

Restructuring Hospital Planning in Denmark

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Health Economics Research Unit

- Currently 25 researchers, with 7 full professorships, 10 PhD students
- Five research areas
 - Behavioural economics in the context of health
 - Economic organisation and incentives
 - Management science and health econometrics
 - Health services research
 - Quality in health care (new area)
- Teaching in 14 different educations
- The biggest health economics research unit in Denmark
- Located together with a number of medical research units and close to a university hospital

Agenda

- Selected major policies in the last 10-15 years
- The 2007 structural reform in Denmark
- Building new hospitals
- Speciality planning

Selected Major Danish Health Care Reforms

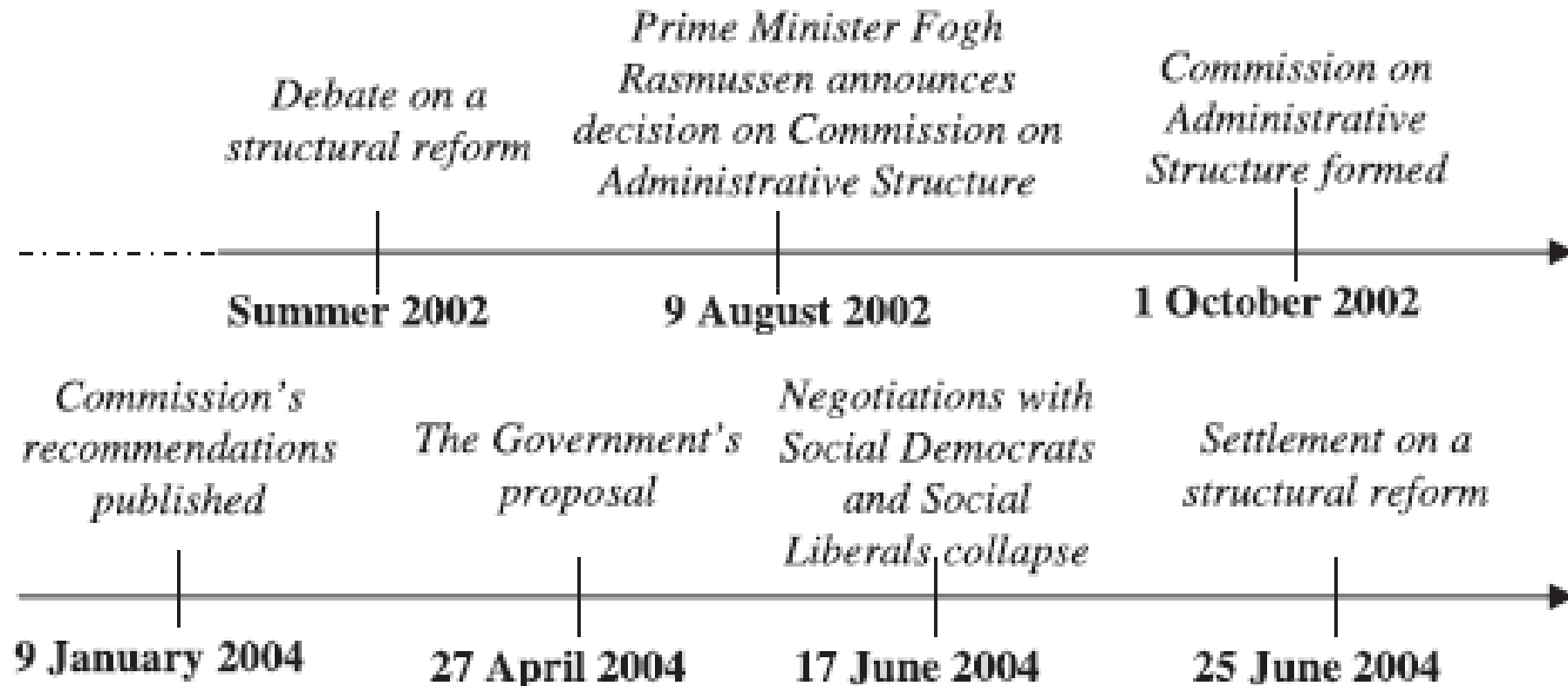
- Patient's **free choice of hospital** introduced (1993)
- **Activity based funding** of hospitals using DRG (2000, 2002 -)
- **3 month waiting** time guarantee (1997)
- **2 month** waiting guarantee and **extended free choice** of provider (including **private** and **foreign hospitals**) (2002)
 - Waiting time guarantee cut to one month in 2007
- **Structural reform** (2007)

The structural reform 2007

- 2007: The largest reform of the public sector since the 1970ies
 - 14 counties and Copenhagen Hospital Corporation merged into 5 regions
 - No longer able to levy and control taxes directly
 - Controlled by elected politicians
 - Manage and control hospitals & GPs
 - 272 municipalities merged into 98 municipalities
 - Responsible for financing and providing more health care services
 - Have some autonomy (but strongly nationally regulated) in levying taxes

The structural reform 2007

Figure 1. The Policy Process of the Structural Reform in Overview.



