# HEALTH SYSTEMS AND COST EVOLUTION

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OECD
BETTER POLICIES FOR BETTER LIVES

# How finance ministries think about health…

Dutch public spending plans: 2011-2015

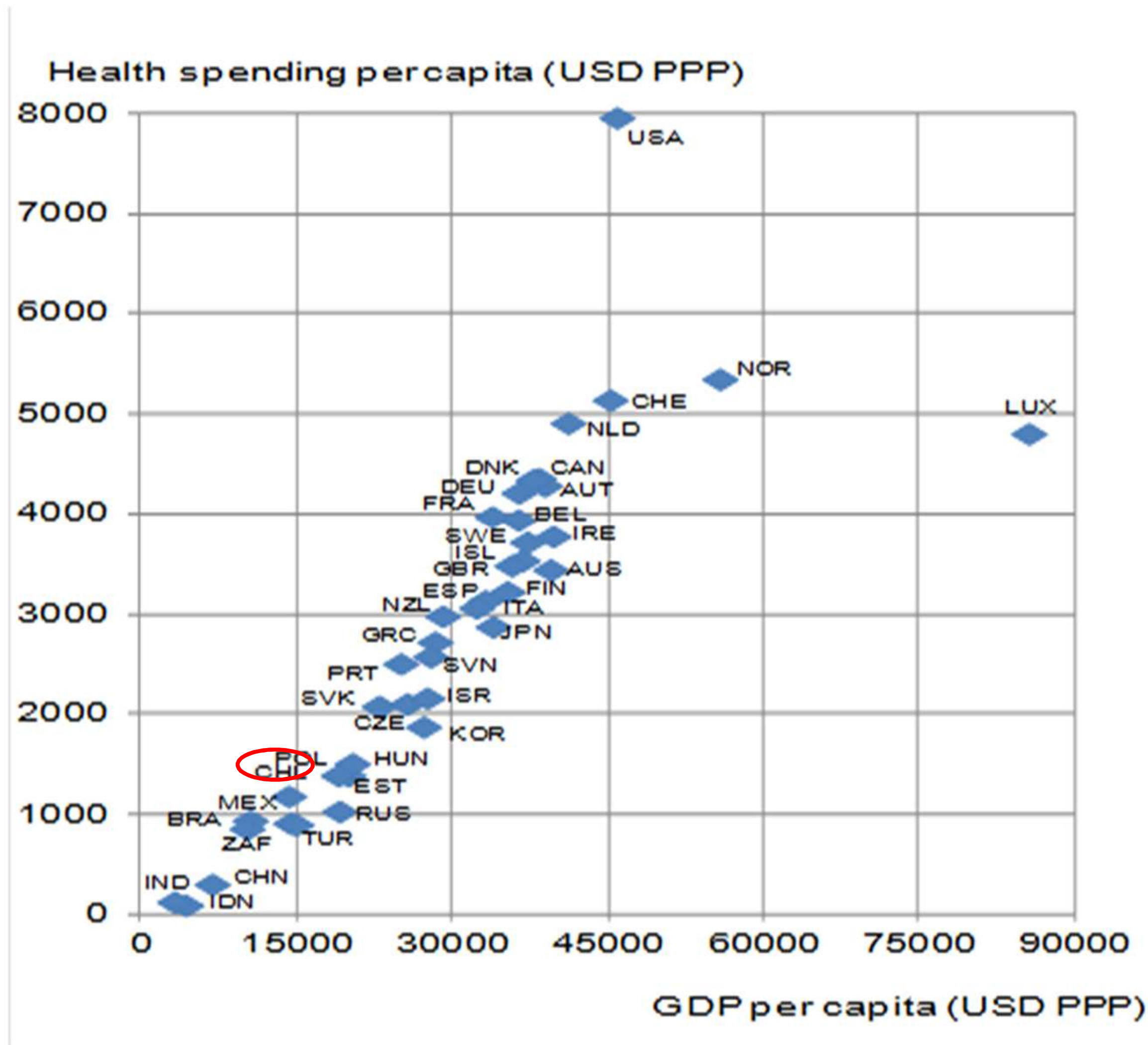
(Real) growth 2011-2015 (mld euro's)

