

Healthcare Infrastructure for a Web of Care
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Changing models of care in Spain in the context of European health system development

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Governing Public Hospitals

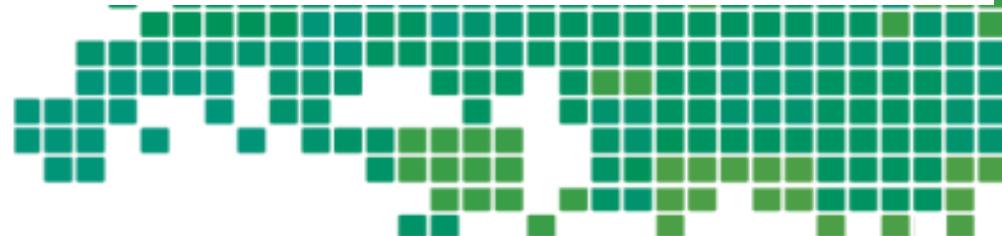
Reform strategies and the movement
towards institutional autonomy

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Main topics to be addressed

- Service reform and the rationale for a “web of care”
- (Some) Lessons learnt in Spain



What is a *hospital*? 1

- Nuns-served places for patients waiting for death in galleries with an altar;
- Diagnostic and treatment technologies in operating theatres, labs and image units (high costs, big size, complex handling, etc.);
- Increasingly complex specialized services during XXth Century (with correlate of increasing costs).



What is a *hospital*? 2

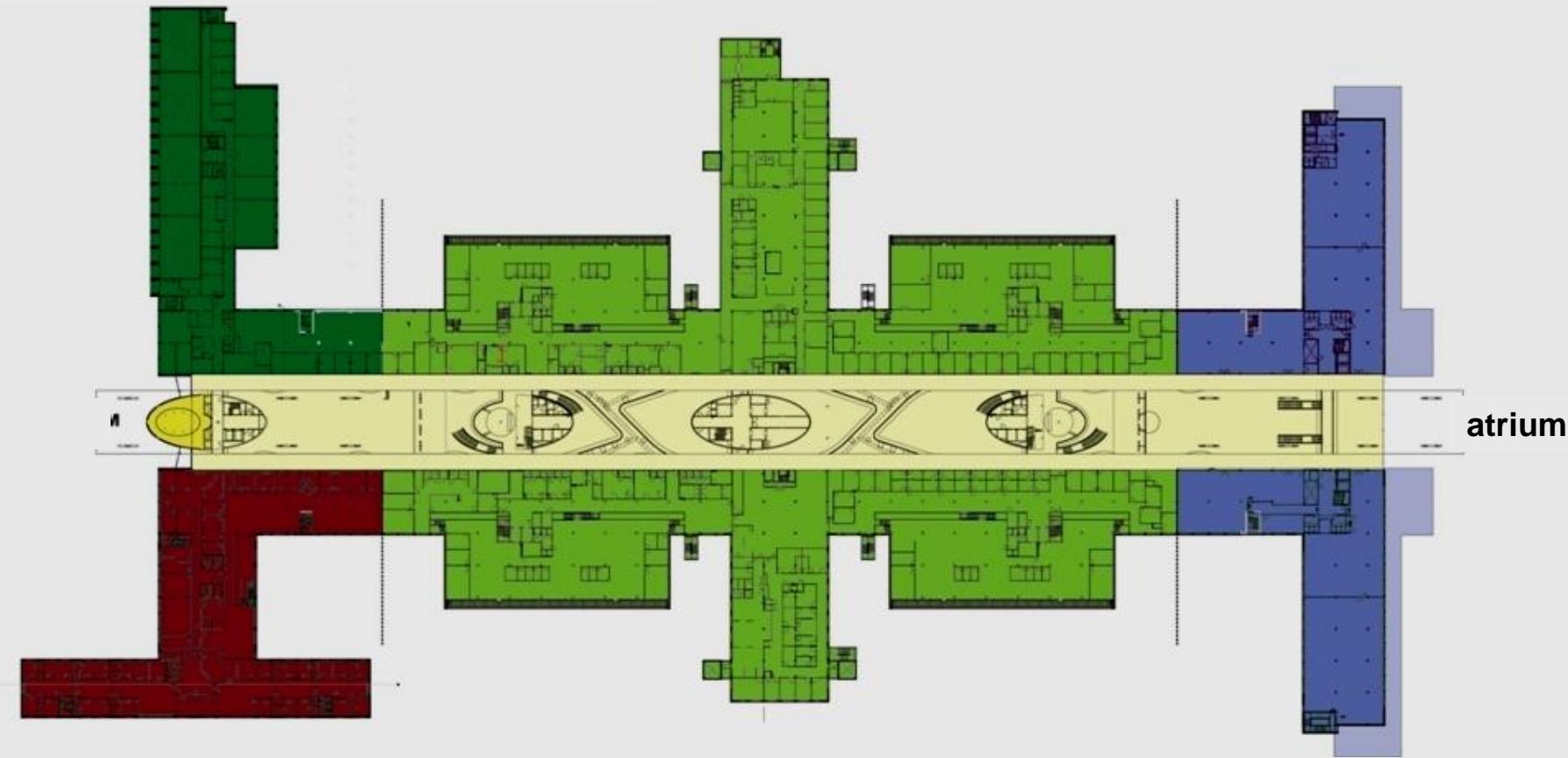
“Klinikum Nordstadt” Hospital, Hannover, Germany



Mertes, Joachim , Klinikum Region Hannover GmbH general director of financial and accounting, Presentation at Warsaw, 23 September 2012

Orbis Medical Park

Rehabilitation centre



Psychiatric centre

Maasland Hospital

Health boulevard

Helsinki University Hospital: merging 17 hospitals; 20,000 employees and 3,300 beds (catchment pop of 1.4 m).

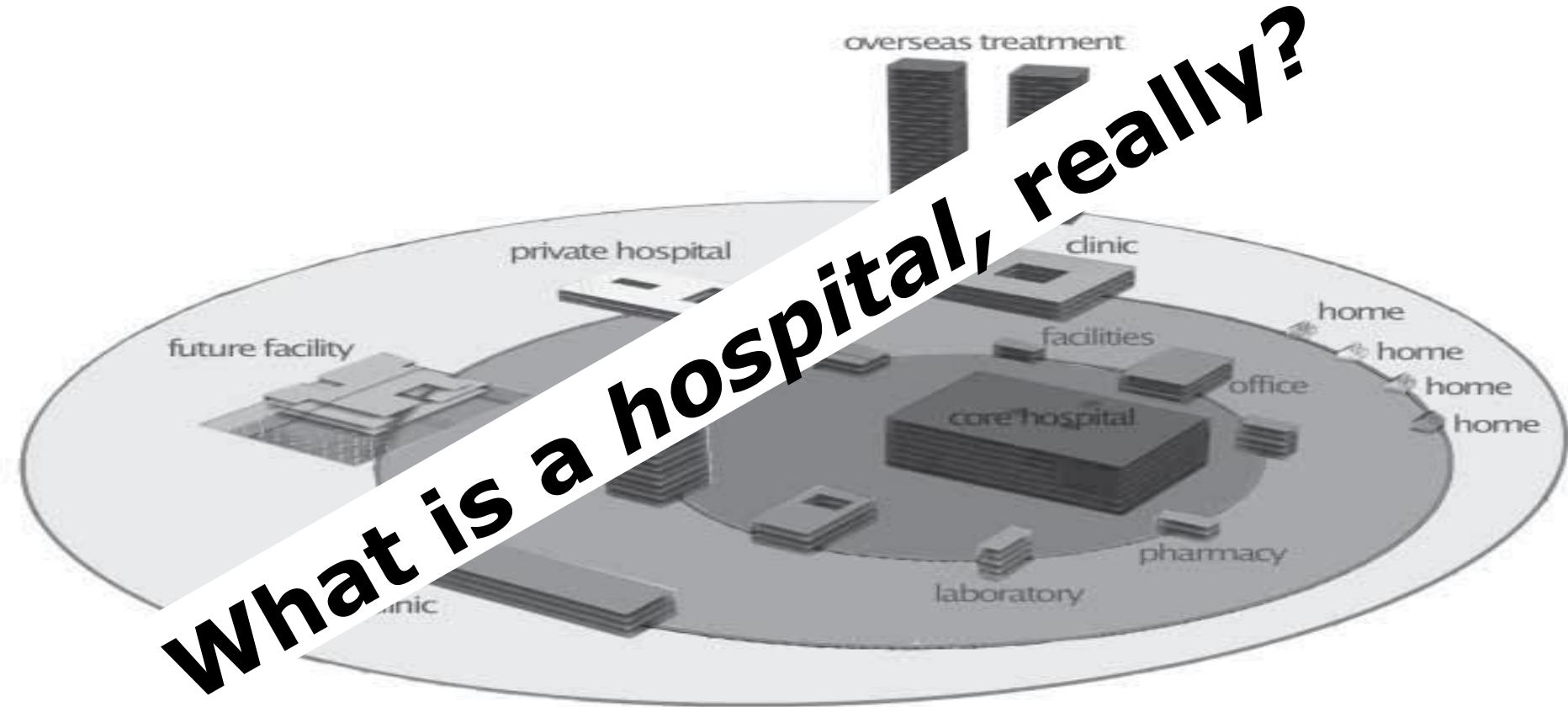
Karolinska University H, Stockholm: merging 2 major campuses; 15,000 employees and 1,700 beds (a bit more than 1 million catchment population)

