Innovations and Policy Learning in Catalonia: Similarities and differences between the English and Catalan Reforms

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Health expenditure per capita across OECD countries ($ ppp).

1. Health expenditure is for the insured population rather than resident population.
2. Current health expenditure.

Organisational structure of the **Decentralised Spanish National Health System**

**REGIONAL GOVERNMENTS**
- Regional Budget Law

**REGIONAL PARLIAMENTS**
- 17 ACs
  - Public Health
  - Planning
  - Management of Social Security and Healthcare

**INTERTERRITORIAL COUNCIL**
- Regional Health Services

**SPANISH PARLIAMENT**
- Basic Laws
- National budget law

**SPANISH GOVERNMENT MINISTRY OF HEALTH**
- General Co-ordination
- Coverage and benefits
- Pharmaceutical policy
- Undergraduate and Postgraduate education and training

**NATIONAL HEALTH SYSTEM**
- Own and Social Security Resources

**REGIONAL HEALTH SERVICES**
- Primary Care
- Specialised Care (Hospitals)

(100% of the population)

From 2002 all Regional Governments have assumed the competences on managing the Regional Health services.

Source: HIT. WHO and own elaboration
The Spanish Health System Decentralization

Central Government
- Basic legislation and coordination
- Financing
- Package funded through NHS
- Pharmaceutical policy (up to prescription)
- International health policy
- Educational requirements

Autonomous Government
- Top up central finance
- Public health
- System’s organizational structure
- Accreditation and planning
- Purchasing and service provision
Catalonia: 7 million citizens. Public spending in health care a bit below the Spanish average. Offset by a higher private expenditure.

General diagram of the Catalan Healthcare System:
THE SPANISH vs CATALAN (approach of flows)

Figure 1. An overview of the Spanish NHS and the Catalan Health Service for Comparative purposes (both respectively in brackets).

Key words: Finance refers to the revenue sources; provision to the service responsibilities; production, regards to who produces the service; and supply, to the inputs ownership. Prices can be identified with direct expenditure and premia with indirect expenditure. Source: own elaboration, from different sources. In the second bracket, similar figure for the region of Catalonia, with the most different idiosyncratic model of health care.
Despesa mitjana per persona en assegurances privades relacionades amb la salut. Any 2007

Font: INE. Enquesta de pressupostos familiars
Població amb cobertura privada. Any 2006

Font: MSyC - INE. Enquesta Nacional de Salut 2006
Organisational structure of the Decentralised Spanish National Health System

From 2002 all Regional Governments have assumed the competences on managing the Regional Health services.

Source: HIT. WHO and own elaboration.
IN A DECENTRALISED HEALTH SYSTEM, 17 AUTONOMOUS COMMUNITIES, WITH 5 UNDER 2 MILLION PEOPLE

THE WORST: ALL OF THE ACs TRYING TO BEHAVE AS SELF-SUFFICIENT AND POLITICALLY INFLUENCED NATIONAL HEALTH SERVICES

THE BEST: IT OPENS PLENTY OF OPPORTUNITIES IN ORDER TO INNOVATE AND BREAK THE CENTRAL MONOPSONY AND MONOPOLISTIC POWER IN HEALTH CARE
THE SPANISH allocation of public resources from Central Funds for Health Care -- per capita differences 2004
Despesa sanitària pública per càpita. Any 2008

Font: Pressuposts 2008 de les comunitats autònomes
From transfers to the LOSC: The Health Care Organisation in Catalonia Act (1981-90): The Catalan Health Service as a separate organisation from the Catalan Health Institute and Non Profit Organisations under the Public Financed Network of Health Care

From the LOSC to CatSalut as the public provider of coverage (1991-2003): the public insurer half way wrt. direct involvement in provision

Primary Care new ‘entities’ EBAs (coop, Trustees and Limited Liability Corporations): 14 pilot experiences

A new model: Healthcare governance, integrating health care providers on a geographical basis and a population based finance: 5 pilot regions
How financial resources are allocated at the micro level

Table 1: FRAMEWORKS FOR HEALTH CARE AND EVOLUTIONARY STAGES

**Departure point:**

Planning/ Finance/ Insurance coverage/ Purchasing care/ Production
Health Department, integrating all the providers as budget units (cost centers)

**Evolution:**

A)

<table>
<thead>
<tr>
<th>Planning/ Insurance</th>
<th>Purchasing</th>
<th>Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Depart.</td>
<td>Central Health Care Service Unit</td>
<td>Manag. Units</td>
</tr>
</tbody>
</table>

B)

<table>
<thead>
<tr>
<th>Planning/ Insurance</th>
<th>Purchasing</th>
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<tbody>
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<td>Health Depart.</td>
<td>Regional Health Care Service Unit</td>
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</table>
How financial resources are allocated at the micro level