14
12
10
8
6
4
2
0
-2
-4
-6

Social Security
Health Care
Education
Business Transfers
Public Administration
Safety
Defense
Accessibility
International Cooperation

*Source: The Netherlands Ministry of Health, Welfare and Sport.*

# The richer you are, the more you spend



# Health spending outpaced GDP growth, 2000-2009

# Average OECD health expenditure

## Growth rates in real terms, 2000 to 2011, public and total

7.0%
6.0%
5.0%
4.0%
3.0%
2.0%
1.0%
0.0%

2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

Total Health Expenditure — Public health expenditure

Source: *OECD Health Data 2013.*

# Average annual growth in health spending

Real terms, 2000-2011

15%
10%
5%
0%
-5%
-10%
-15%

Greece, Ireland, Iceland, Estonia, Portugal, Denmark, Spain, United Kingdom, Slovenia, Czech Republic, Italy, Austria, OECD, France, Australia, Mexico, Netherlands, Poland, Belgium, Germany, Norway, New Zealand, Canada, Finland, United States, Hungary, Switzerland, Slovak Republic, Sweden, Israel, Japan, Chile, Korea

2000-09 2009-11

**Note:**
Growth rates for Australia, Denmark, Japan, Mexico and Slovak Republic refer to 2009-10 instead of 2009-11
Growth rates for 2009-11 are not available for Luxembourg, and Turkey.
Growth rates for Chile calculated using the Consumer Price Index (CPI).

Source: *OECD Health Data 2013.*

# Even conservative projections suggest health spending will continue to grow

**Percentage point increase in total public health and long term care spending, 2010- 2060**

Range of estimates across sensitivity analyses[1]

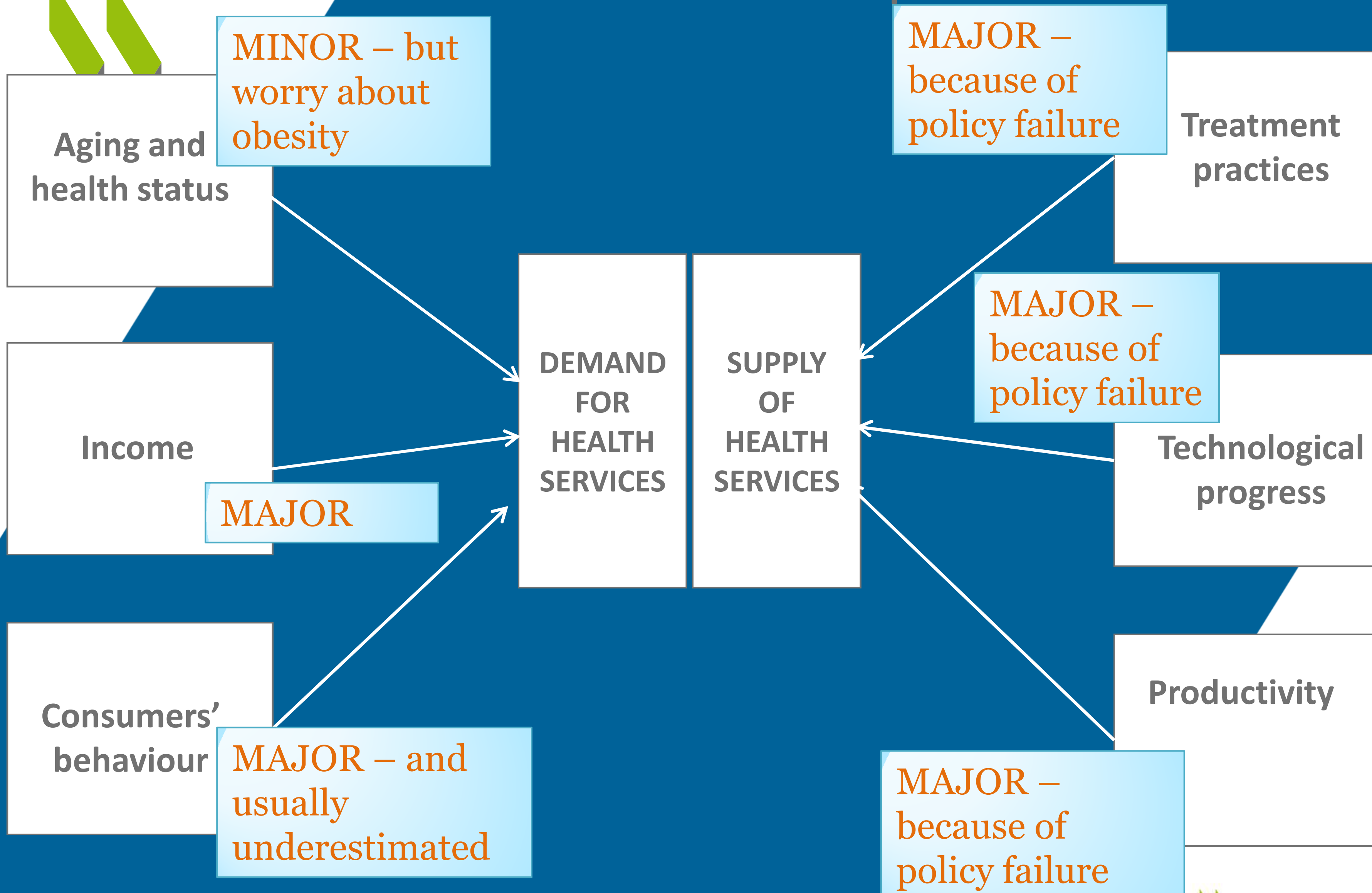
Percentage point increase in total health spending to GDP