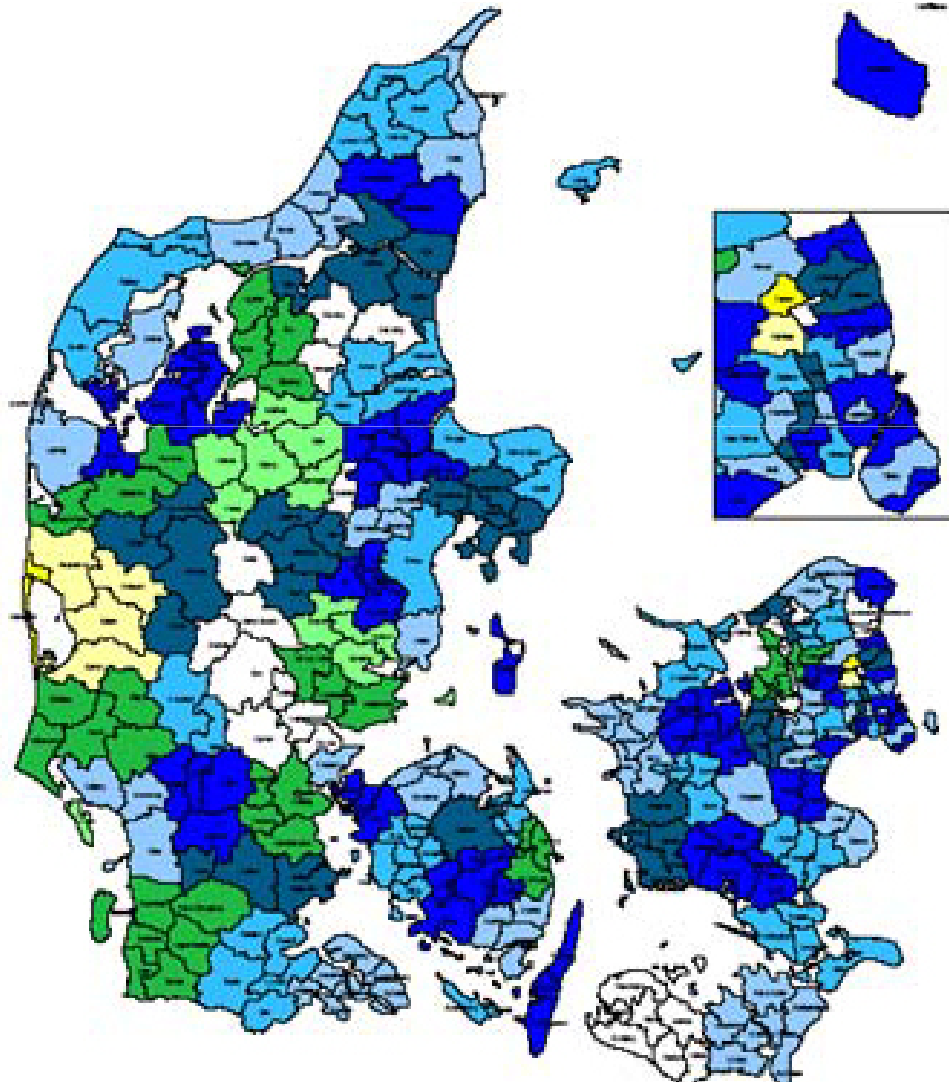
The structural reform 2007

- Funding of the regions (health care expenditure)