<table>
<thead>
<tr>
<th>C) Planning</th>
<th>Insurance</th>
<th>Purchasing</th>
<th>Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Depart.</td>
<td>Health Care Service</td>
<td>Health Areas</td>
<td>Manag. Units</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>D) Planning</th>
<th>Insurance</th>
<th>Purchasing/Production</th>
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</thead>
<tbody>
<tr>
<td>Health Depart.</td>
<td>Health Care Service</td>
<td>Health Areas, Primary care physicians, Networks of Manag. Units</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>E) Planning/Insurance</th>
<th>Insurance Management/Purchasing</th>
<th>Production</th>
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</thead>
<tbody>
<tr>
<td>Health Depart/Health Care Service</td>
<td>Networks of providers/Non public Insurers</td>
<td>Health Care/Manag. Units</td>
</tr>
</tbody>
</table>
THIRD GENERATION OF DEVOLUTION POLICIES
and the search for the optimal transfer of risks between financers and providers…

• …In a more coordinated context of providers’ networks on a geographical area in which no one wants to be the weakest part (the last holder of the financial pressures, under competitive tendering) of the new integrated chain of the added value for health: disease management, partnerships, risk-sharing agreements…
Trends at present…

RISK TRANSFER from insurers to providers  
(risk-rating, prospective case-mix payments, global budgeting…)

INCENTIVES FOR COORDINATION by 
inserting into the system new ‘brokers’ of the individuals’ care

NEW STRATEGIES IN MANAGING 
ILLNESS EPISODES: the importance of 
being part of the chain rather than the last 
resort input purchased-out in times of budget constraints.
ON RISK TRANSFER - Averhill (from payers to providers)

Degree of financial risk

Per item  Actual cost  Per diem  Per case  episode  Risk adjusted capitation  Pure capitation

Private provider
Provider
Public Provider
Payer
THE FIRST FRONTIER: Managing population based finance: The general health care cost equation (Kitagawa)

VARIABLES CONTRIBUTING TO THE COST OF CARE

\[
\frac{\text{Cost}}{\text{Person}} = \frac{\# \text{ Conditions}}{\text{Person}} \times \frac{\# \text{ Episodes of Care}}{\text{Condition}} \times \frac{\# / \text{Type Services}}{\text{Episode of Care}} \times \frac{\# \text{ Processes}}{\text{Service}} \times \frac{\text{Cost}}{\text{Process}}
\]

- How many people have heart disease?
- How many heart attacks do they have?
- CABG vs. Stent vs. Medical Mgmt?
- Treatment Protocol, Type of Stent?
- Prices of Providers, Devices, Drugs?

Cost of Treating Heart Disease
Understanding risk-adjustment

Predictive modeling

Case identification

Risk Adjustment

Severity adjustment

Health-based payment

Conventional risk adjustment

Optimal risk adjustment

Needs-adjusted payment

Prediction models

Payment models

Use any information available

Use health status information only

Use health status, socioeconomic, and access information

Ellis, 2008
The health care cost equation

\[
\text{Cost per Person} = \text{Number of Conditions per Person} \times \frac{\text{Number of Episodes of Care}}{\text{Number of Conditions}} \times \frac{\text{Number of Services}}{\text{Type of Service}} \times \frac{\text{Number of Processes}}{\text{Cost per Process}}
\]

- FEE FOR SERVICE -

--- TRADITIONAL CAPITATION ---

PERFORMANCE RISK

INSURANCE RISK

Provider payment systems

Risk adjustment
Population based purchasing

- May 2002. Pilot Project, initially 5 areas with capitation payments
- Goals:
  - Promote quality of services and avoid activity growth
  - Promote activity and services to the right place through coordination of providers
  - Promote patient centered care
  - Transfer risk and responsibility to those providers that can create more value.
- A combination of funding (capitation) and organizational (coordination) approach.
  - Providers are still compensated through payment system, however there is a population ceiling that promotes an agreement ex-ante and a review ex-post of the goals and activities of each provider within the Geographical Areas (Governs Territorials de Salut)
THE SECOND FRONTIER: The role of the providers The case of the Hospital payment system

- Inpatient income = Number of expected discharges * Price per discharge
- Price per discharge = (0.65 * Structural average price * Structural Relative Index) + (0.35 * Casemix average price * Casemix Index)
  - A hospital with the same structure and casemix as the average will receive the average price of the network.
- Visits Income = Number of expected first visits * Index of repetition * Forfait price (1 and 2nd visit) by type of hospital
- Emergencies income = Number of expected emergencies * Price emergency by type of hospital
- Idem for day hospital
- Beyond the expected volume: marginal production paid at 20% price.
The way we have faced it: Hospital payment: structure

- Measurement of structural differences according to a fuzzy classification model (Grade of Membership analysis).
- Number of groups defined statistically.
- The model provides probabilistic pure types
- Each observation belongs to a pure type in a certain degree.
The way we have faced it: Hospital payment:

structure Structure and case-mix

• *Estimation of expected structural cost per discharge* through regression on grades of membership.

