Presidium, which includes the Generalitat and Municipalities, each holding a 50% share.

- **Approval of strategic plan**: The Presidium approves the strategic plan for the healthcare system, guiding the direction and objectives of the services provided.

- **Executive Director**: A Director is appointed to oversee the implementation of the strategic plan, ensuring that the priorities are executed effectively.

- **Assessor committees**: Committees of evaluators (Assessor committees) are responsible for assessing the performance and ensuring that priorities are met.

- **Competent administrations**: The CatSalut (Purchaser) administration is responsible for ensuring that the execution of priorities is in line with the strategic plan. It coordinates with other competent administrations to achieve the desired outcomes.
From the Catalan model of health to the Catalan healthcare system