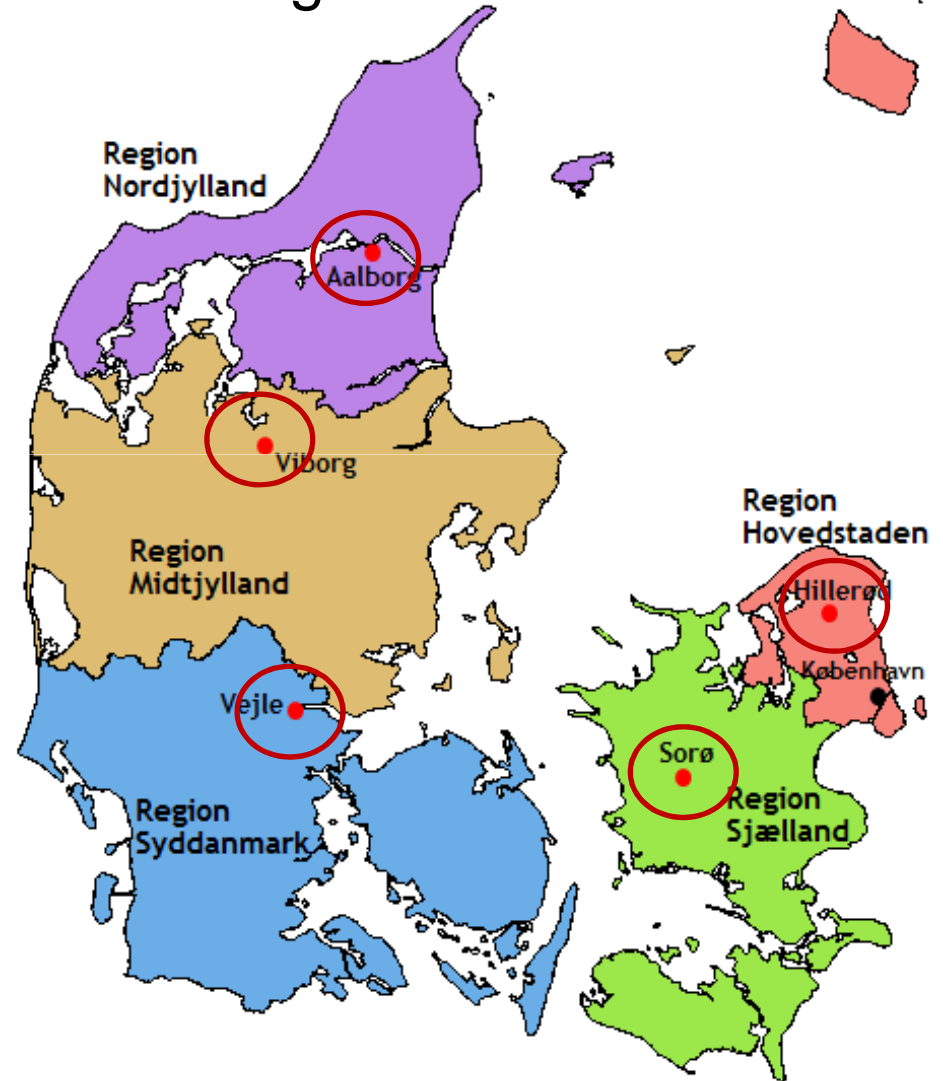
Contributor	Activity independent (block grants)	Activity based	In total
State	79 pct	3 pct	82 pct
Municipalities	7 pct	11 pct	18 pct
In total	86 pct	14 pct	100 pct