Sheffield Teaching Hospital: merging 5 hospitals (catchment pop 640,000 p).

http://ec.europa.eu/enterprise/archives/e-business-watch/studies/sectors/health_hospital/documents/Hospitals_2006.pdf
<http://www.karolinska.se/en/OM/About-Karolinska/>.
<http://www.sth.nhs.uk/about-us> Accessed September 14th 2012

Why continue using number of beds, which says virtually nothing about the capacity of a hospital, as the key proxy for activity?

What is a hospital, really?



Source: Netherlands Board for Health Care Institutions 2005, *Future hospitals: competitive and healing. Competition report*. Utrecht, Netherlands Board for Health Care Institutions (<http://www.bouwcollege.nl/smartsite.shtml?id=2065>, accessed 13 April 2010).

3 main Business Models in Hospital Care

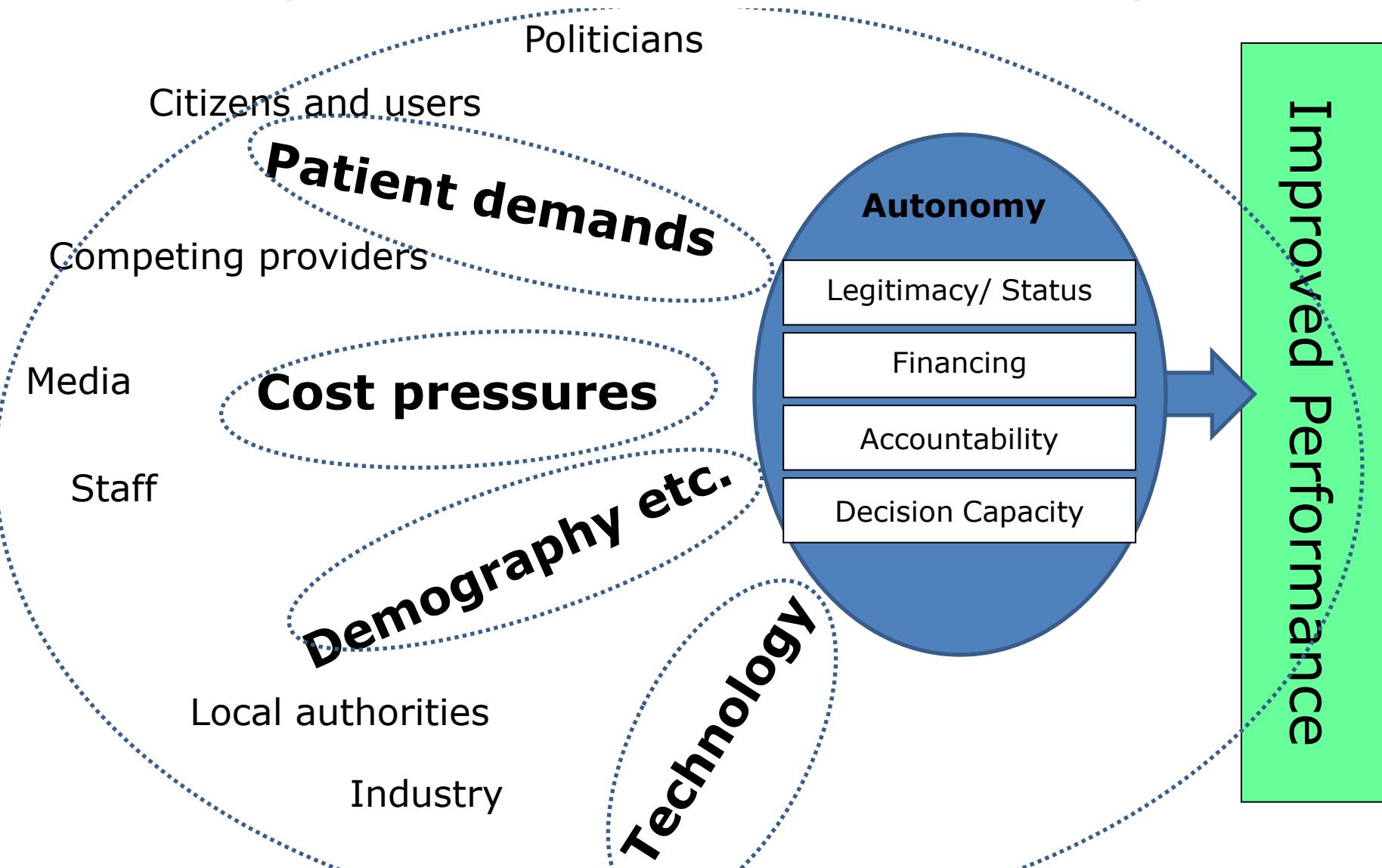
Solution shops

Value adding chains

Facilitated patient networks

What matters is that not all business models can be placed in all facilities given the implications in terms of payment methods, volumes of activity, unit costs, overheads, etc.