12
10
8
6
4
2
0

◆ Cost pressure
✕ Cost containment

Korea, Turkey, Chile, Mexico, Brazil, Spain, Luxembourg, Slovak Republic, Slovenia, China, Poland, Greece, Portugal, Italy, Switzerland, OECD average, Indonesia, Netherlands, Japan, Australia, Ireland, Israel, Canada, New Zealand, Austria, Czech Republic, Germany, Estonia, Hungary, Non-OECD average, Norway, France, Belgium, United States, Denmark, Finland, United Kingdom, Iceland, India, Sweden, Russia, South Africa

*__Note__: The vertical bars correspond to the range of alternative scenarios, including sensitivity analysis. Countries are ranked by the increase of expenditures between 2010 and 2060 in the cost containment scenario. Source: La Maisonneuve and Oliveria Martins, OECD Economics Department*


Drivers of health expenditure
MINOR – but worry about obesity
Aging and health status
Income
MAJOR
Consumers' behaviour
MAJOR – and usually underestimated
DEMAND FOR HEALTH SERVICES
SUPPLY OF HEALTH SERVICES
MAJOR – because of policy failure
Treatment practices
MAJOR – because of policy failure
Technological progress
Productivity
MAJOR – because of policy failure
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# What are our options?

1. Do less
2. Fund the increase through more taxes
3. Divert money from other areas of spending
4. Get more private finance into the system
5. Do things better – more health for our money

# Public finances: huge deficits at the moment

**Annual deficit or surplus as a % of GDP (selection of countries with largest deficits in 2010)**

10
5
0
-5
-10
-15
-20

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

Ireland:
-30.9% in 2010

EU (27 countries) Greece United Kingdom Iceland Portugal Spain Latvia Ireland

# Debt ratios starting to look troublesome

**Public debt to GDP ratio, (Eurostat)**

180,0
160,0
140,0
120,0
100,0
80,0
60,0
40,0
20,0
0,0

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

European Union (27 countries)
Greece
Italy
Portugal
Ireland
Iceland
Belgium
France
United Kingdom

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# A transformation in financing?