The structural reform 2007

The new municipalities

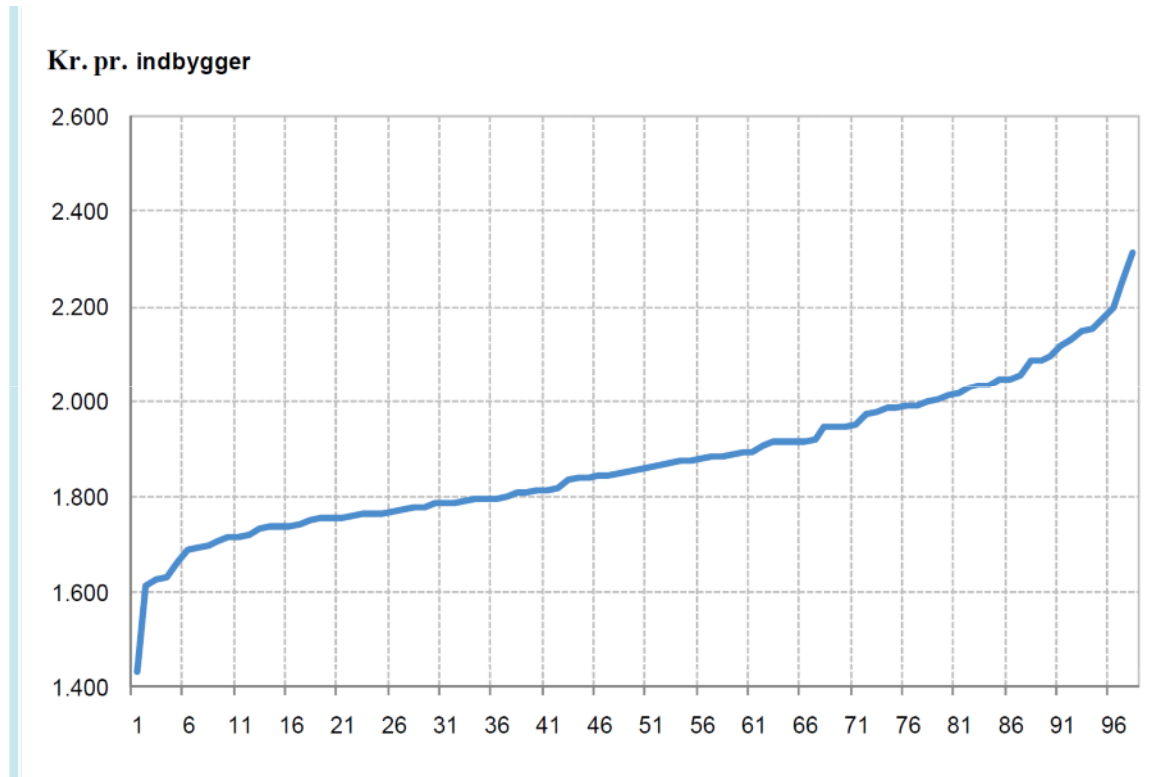


The new regions



Municipalities' co-financing

Distribution of average expenditure for activity based municipal co-financing for all 98 municipalities



Kilde: Sundhedsstyrelsen,

Note: Opgørelsen er køns- og aldersstandardiseret på baggrund af raterne i 2008. Opgørelsen er baseret på kommunernes udgifter til medfinansiering i 2008 og er opregnet forholdsmæssigt til det forventede niveau i 2010 på i alt 10,5 mia. kr.

Ministeriet for Sundhed og Forebyggelse. Oktober 2009. En analyse af ældre medicinske patienters forløb - på tværs af kommuner og regioner..

Number of hospitals

Denmark

- 1927: 165 somatic hospital within on average 93 beds
- 1987: 97 “ ” ” 285 beds
- 1997: 82 “ ” ” 272 beds
- 2004: 52
- 2010: 40