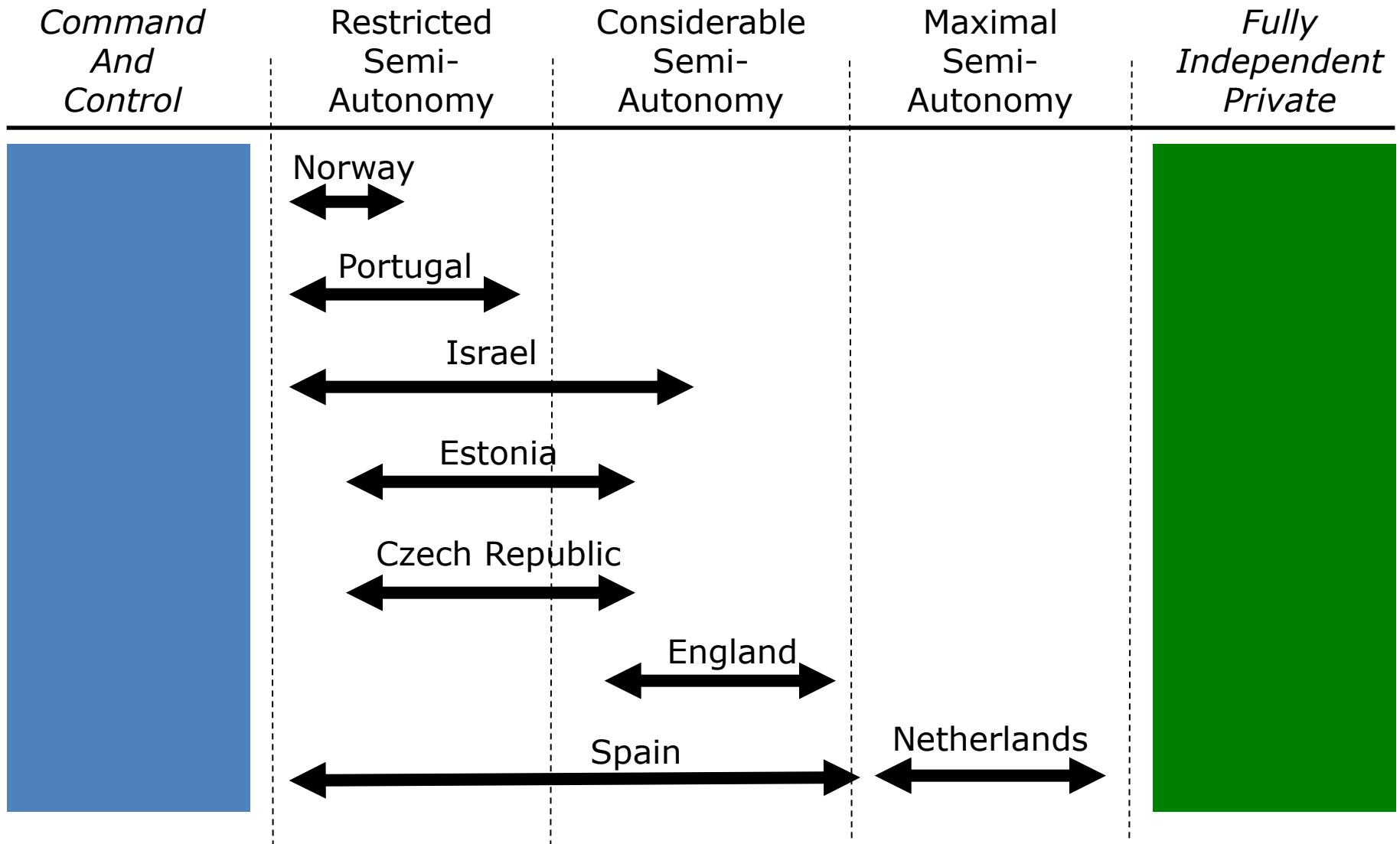
Challenges to traditional management



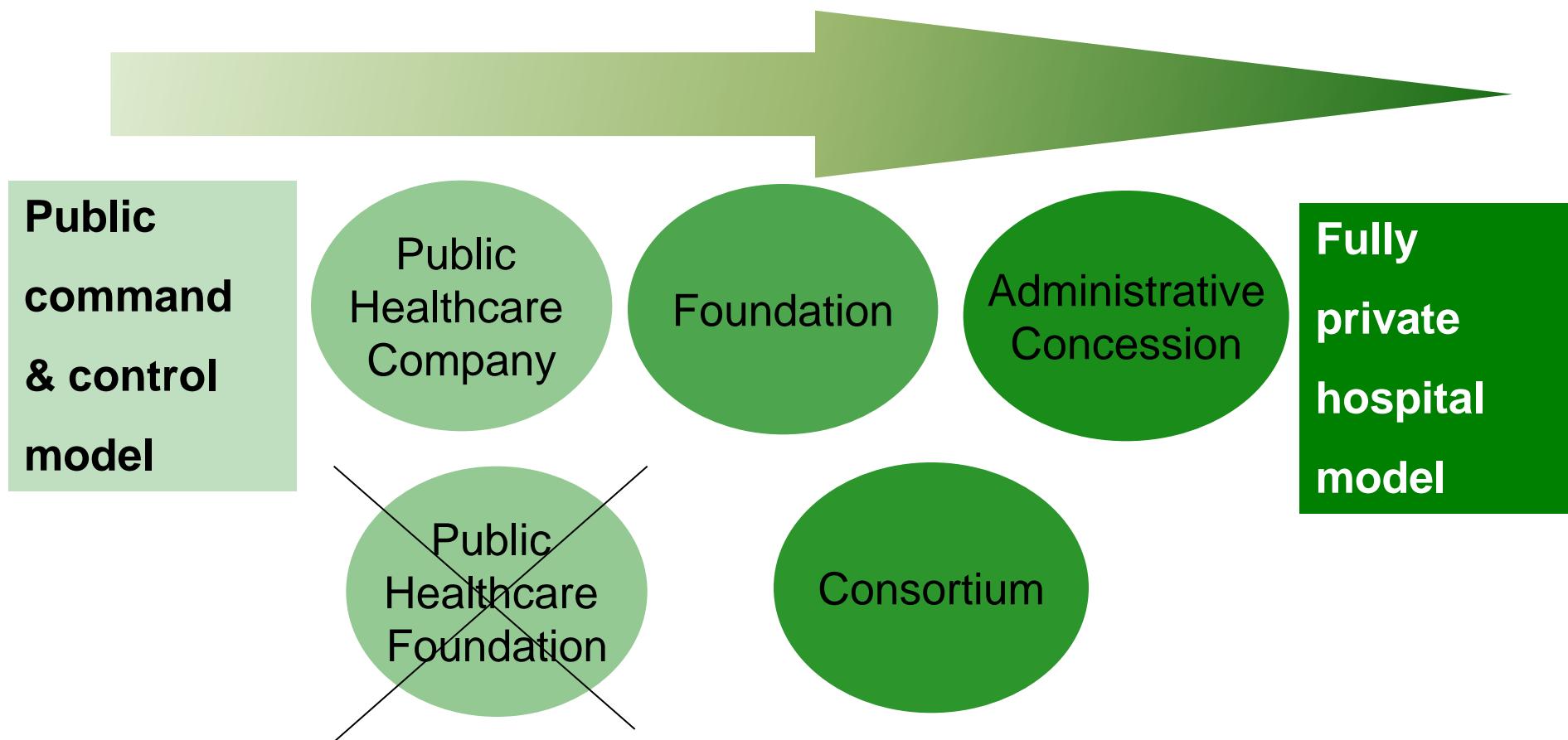
A widespread phenomenon

Country	Self-governing models	Country	Self-governing models
Czech Republic	<i>Joint Stock Companies</i>	Norway	<i>Regional Health Enterprises</i>
	<i>Public Contributory Organizations</i>		<i>Public Enterprise Entity Hospitals EPE</i>
	<i>Limited Liability Companies</i>	Portugal	<i>Public Health care Companies</i>
Estonia	<i>Joint Stock Companies</i>		<i>Empresa Pública Sanitaria</i>
	<i>Foundations</i>	Spain	<i>Fundación Pública Sanitaria</i>
Israel	<i>Private non-for-profit</i>		<i>Fundación Consorcio</i>
	<i>Government Owned</i>		<i>Concesión Administrativa</i>
	<i>Sick Fund owned</i>		
	<i>Private, Sick Fund Major Shareholder</i>		
Netherlands	<i>Non-for-profit Private Foundations</i>	England	<i>NHS Trust</i>
			<i>Foundation Trust</i>

European Continuum of Hospital Governance Strategies



Hospital autonomy and self-governance, Spain



Key feature: mostly not ear-marked budget transfers

National Government +
2-Chamber Parliament



17 Autonomous Communities
2 Autonomous Cities

Parliaments elected by direct vote
Regional Governments

Regional Ministries of Health
coordinated by the Ministry of
Health and Social Policy

Public expenditure in health in 2014,

Regions: 91.56% of total public health expenditure

Central administration 7.46%;

Municipalities 0.98%

Spain

- 3rd in the world in life expectancy at birth;
- 4th in life expectancy at age 60;
- Under average in OECD infant mortality;
- Among the lowest, and in steady decrease, in mortality for top causes since 1970 in Europe (CV diseases, cancer and respiratory diseases).

OECD Health Statistics 2016, <http://www.oecd.org/els/health-systems/health-data.htm>

WHO Global Health Observatory data repository, 2016, <http://apps.who.int/gho/data/view.main.SDG2016LEXv?lang=en>

European Observatory on Health Systems and Policies, 2016. The Health Systems and Policy Monitor. Health Systems in Transition profile of Spain.