**Evolution of revenues for the CNAMTS (as % of total resources)**

5,9
1,7
35,4
57
7,9
4,1
**34,6**
3,5
49,9
3,8
12,6
**35,7**
47,9
98,4

1968 1995 2000 2011

Wages contribution | from employers | from workers | CSG | Other Taxes | Other

*Source: CNAMTS, CCSS*

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# Health is the 2nd largest area of government spending

**Structure of general government expenditures, 2007 & 2010 (% of total expenditures)**



*Source: OECD Fiscal Consolidation Survey 2012.*

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# In the crisis, all the extra private money is coming out-of-pocket

| | Percentage of the change in private share of THE that is due to change in OOP | Change in Private share of THE |
|---|---|---|
| **Russia** | 109.1% | 8.4 |
| **Ireland** | 49.1% | 5.8 |
| **Montenegro** | 91.0% | 4.8 |
| **Macedonia** | 99.1% | 3.0 |
| **Armenia** | 88.3% | 2.9 |
| **Moldova** | 44.5% | 2.7 |
| **Albania** | 99.8% | 2.7 |
| **Kyrgyzstan** | 89.7% | 2.3 |
| **Latvia** | 95.3% | 2.2 |
| **Greece** | 94.5% | 2.2 |
| **Iceland** | 100.7% | 1.6 |
| **Average of 33** | 82.5% | 1.5 |

# Not much sign that private health insurance is growing

## Private insurance as a percentage of total health spending

**% of total health spending**

Legend: 1990, 2000, 2010 (or nearest year)

Y-axis: 0, 5, 10, 15, 20, 25, 30, 35, 40

| Country | 2010 (or nearest year) |
| --- | --- |
| République tchèque | 0.2 |
| Suède | 0.2 |
| Estonie | 0.2 |
| Pologne | 0.6 |
| Italie | 1.0 |
| Danemark | 1.7 |
| Grèce | 2.1 |
| Finlande | 2.1 |
| Japon | 2.4 |
| Hongrie | 2.7 |
| Royaume-Uni | 3.1 |
| Luxembourg | 3.1 |
| Mexique | 4.0 |
| Portugal | 4.3 |
| Autriche[1] | 4.7 |
| Belgique | 4.8 |
| Nouvelle-Zélande | 5.0 |
| Pays-Bas[1] | 5.2 |
| Corée | 5.2 |
| Espagne | 5.6 |
| OECD | 6.5 |
| Australie | 7.8 |
| Israël | 8.0 |
| Suisse | 8.8 |
| Allemagne | 9.3 |
| Irlande | 11.2 |
| Canada | 12.5 |
| Slovénie | 12.5 |
| France | 13.5 |
| Chili | 18.5 |
| États-Unis | 33.8 |

Source: OECD Health Data

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# Bending the cost curve

- Is there a better system for turning spending into health?

# Groups of countries sharing broadly similar institutions

**Reliance on market mechanisms in service provision**

- Private insurance for basic coverage
  - -1- Germany, Netherlands, Slovak Republic, Switzerland
- Public insurance for basic coverage
  - Private insurance beyond the basic coverage and some gate-keeping
    - -2- Australia, Belgium, Canada, France
  - Little private insurance beyond the basic coverage and no gate-keeping
    - -3- Austria, Czech Republic, Greece, Japan, Korea, Luxembourg

**Mostly public provision and public insurance**

- No gate-keeping and ample choice of providers for users
  - -4- Iceland, Sweden, Turkey
- Gate-keeping
  - Limited choice of providers for users and soft budget constraint
    - -5- Denmark, Finland, Mexico, Portugal, Spain
  - Ample choice of providers for users and strict budget constraint
    - -6- Hungary, Ireland, Italy, New Zealand, Norway, Poland, United Kingdom

# Efficiency varies more within groups of countries than across them

Potential gains in life expectancy (years, DEA)

5
4
3
2
1
0

SVK
DEU
NLD
CHE

BEL
CAN
FRA
AUS

GRC
LUX
CZE
AUT
JPN
KOR

SWE
TUR
ISL

DNK
FIN
ESP
PRT
MEX

HUN
GBR
IRL
NZL
NOR
POL
ITA

0 1 2 3 4 5 6

# Bending the cost curve

- Is there a better system for turning spending into health? No, so....

a) Quality

b) Payment reform

c) Workforce

# The Quality Challenge according to the IOM

'[Our] health care system has become far too complex and costly to continue business as usual.'