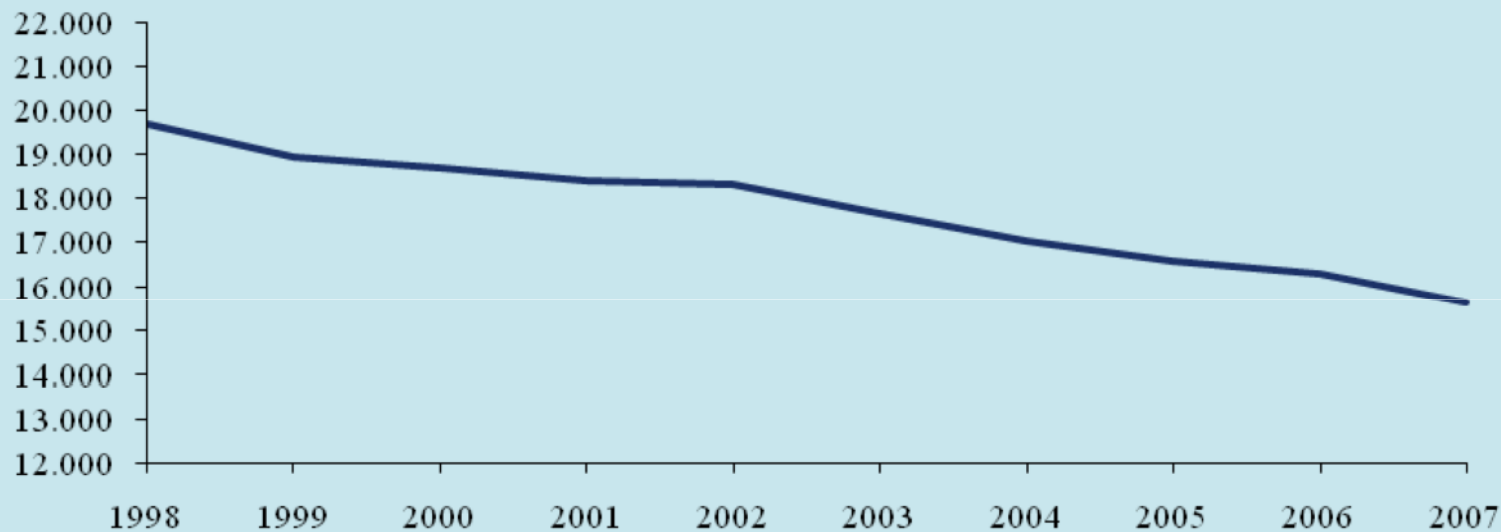
Hospital planning philosophy

- 1930-1970 : Every county should have one central hospital, and these central hospital should have at least one surgical-, one medical- and x-ray department
- 1970-2000: One central hospital in each county with considerable size, more specialities and acute functions
- 1980 - : Closing of smaller hospitals
- 2002-2007 : Initiatives with centralisation of specialities and cooperation/mergers between hospitals
- 2008 - : Central control of specialisation. Acute hospital functions

- Reasons for shift in planning philosophy: Demarcation of the political/administrative units, technology, clinical evidence and belief

Number of hospital beds

Number of beds for somatic hospital, 1998-2007



Kilde: Sundhedsstyrelsen.

Anm.: Opgørelsen omfatter normerede 5- og 7-døgnssengepladser på sygehusafdelinger inden for kirurgiske, medicinske, pædiatriske specialer, blandede specialer og afdelinger uden specialeangivelse.

Anm: 2007 er forelødige tal

Figurdata, klik her http://www.sum.dk/inevrest/Publications/imf%20oc2D%20dansk/SSTAT.SIT/2009070120010/currentversion/figurdata_nul2009.html

Ministeriet for Sundhed og Forebyggelse. Sundhedsvæsenet i nationalt perspektiv, juli 2009

http://www.sum.dk/Aktuelt/Publikationer/Sundhedsvaesenet_i_nationalt_perspektiv_juli2009.asp

Inpatient hospital activity

Tabel 5.2 Stationær somatisk aktivitet på offentlige sygehuse, 1999-2008

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Gnms. årlig vækst, pct.
Hospital discharges (x1,000)	9	1.029	1.030	1.062	1.071	1.089	1.105	1.127	1.136	1.121	1,1
Discharged (unique) patients (x1,000)	2	614	612	628	629	630	631	642	647	634	0,4
Average length of stay	5	5,4	5,4	5,2	4,9	4,7	4,5	4,4	4,3	4,2	-3,0
Bed days (x1,000)	0	5.567	5.509	5.471	5.241	5.115	5.011	4.929	4.828	4.713	-2,0
Belægningspct., medicinsk blok	96	95	95	95	92	94	94	93	94	-	-0,2
Belægningspct., kirurgisk blok	82	82	82	83	82	81	81	82	83	-	0,1

Kilde: Landspatientregisteret, Virksomheden ved sygehuse (diverse årgange), Sygehusstatistikken (diverse årgange) samt Belægningsprocenter ved offentlige sygehuse 1997-2007, alle udgivet af Sundhedsstyrelsen.

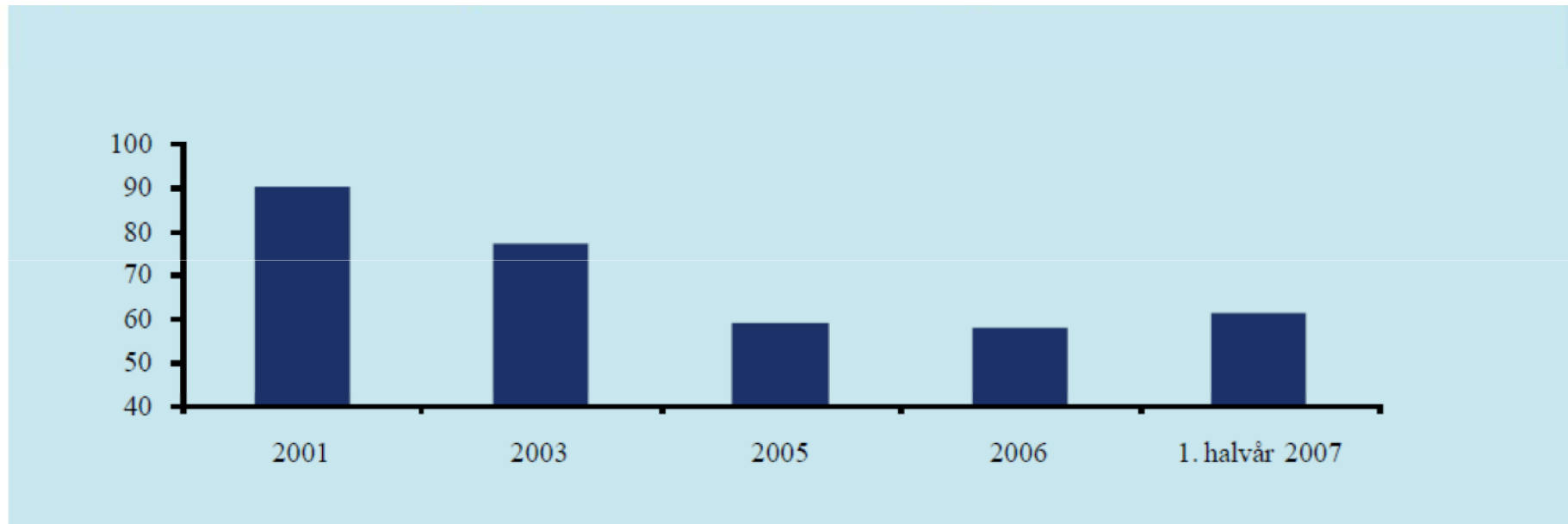
Anm.: Opgørelserne er ekskl. raske nyfødte. Belægningsprocenten er beregnet på baggrund af sygehusenes indberetninger af gennemsnitlige *disponible* sengepladser. Den medicinske blok dækker foruden de medicinske specialer også sygehusafdelinger med blandede specialer og ingen specialeangivelse. Pædiatri er ikke inkluderet i opgørelsen.