<http://www.hspm.org/countries/spain25062012/livinghit.aspx?Section=1.4%20Health%20status&Type=Section>

Accessed on October 20th, 2016

Specific policy development style

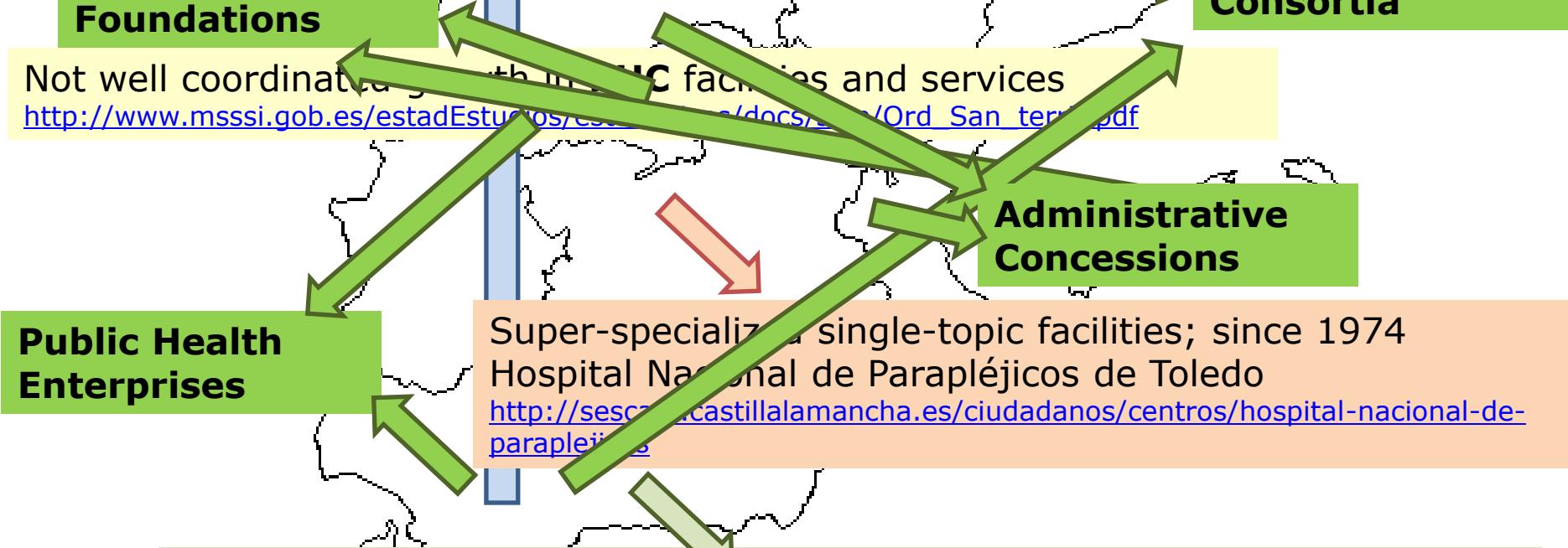
1977/81	Creation of MoH (Health& Social Security and Consumer Affairs)
1986	General Health Law
1991	"Comisión Abril" for the NHS Analysis and Evaluation
1992	Law on Consortia
1993	Creation of Public Enter
1994	Law on "Public Activities of
1996	
1997	Law on Reformin
1998	Create
1999	Valencia uses I
2000	Royal Decree on New Mo Foundations, Consortia a
2002	Abolition of INSALUD. Updati
2007	Law on Public Sector Contracts reducing autonomy of schemes
2012	Royal Decree Law 16/2012 of Urgent Measures to guarantee the Sustainability of the SNS

From 1993 on...
Explosion of innovative experiences

The diagram consists of several blue triangles of varying sizes, all pointing towards the central text "From 1993 on... Explosion of innovative experiences". The triangles are positioned around specific policy milestones listed in the table, such as the "Law on Consortia" (1992), "Law on 'Public Activities of" (1994), "Law on Reformin" (1997), "Create" (1998), "Valencia uses I" (1999), "Royal Decree on New Mo Foundations, Consortia a" (2000), "Abolition of INSALUD. Updati" (2002), and "Law on Public Sector Contracts reducing autonomy of schemes" (2007). The triangles are oriented in different directions, creating a sense of radiating influence from the central text.

EMERGENCIES

Empresa Pública de Emergencias Sanitarias Andalucía - EPES (1994) <http://www.epes.es/>
Fundación Pública Urxencias Sanitarias de Galicia-061 (desde 1997)
<http://061.sergas.es/Paxinas/Contidos.aspx?idContido=63&menuSup=5&submenuSup=8>



CHARES ("no Andalusian citizen more than 30 minutes away from a hospital") 13 new small-sized facilities between 2005-2012
<http://www.juntadeandalucia.es/servicioandaluzdesalud/centros/default.asp>

Public Health Enterprise

- In Andalucía: Costa del Sol Marbella, Poniente, Alto Guadalquivir and Empresa de Emergencias Sanitarias; in Madrid: Fuenlabrada.

Public Health Foundation

- In Asturias: Oriente "Grande Covián"; in Baleares: Inca. **Gone!**

Foundation

- In Madrid: Alcorcón; in Baleares: Manacor; in Galicia: Barbanza, Virxe da Xunqueira, Verín and Salnés (status abolished July 2008)

Consortium

- In Cataluña: Maresme, Integral de Cataluña, Vic and Tarrasa; in Sevilla: Aljarafe -San Juan de Dios.

Administrative Concession

- In Valencia: Ribera Hospital in Alzira, Torrevieja; Marina Alta in Denia and Manises; in Madrid: Infanta Elena in Valdemoro.

...but not many robust evaluations!

Despite serious financial investments... health information system in Spain too much based on resources/activity data (to the detriment of outcomes)

Very limited connectivity between Regions and across the country; no systematic performance assessment



Hard to speak about “lessons”!

Valencia. Does the hospital legal form have any major influence on efficiency?

	2006	2007	2008	2009	2010
Cost per inhabitant (wider region of Valencia)	€ 660	€ 731	€ 781	€ 812	€ 825
Annual fee paid to the contractor per inhabitant	€ 495	€ 535	€ 572	€ 598	€ 607
Difference	25%	27%	27%	26%	26%

Administrative Concession model, lower “formal” capitation costs than the rest of the system...

Andalucía. Financing indicators for a Traditional Hospital and a Public Healthcare Company.

	TPH	PHC	(1)/(2)
Total expenditure (per covered inhabitant)	514	324	1.58
Total expenditure (per discharge)	7,658	6,352	1.20
Total expenditure (per DRG point)	4,799	4,443	1.08
Operational costs (per covered inhabitant)	494	303	1.63
Operational costs (per discharge)	7,364	5,924	1.24
Operational costs (per DRG point)	4,614	4,145	1,11

Análisis comparativo de la actividad realizada por dos hospitales del sistema sanitario público de Andalucía: Hospital Virgen de Valme y Hospital Costa del Sol. Cámara de Cuentas. 2008

Andalucía. Traditional Public Hospital and Public Healthcare Company. Structural profiles

TPH		PHC
349,376	Covered population	372,964
555	Number of beds	348
2,481	Total Staff	1,412
15	High managerial staff	13
36	Intermediate managerial staff	16
5.6%	Absenteeism	4.6%

Análisis comparativo de la actividad realizada por dos hospitales del sistema sanitario público de Andalucía: Hospital Virgen de Valme y Hospital Costa del Sol. Cámara de Cuentas. 2008

Andalucía. Surgical activity for a Traditional Hospital and a Public Healthcare Company.