- … 'Pervasive inefficiencies…'
- … 'inability to manage a rapidly deepening clinical knowledge base…'
- … 'a reward system poorly focused on key patient needs'

… 'threaten the nation's economic stability and global competitiveness.'

# A quality focus *could* save health systems lots of money

- Netherlands: adverse events in hospitals cost €165m
- UK: cost of legal payouts due to medical mistakes up to 1.3% of all spending
- Australia: there are 150 interventions still taking place that should not on the basis of clinical evidence

# International variations C-section rates raise questions

Per 1 000 live births

| Country | Value |
|---|---|
| Iceland | 161 |
| Finland | 162 |
| Sweden | 163 |
| Norway | 164 |
| Spain | 178 |
| France | 197 |
| Denmark | 205 |
| England | 229 |
| New Zealand | 232 |
| Ireland | 236 |
| Wales | 236 |
| Scotland | 241 |
| OECD-17 | **242** |
| Canada | 264 |
| Portugal | 274 |
| Northern Ireland | 287 |
| Australia | 291 |
| Germany | 305 |
| United States | 313 |
| Switzerland | 316 |
| Italy | 385 |

Source: McPherson et al. (2013) International variations in a selected number of surgical procedures – OECD Health Working paper No. 61

# Variations in medical practice

Distribution of French GPs: % of diabetic patients having 3 or more HBA1C tests during the year in the last 12 months (2009)

FREQUENCY

3000

2000

1000

0

Average=40%
Target=65%

10 20 30 40 50 60 70 80 90

# So what do we do?

- *Measure* (Israel: primary care; Denmark: hospital care; Germany: provider level)
- *Co-ordinate* (Norway: intermediate facilites; Denmark: GP co-ordinator in hospitals)
- *Pay* (Korea: avoid FFS; Turkey: child health; Sweden: information)

# Bending the cost curve

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# Move to DRGs or similar is general

| DRG | Budget and DRG blend | Global Budget | Line item budgets | Procedure based |
|---|---|---|---|---|
| Australia | Denmark | Czech Republic | Spain | Israel |
| Austria | New Zealand | Italy | | Korea |
| Belgium | Norway | Luxembourg | | |
| Finland | Poland | Mexico | | |
| France | | Portugal | | |
| Germany | | Sweden | | |
| Iceland | | Canada | | |
| Netherlands | | Ireland | | |
| Slovenia | | | | |
| Switzerland | | | | |
| United Kingdom | | | | |
| United States (Medicare) | | | | |

# Why did we set down the path of DRGs?

- Why move to DRGs in the first place?
  - Adjusting output for complexity
  - Economic notion of 'efficient price'

- For given level of funding, outputs should increase
  - DRGs (activity-based financing) has been used as tool to increase hospital productivity
  - Shorter lengths of stay; increased throughput

# Information is key for all countries

- Reliable, timely, validated and comparable information is needed on hospital performance no matter what the country's model
- OECD countries moving away from command and control toward a mixed, regulated system with case-based payments and competition among hospitals
  - Less emphasis on output based targets
  - Purchasing agents and patients need information on hospital performance, particularly quality and costs

# There is only so much financing can do

- Outcomes are often related to the whole health system, and hospitals are not totally in control
  - Emergency services are critical for key indicators like mortality rates for myocardial infarction
  - Primary care is critical for quality indicators for chronic diseases like diabetes

- Do hospital managers have the autonomy to drive performance? OECD countries differ greatly:
  - Netherlands, not for profit private hospitals subject to significant reporting obligations, have hiring and firing power though wage setting is limited
  - UK foundation trusts can retain financial surpluses and Local Hospital Networks in Australia