• Knowing total costs of hospitals, and proportion of inpatient costs and number of discharges, we can obtain an average observed cost per discharge

• Since we have grade of membership that adjusts structure, we can get the expected cost according to structure. This expected cost is transformed into an index, Relative index of structure IRE

• *Calculating case-mix index per hospital*. Using ICD9-CM of all discharges and AP-DRGs. Relative index of resource consumption according to diseases, IRR
Assessment of the payment system

Positive elements:
• Efficiency improvement
• Contribution to transparency between funding and provision
• Improvement of information systems
• Promotion of new activities: ambulatory surgery with strong incentives.

Controversial elements
• Payment system based on intermediate products, not the episode of care
• Based on current supply, and promotes incremental activity
• Avoid collaboration between providers
• Quality of services need better goals
• Some areas (visits, mental health) underdeveloped
THE THIRD FRONTIER: REFORMING THE PRIMARY CARE. The way we have faced it

- Salaried staff in traditional health centres
- New associative basic entities (coops, Ltd respons. corporations..)
- Enlarging the primary providers autonomy
- Primary services capitation finance
- Virtual integration with acute specialised care in a geographical based towards a more complete risk-adjusted capitation
Final comments

• To increase action
• To manage transition
• From paying for inputs (to be), to pay for activity (to do), to P4P (to achieve), to population based finance (to cover)
• To clarify governance structures and financial responsibilities of the parts
• To maintain providers’ autonomy under a common contracting out approach
• To identify the agent best located in order to increase users’ additional finance for health care
THANKS FOR YOUR ATTENTION!!

...follows some addenda...
## Current Payment Systems Catalonia (P. Ibern, CRES 2010)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Budget</th>
<th>Capitation</th>
<th>Acute care</th>
<th>LTC</th>
<th>Mental Health</th>
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<tr>
<td>Bedday</td>
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<td>Unit</td>
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<td>Visits, Emergencies, AS</td>
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<td>Programs</td>
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<td>Age/Sex. Rural Utilization</td>
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<td>Pilot Plan Population based-purchasing</td>
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## Hospital payment: Structure

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<tr>
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<th>Tipo puro 3</th>
<th>Tipo puro 4</th>
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Example of estimated values of grade of membership $gik$
Hospital payment system: structure and casemix index

IRE 2008

Mitjana IRE 2008: 5.8959

IRR 2008

Mitjana IRR 2008: 0.9493
Hospital payment: Structure and Casemix

<table>
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<tr>
<th>Any</th>
<th>Preu IRE</th>
<th>Creixement preu IRE</th>
<th>Preu IRR</th>
<th>Creixement preu IRR</th>
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<td>1998</td>
<td>1.416,82 €</td>
<td>0,00%</td>
<td>1.402,09 €</td>
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<tr>
<td>1999</td>
<td>1.442,32 €</td>
<td>1,80%</td>
<td>1.427,33 €</td>
<td>1,80%</td>
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<tr>
<td>2000</td>
<td>1.476,94 €</td>
<td>2,40%</td>
<td>1.461,58 €</td>
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<tr>
<td>2001</td>
<td>1.532,32 €</td>
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<tr>
<td>2002</td>
<td>1.581,36 €</td>
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<td>2003</td>
<td>1.669,13 €</td>
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<td>1.651,76 €</td>
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<tr>
<td>2004</td>
<td>1.719,20 €</td>
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<tr>
<td>2005</td>
<td>1.779,89 €</td>
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<td>1.761,37 €</td>
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<tr>
<td>2006</td>
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<td>1.835,52 €</td>
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<td>2007</td>
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<tr>
<td>2008</td>
<td>2.141,53 €</td>
<td>5,74%</td>
<td>2.119,24 €</td>
<td>5,74%</td>
</tr>
</tbody>
</table>

Font: CatSalut
Nota: L’any 2007, l’aumenge de les tarifes d’hospitalització incorpora l’aplicació a tarifes del VI Conveni de la XHUP
Evolution of hospital economic results

Source: Central de Balanços. Departament de Salut.
Capitation payment evolution

IMPORTS EN € CAPITATIU


CÀPITA CATALUNYA
Alt Maresme
Baix Empordà
Osona
La Cerdanya
Altetra
Garraf
Alt Penedès
Baix Montseny
Baix Vallès (Mollet)
Alt Empordà
Granollers
Vallès Occidental O. (Terrassa)
Garrotxa
Maresme
Alt Camp i la Conca de Barberà
Gironès - Pla de l'Estany
Baix Camp
Alt Urgell
Bages - Solsonès
Ripollés
Barcelona Nord
Baix Ebre
Berguedà
Pallars Jussà - Pallars Sobirà
Montsià