TPH		PHC
1.03	Average preoperative length of stay	0.04
15,630	Programmed interventions	11,890
4,857	Inpatient interventions	3,983
5,486	Major ambulatory surgery	4,787
5,287	Minor ambulatory surgery	3,120
4,308	Urgent interventions	2,877
9.2%	Nosocomial infections prevalence	5.7%

Análisis comparativo de la actividad realizada por dos hospitales del sistema sanitario público de Andalucía: Hospital Virgen de Valme y Hospital Costa del Sol. Cámara de Cuentas. 2008

Does the hospital legal form have any major influence on performance? Handling of Acute Myocardial Infarction, Breast Cancer and Chronic Obstructive Pulmonary Disease analyzed in hospitals with different legal forms

TPH		PHC	F	C	AC
210,600	Covered population	297,458	142,403	147,809	246,135
2.38	Beds/1000 population	1.06	1.24	1.42	1.13
7.68	Length of stay (LOS)	5.22	6.11	7.44	4.76
83.73	Occupancy rate	80.11	99.94	92.32	90.21
20.22	H/day of operating rooms use	3.81	8.12	13.03	7.71
52.81	No. of surgical interventions	44.82	51.59	58.51	79.64

No overwhelming superiority of any legal form; only specific advantages and disadvantages

Valencia activity results; Traditional Hospitals vs. Administrative Concession model

Traditional		AC model
51 days	External consultation delay	25 days
60-90 days	Average surgery delay	34 days
7.2	Patient's satisfaction (0 to 10)	9.1
43%	Major day surgery	56%
52%	Outpatient surgery rate	79%
> 2 hours	Emergency waiting time	< 1 hour

Galicia. Do Foundations cause access inequity by generating longer waiting lists"/ spending less per person/ offering fewer services?

Traditional public hospitals			Foundations		
Av.	Max	Min	Av.	Max	Min
2.39	2.9	1.8	Beds (by 1000 population)	1.68	2.6
7.14	8.30	6.18	Length of stay	6.63	9.90
75.79	88.90	60.55	Occupancy rate	77.54	88.90
4,976	13,402	2,398	N. of surgical interventions	4,312	11,124
1,016	1,340	599	Surg. Interv./room / year	963	1,285

yet activity levels are very similar

- (i) Geographical **differences -in health outcomes** (3 years of LEB) & **financing** (*variation of 540€ / 43.8% around the average* in public expenditure per person in 2014);
- (ii) Large **variability in access, quality, safety and efficiency** all over.

Unwarranted variability across regions (1 of 2)

5-time variations in use of percutaneous transluminal coronary angioplasty PTCA between areas; 2-fold variation in mortality after PTCA (hospitals)

7.7-time variability in prostatectomy rates across health care areas

Caesarean sections increasing unwarrantedly; variability among hospitals declining due to the convergence of all providers towards high rates.

2.2 to 4.5 times higher fatality rates low-mortality DRGs, decubitus ulcer, catheter-related infection, pulmonary thromboembolism and deep-venous thrombosis after surgery or post-operative sepsis across health care areas.

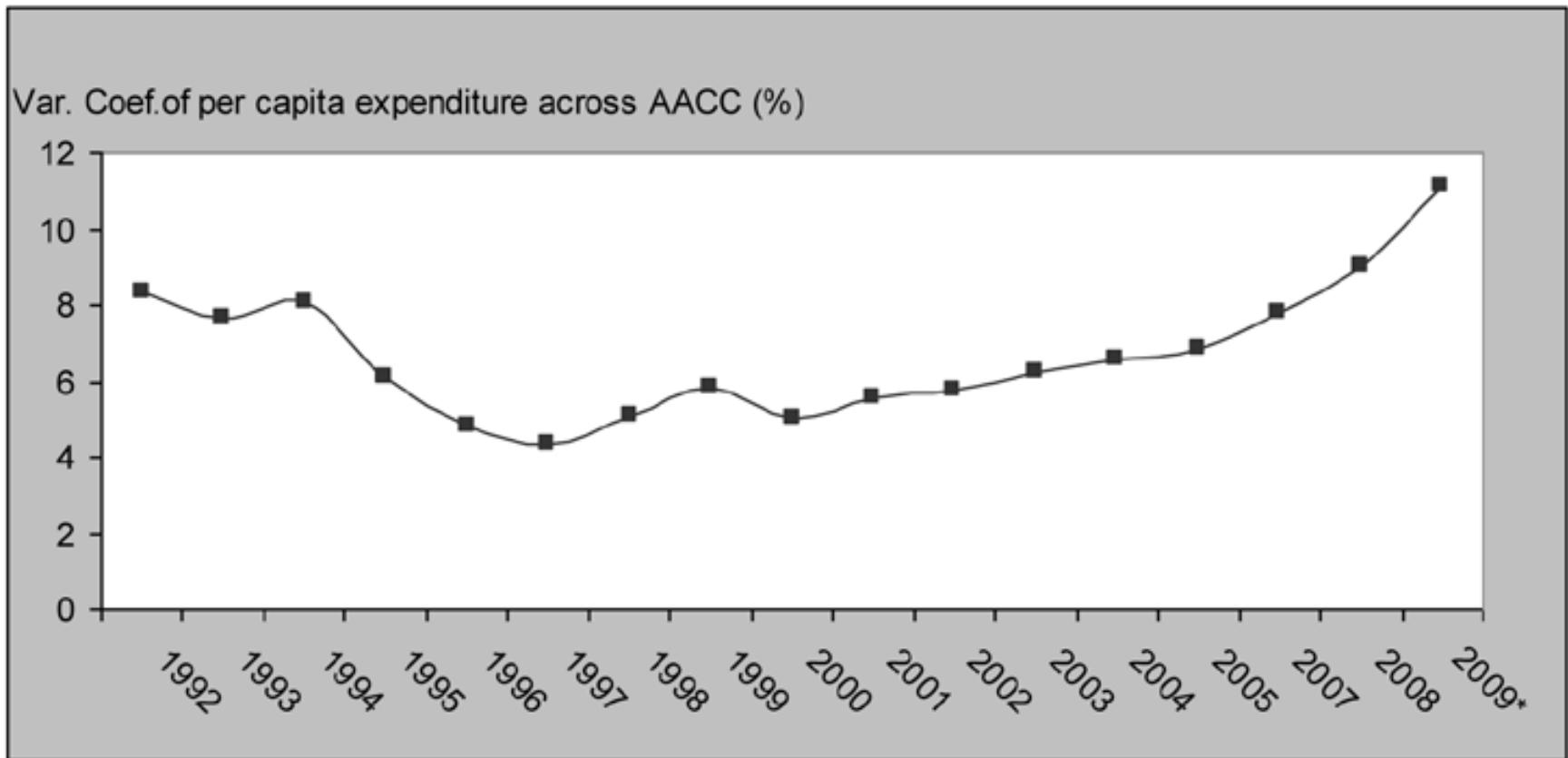
Unwarranted variability across regions (2 of 2)

28 times more frequent admissions to acute care hospitals due to affective psychosis among areas

26% of hospitals with more than 501 and less than 1000 beds, at least 15% more inefficient than the standard;