Ministeriet for Sundhed og Forebyggelse. Sundhedsvæsenet i nationalt perspektiv, juli 2009

http://www.sum.dk/Aktuelt/Publikationer/Sundhedsvaesenet_i_nationalt_perspektiv_juli2009.asp

Average waiting time for operation

Average waiting time (days)



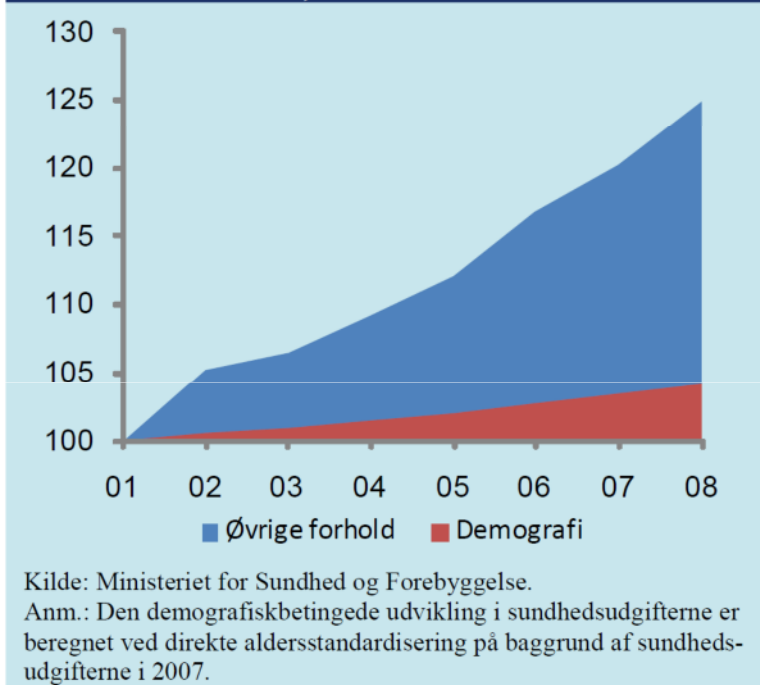
Most Danes use health care

Tabel 2 Befolkningens sundhedsforbrug 2003 - 2005

Befolkningens sundhedsforbrug	2003	2004	2005	Ændring fra 2003 til 2005	
				Absolut	Pct.
Inpatient	677 596 (12,6)	672 803 (12,5)	673 685 (12,4)	-3 911	-0,6
Outpatient	838 803 (15,6)	868 177 (16,1)	904 155 (16,7)	65 352	7,8
Emergency depart.	364 725 (6,8)	355 462 (6,6)	351 364 (6,5)	-13 361	-3,7
Priv. practicing spec.	876 105 (16,2)	881 341 (16,3)	873 719 (16,1)	-2 386	-0,3
General Practice	2 058 136 (38,2)	2 049 883 (38,0)	2 056 428 (38,0)	-1 708	0,0
Use health care (total)	4 815 365 (89,4)	4 827 666 (89,4)	4 859 351 (89,7)	43 986	0,9
Personer uden sundhedsforbrug	571 809 (10,6)	573 511 (10,6)	556 627 (10,3)	-15 182	-2,7
Befolkning i alt	5 387 174 (100)	5 401 177 (100)	5 415 978 (100)	28 804	0,5