# Strong growth in services since introduction of DRGs

**Growth in hospital services over the past five years, select OECD countries**

Per 1 000 population

250

200

150

100

2005 2006 2007 2008 2009 2010

Australia[1]
Denmark
France
Germany
Netherlands
United Kingdom
OECD average

# Future of payment systems

- More bundling across providers
- More Pay for Performance:
  - Increasingly common in primary care (US, UK, France)
  - Now appearing in hospital payments (Israel, Sweden)

# Bending the cost curve

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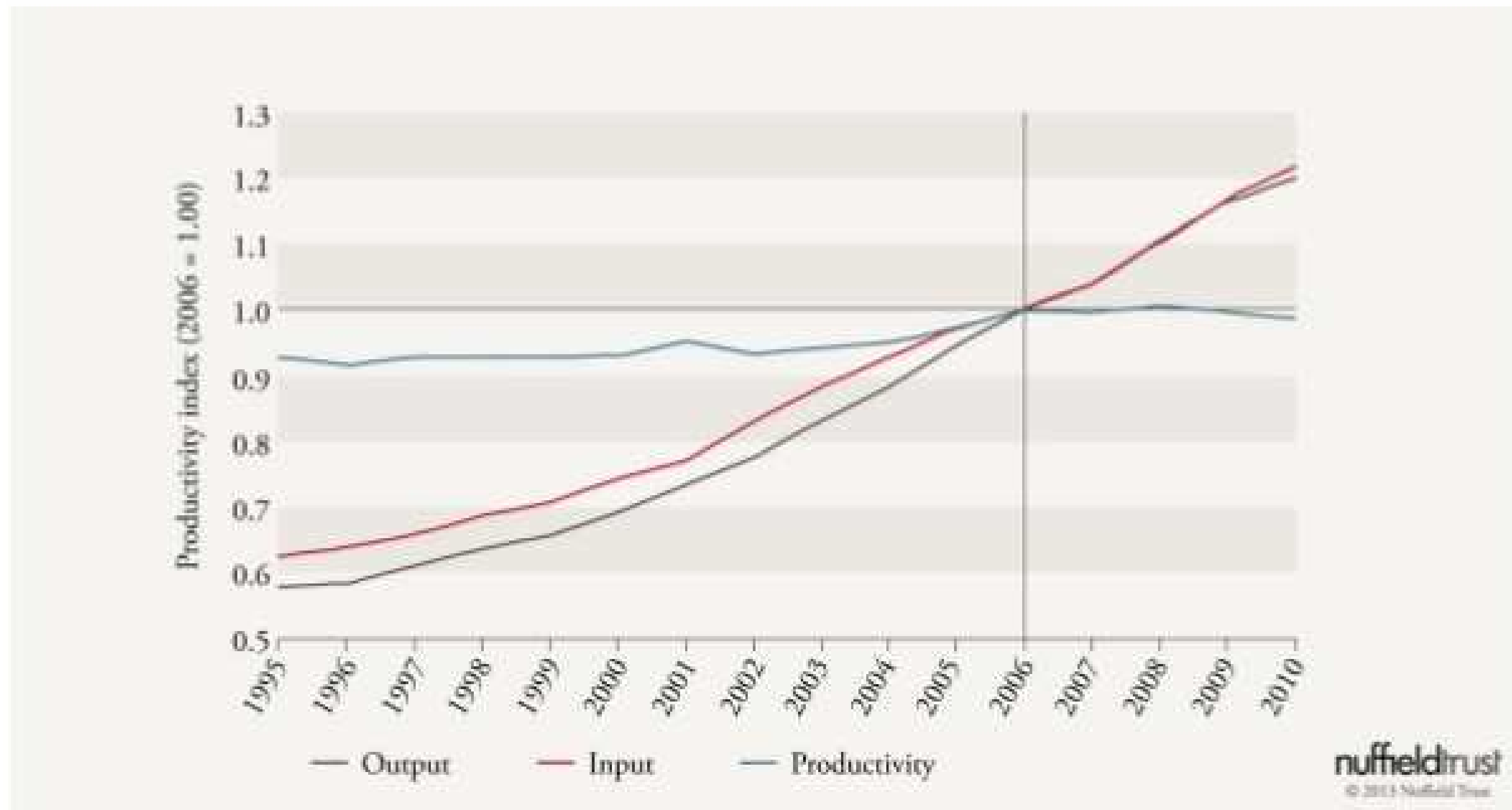
# Health Productivity in the UK, 1995-2010