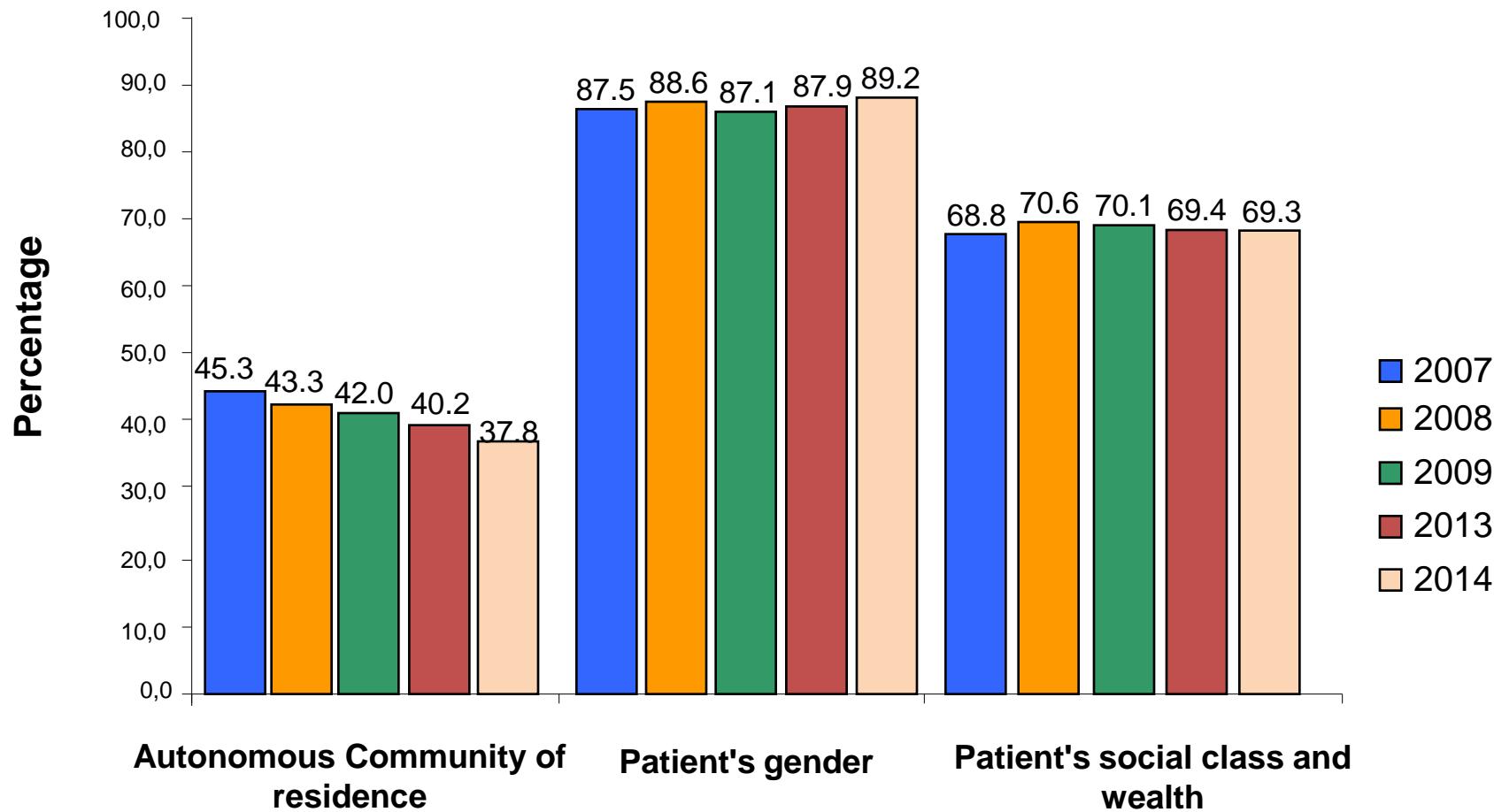
12% of hospitals with more than 201 beds and less than 500 were, at least, 25% less efficient than the standard for treating similar patients

1992-2009 per capita expenditure variation coefficient among Regions



Variability not explained by changes in protected population

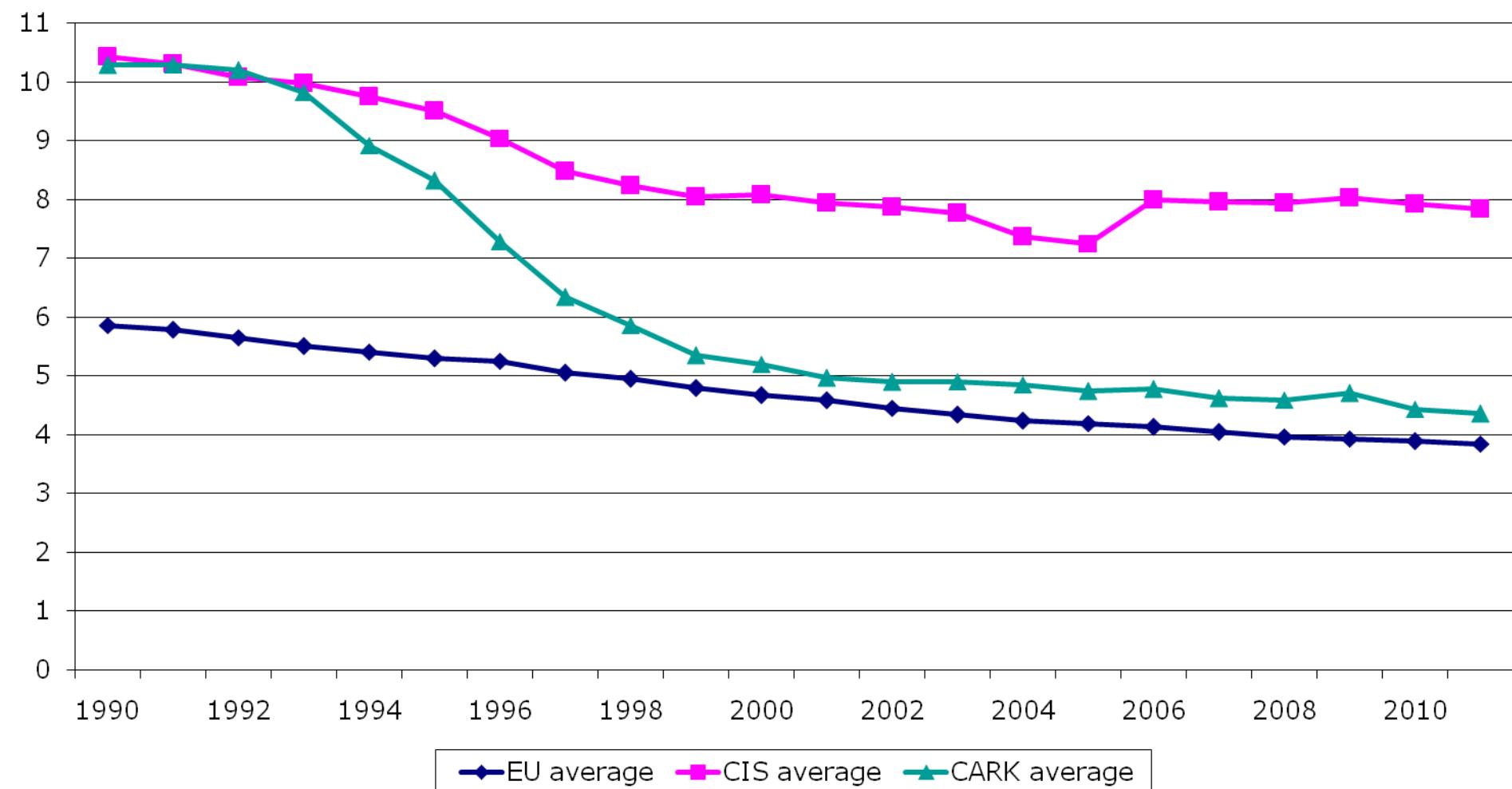
Respondents who believe that same health services are offered to all citizens despite...



Efficiency-improving innovation or increasing expenditure?

Same gain (1 year) in Life Expectancy at Birth by halving the efficiency gap (difference between LEB in countries and that of best performing one at similar spending level, considering socioeconomic and lifestyle factors) as by 30% increased expenditure