Importance of ageing

Figur 3.4: Udviklingen i sundhedsudgifter dekomponeret på demografi og øvrige forhold, 2001-2008. Indeks, 2001=100



Godt 20 pct. point og dermed langt størstedelen af væksten i sundhedsudgifterne fra 2001 til 2008 kan hovedsageligt forklares ved generelle forbedringer på sundhedsområdet bl.a. som følge af den medicinsk-teknologiske udvikling, som har betydet, at stadig flere kan komme i behandling, og at sygdomme kan behandles mere intensivt.

Ministeriet for Sundhed og Forebyggelse. Oktober 2009. En analyse af ældre medicinske patienters forløb - på tværs af kommuner og regioner..

Two interrelated functions

- Capacity planning of hospitals
 - Strategic and operational of capacity – number of hospital beds, construction and restructuring of hospital facilities
 - Executed by regional agencies in corporation with hospitals within the region
 - Cover public hospital capacity (private hospital ~ 2% of total hospital activity)
- Specialty planning of hospitals
 - Decisions on permission to perform different types of treatments – depending on specialisation level
 - Determined by The National Board of Health with inputs from the regions

Building new hospitals

- The structural reform opened a policy window for allocating funding to new publicly owned hospitals
- Important policy entrepreneurs were regional politicians
 - Started discussion with round numbers – need for 100 billion DKK
 - August 2007 – Announced that 25 billion DKK would be available (become 40 billion DKK with regions co-financing)

Building new hospitals

- Process
 1. A expert committee was appointed
 - Five members: Three Danes: Lead by the former CEO of Copenhagen Hospital Corporation; an health economic researcher, a former CEO of county health services; Norwegian member with expertise from the Norwegian reform; Swedish member who is executive director of the county of Stockholm
 2. Call for plans from the regions – administrative and politically demanding. High politics and public attention
 3. Evaluated by the expert committee in a report
 4. Decisions made by the Ministry of Health (and the Ministry of Finance)

Building new hospitals

- First round:
 - 25 billion DKK available including regional co-financing
 - Applications summed to 68 billion DKK
 - Large variation in assumptions (treatment need, length of stay, shift from inpatient to outpatient, capacity utilisation, square meter per bed etc.)
 - Standardised assumption decided by the committee

REGIONERNES INVESTERINGS-
OG SYGEHUSPLANER

- SCREENING OG VURDERING

Afgivet af regeringens ekspertpanel
NOVEMBER 2008

Building new hospitals

- First round:
 - Evaluation according to
 - Extent of consolidation of hospitals into fewer entities
 - Extent of adherence to the centrally issued guidelines from the National Board of Health
 - Pre-hospital acute service plans (in view of closures and fewer hospitals with 24h emergency departments)
 - Interrelationship with bordering regions
 - Two regions did not conform very well with these criteria and was granted little funding!

Building new hospitals

- Need for investments – “stylised model”

What is the treatment need? (# patients, #operations, # outpatient treatment etc.)

Capacity utilisation (opening hours, # operation per day, scans per day etc)? (most parameters fixed by the committee)

Number and type of rooms

Size for each type of room (fixed by the committee)

= Net need for size of the hospitals

× factor for other rooms (hall, technical rooms etc.) (fixed by the committee)