# The health workforce: Doctors (per 1000 population)…

| Country | Doctors per 1000 population |
|---|---|
| Chile | 1,4 |
| Turkey 1 | 1,7 |
| Korea | 2,0 |
| Mexico | 2,0 |
| Poland | 2,2 |
| Japan | 2,2 |
| Canada 1 | 2,4 |
| Slovenia | 2,4 |
| United States | 2,4 |
| New Zealand | 2,6 |
| United Kingdom | 2,7 |
| Luxembourg | 2,8 |
| Hungary | 2,9 |
| Belgium | 2,9 |
| Netherlands 1 | 2,9 |
| Australia | 3,1 |
| Ireland 1 | 3,1 |
| OECD | **3,1** |
| Estonia | 3,2 |
| Finland 1 | 3,3 |
| France 1 | 3,3 |
| Slovak Republic 1 | 3,3 |
| EU | **3,4** |
| Denmark | 3,5 |
| Israel | 3,5 |
| Czech Republic | 3,6 |
| Iceland 1 | 3,6 |
| Italy | 3,7 |
| Germany | 3,7 |
| Spain | 3,8 |
| Sweden | 3,8 |
| Switzerland | 3,8 |
| Portugal 2 | 3,8 |
| Norway | 4,1 |
| Austria | 4,8 |
| Greece 1 | 6,1 |

# …and nurses (per 1000 population)

| Country | Nurses per 1000 population |
|---|---|
| Chile | 1.5 |
| Turkey 1 | 1.6 |
| Mexico | 2.5 |
| Greece 1 | 3.3 |
| Korea | 4.6 |
| Israel | 4.8 |
| Spain | 4.9 |
| Poland | 5.3 |
| Portugal 1 | 5.7 |
| Slovak Republic 1 | 6.0 |
| Estonia | 6.1 |
| Hungary | 6.2 |
| Italy 2 | 6.3 |
| Austria 3 | 7.7 |
| Czech Republic | 8.1 |
| Slovenia | 8.2 |
| Netherlands | 8.4 |
| France 1 | 8.5 |
| OECD | 8.6 |
| Canada | 9.3 |
| Finland | 9.6 |
| United Kingdom | 9.6 |
| New Zealand | 10.0 |
| Australia | 10.1 |
| Japan | 10.1 |
| United States 1 | 11.0 |
| Sweden | 11.0 |
| Luxembourg | 11.1 |
| Germany | 11.3 |
| Ireland 1 | 13.1 |
| Norway | 14.4 |
| Iceland | 14.5 |
| Belgium 2 | 15.1 |
| Denmark | 15.4 |
| Switzerland | 16.0 |

# The big issue is *not* the number of workers, but the organisation of the workforce

Countries responding that an issue is of major concern

| Issue | Countries |
| --- | --- |
| No issue identified* | 1 |
| Maintaining the current level of physician supply | 5 |
| Meeting increased demand for services | 9 |
| Maintaining share of GPs | 12 |
| Shortages of certain specialty areas | 23 |
| Mal-distribution of physician supply | 28 |

# Share of generalists is falling

60
55
50
45
40
35
30
25

1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

Australia
Austria
Belgium
France
Germany
Netherlands
New Zealand
United Kingdom

# A glimmer of hope – the rise in training of other professionals

Annual graduates in the US: Nursing practitioners and Physician Assistants compared with Doctors

20000
15000
10000
5000
0

2000
2005
2010

NP
PA
MD

# Thanks for listening!

And thanks to Ankit Kumar, Roberto Astolfi, Michael Schoenstein, Valerie Paris,

Mark.pearson@oecd.org

Find lots of data at:

www.oecd.org/health/healthdata