Acute hospital beds/1,000 inhabitants, WHO European Region, 1990-2014



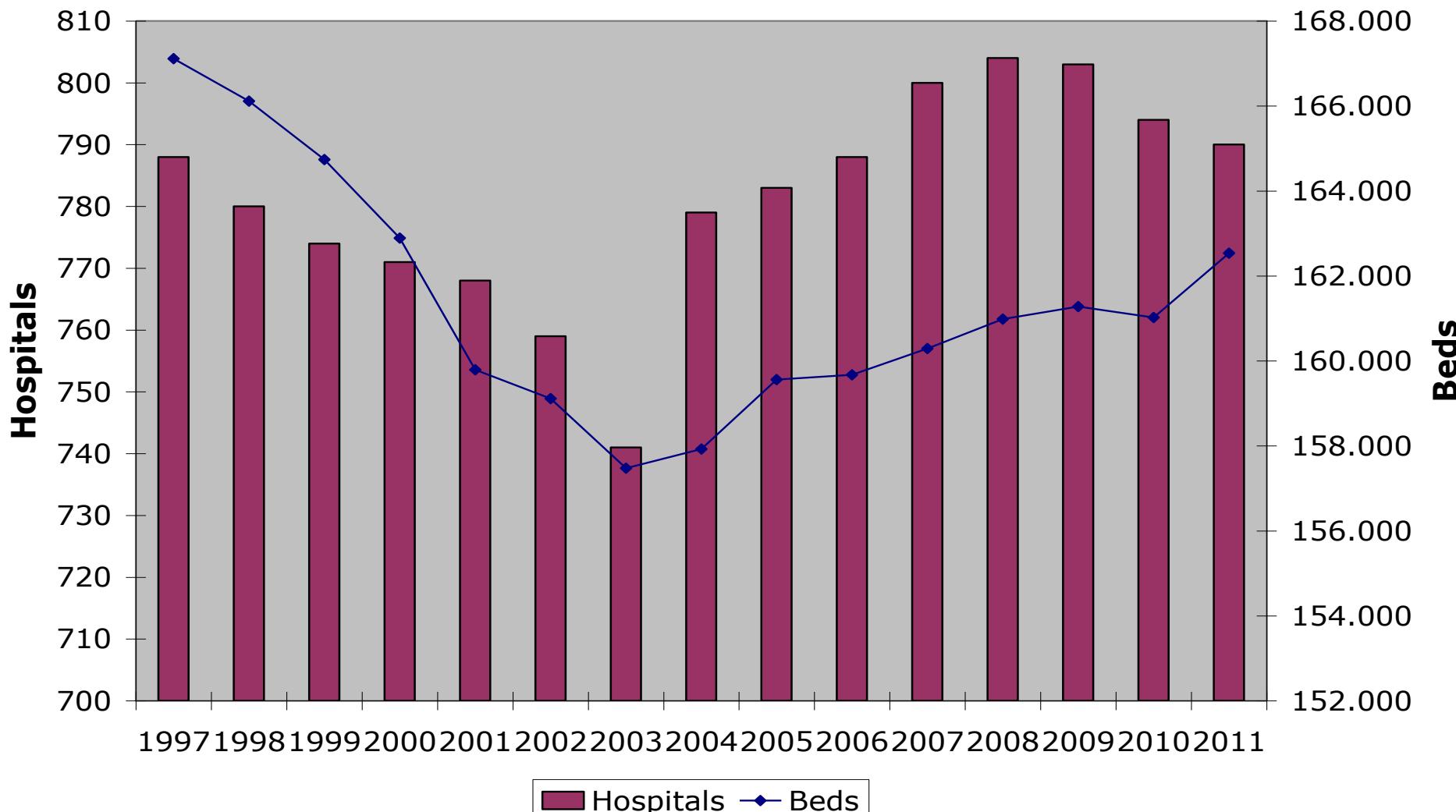
Source: European health for all database (HFA-DB) World Health Organization Regional Office for Europe Updated: April 2014 <http://data.euro.who.int/hfadab/>

Spain, beds in acute care hospitals, psychiatric hospitals and long term institutions, 1980-2003

	1980	1985	1990	1995	2000	2003^(a)
Acute care hospital beds per 100000	398.4	350.9	333.4	303.6	284.0	301.5
Psychiatric hospital beds per 100000	114.4	91.7	70.6	60.2	52.2	36.7
Nursing & elderly home beds/ 100000	22.6	12.8	21.7	30.4	32.5	26.2

European Observatory on Health Policies and Systems, 2006, Hit, Spain. For 1980-2000, WHO/EURO HFADB. 2004 Spanish National Hospitals Catalogue" (Ministerio de Sanidad y Consumo, 2004a). Hospitals National Catalogue,

Spain, Hospitals and hospital beds, 1997-2011



Estadística de Establecimientos Sanitarios con Régimen de Internado. Información Anual de 1997 a 2003
<http://www.msc.es/estadEstudios/estadisticas/estHospiInternado/inforAnualanteriores.htm>)

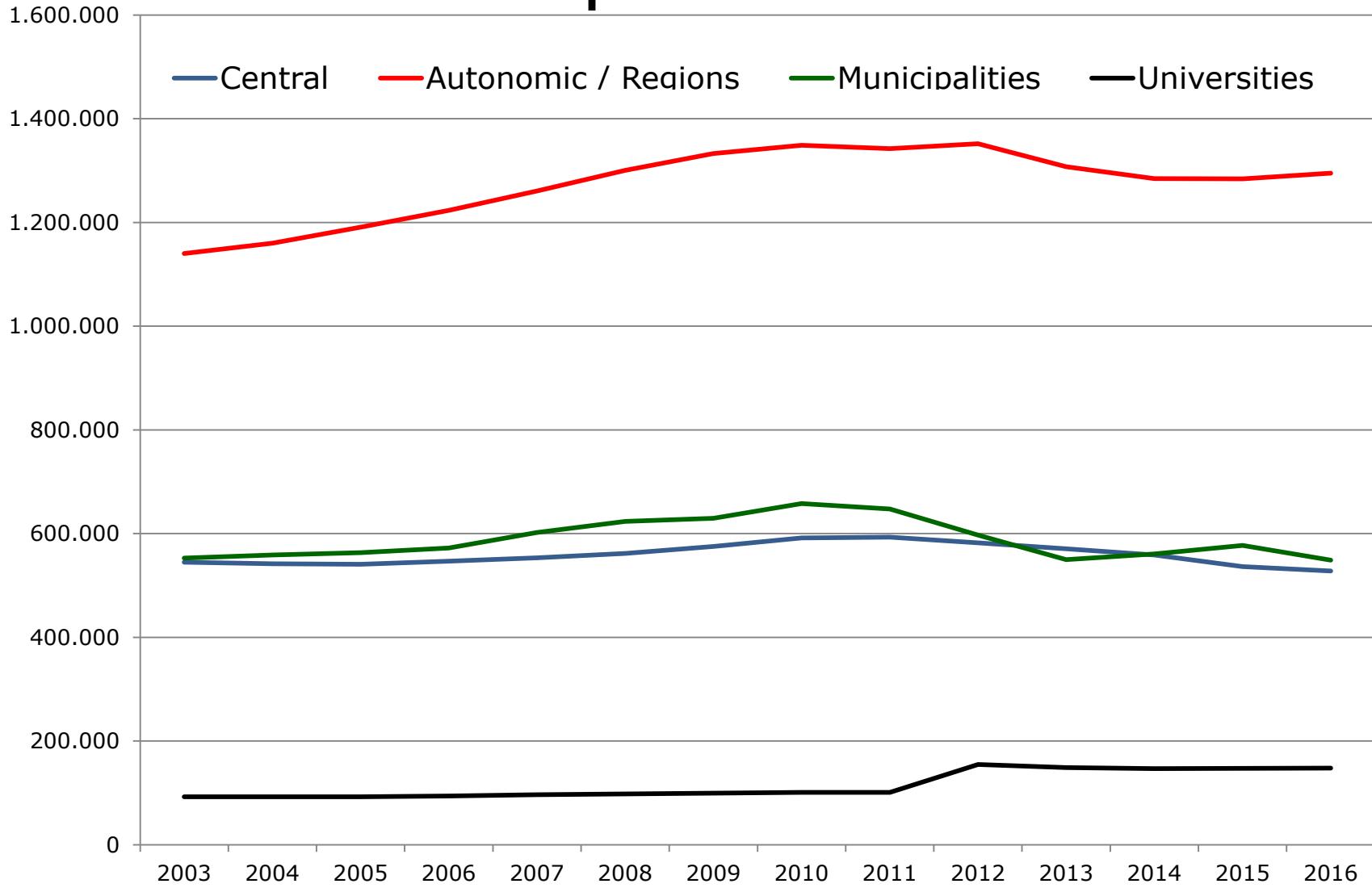
Catálogo Nacional de Hospitales. Años 2004 a 2011

<http://www.msc.es/ciudadanos/prestaciones/centrosServiciosSNS/hospitales/home.htm>) Both accessed May 2012