= Gross need for size of the hospital

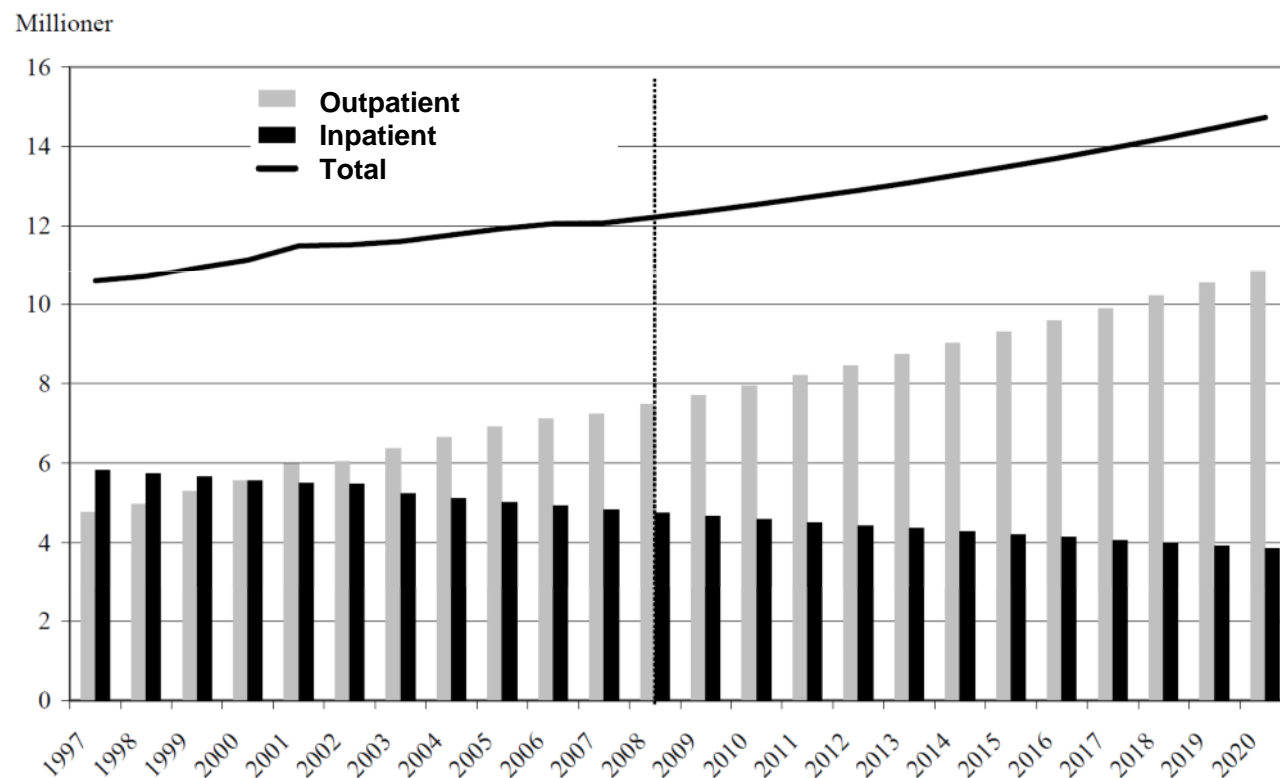
× price per square meter (fixed by the committee)

= Final investment need

Building new hospitals

■ Prediction of need

Figur 4.1 Antal sengedage og ambulante besøg fra 1997 til 2007, inkl. skøn for udviklingen 2008-2020



Kilde: 1997-2007 Sundhedssektoren i Tal, diverse årgange, Ministeriet for Sundhed og Forebyggelse, egne skøn for perioden 2007-2020. Såvel skadestuebesøg som deldøgnskontakter er opgjort som ambulante besøg.

Projections

- Demographics (age groups 0-19, 20-64 and 65+)
- Age specific historical disease and utilisation patterns – assumed reduced morbidity. Time-to-death effects assumed.
- Change in technology and shift to outpatient treatment.

2008 – 2020

- around 20% reduced inpatient activity
- around 40% increase in outpatient activity

Building new hospitals

- Some observations
 - Very high degree of standardisation of the planning assumptions with the expert committee being the ‘ram’
 - Regions not conforming to guidelines were “punished” severely by not being granted money for new hospitals
 - Regions’ decision on placement of acute function was strongly influenced by national agencies
 - Expert evaluations in a very politicised environment
 - One incidence: Placement of one hospital became a major issue in the negotiation on the national budget in 2009.

Specialty planning

- Large national speciality planning
 - Started with determining acute structure
 - All specialities followed in 2010
 - Long process
 - 2007/8 - All hospitals gave their wishes to the regions
 - 2008/9 - Regions decide and negotiate their response
 - 2009 - Sent to the National Board of Health
 - 2009/2010 - Assessed by the National Board of Health based on the pre-determined criteria
 - March 2010 - Plan published
 - April-may 2010 – negotiation on a number of critical areas

Specialty planning

- Three levels
 - Basic treatment: all hospitals
 - Regional functions: 1-3 hospitals in the region
 - Highly specialised functions: 1-3 hospitals in Denmark
- Criteria (the most important criteria)
 - Patient volume
 - Population basis
 - Presence of other specialties
 - Research

Specialty planning

- Some observation
 - Very high politics combined with expert assessments
 - A lot of Bork Barrel games
 - Strong regulation by the National Board of Health of the regions' decision which has questioned the regions' possibilities as a managing and planning authority
 - Questions some basic assumptions behind the establishment of the regions (rather than a system with national authority of hospitals)