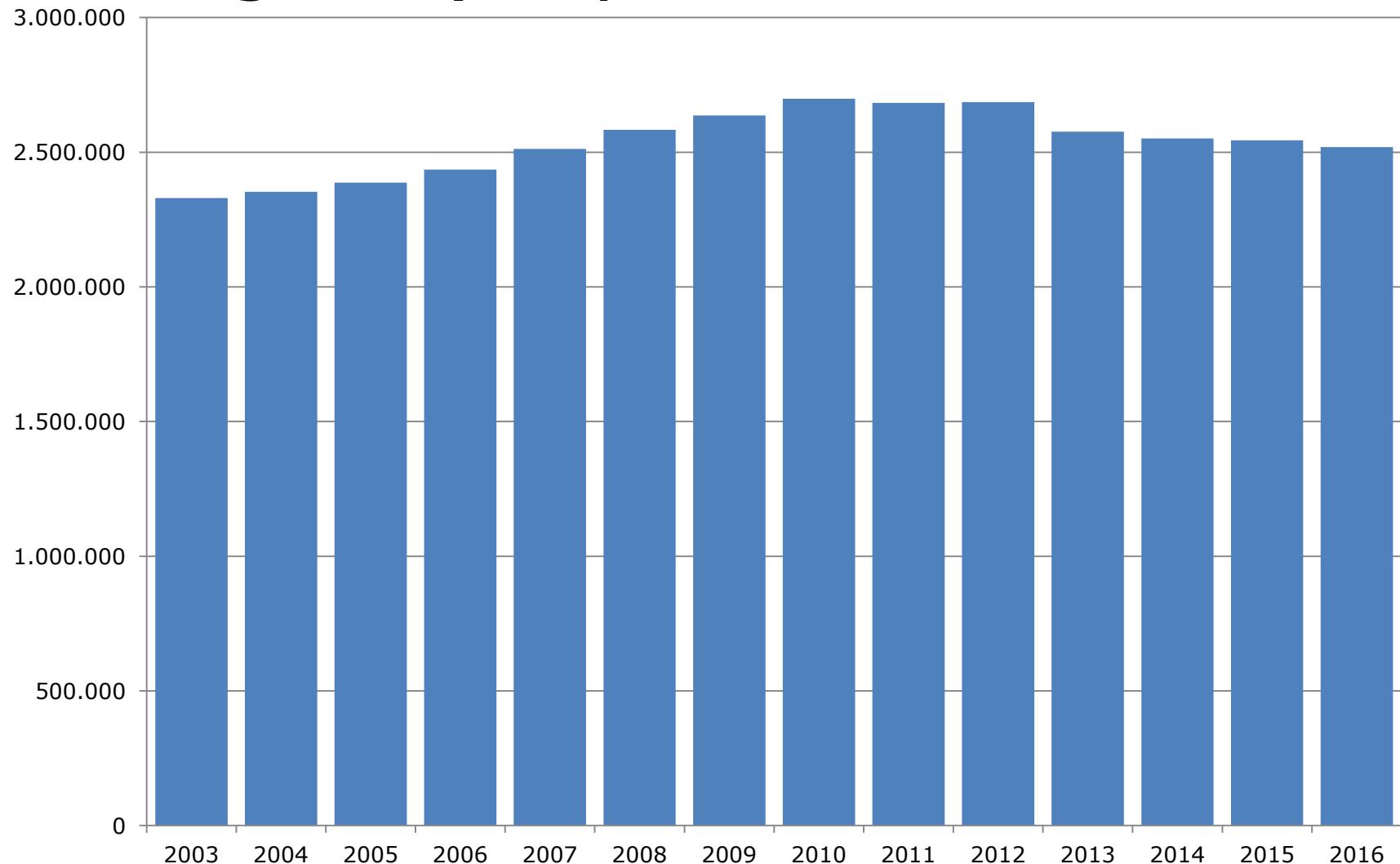
Spain, Hospitals and hospital beds, 2004-2014

	HOSPITALS		BEDS	
	Public	Private	Public	Private
2004	315	464	106.095	51.831
2005	314	468	106.859	52. 504
2006	317	469	106.221	52.931
2007	325	472	106.193	53.505
2008	332	471	107.109	53.612
2009	337	466	107.875	53.404
2010	337	457	108.392	52.630
2011	338	452	110.020	52.518
2012	339	450	109.695	52.346
2013	337	452	107.708	52.262
2014	337	450	107.330	51.967

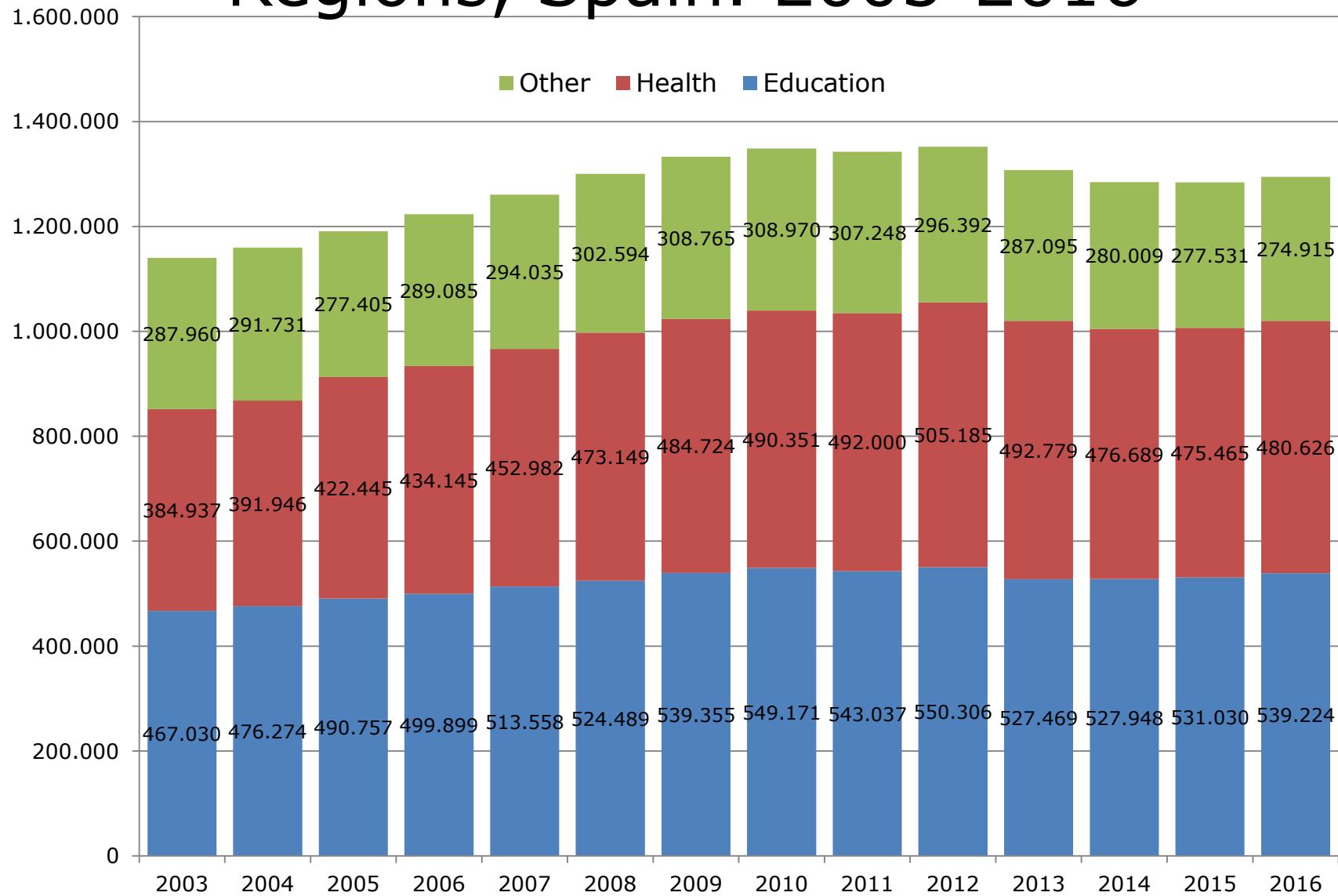
Staff working for the State by public administration Spain. 2003-2016



Staff working for the State (total figures), Spain. 2003-2016



Civil servants working for Autonomous Regions, Spain. 2003-2016



Thank you