

Healthcare Management, Design and Delivery

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Healthcare management, design and delivery:

- What changes have we seen so far?
- Can we look at it from a European perspective?
- What is coming, what is already here?



- Looking at : input / processes / output
- Between EU members / within them

The example of a few medical (and technical) innovations

- Operating theatres
 - Fast acting anaesthetics
 - Minimally invasive surgery
- Radiology departments
 - Telemedicine
 - Ultrasound
- Laboratories
 - Near patient testing
 - Micro-arrays
- Identification of antibiotic resistant infections

A visible impact on healthcare?

- Surgery
 - Increased ambulatory surgery
- Medicine
 - Increased diagnostic work-up in primary care
- Infection control
 - Safer at home?

Visible on input and output?

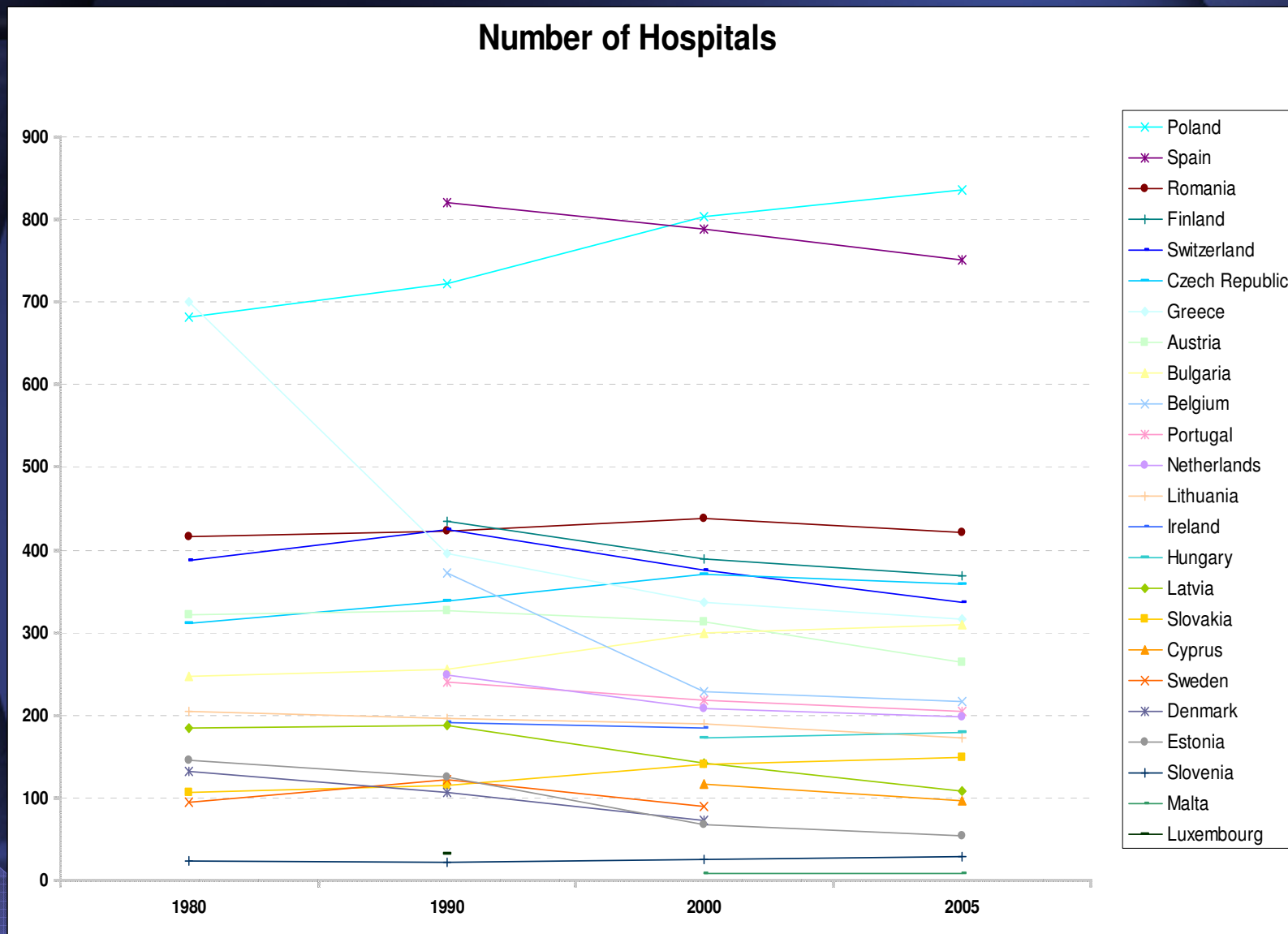
Classical inputs: facilities/beds

Do we see less hospitals?

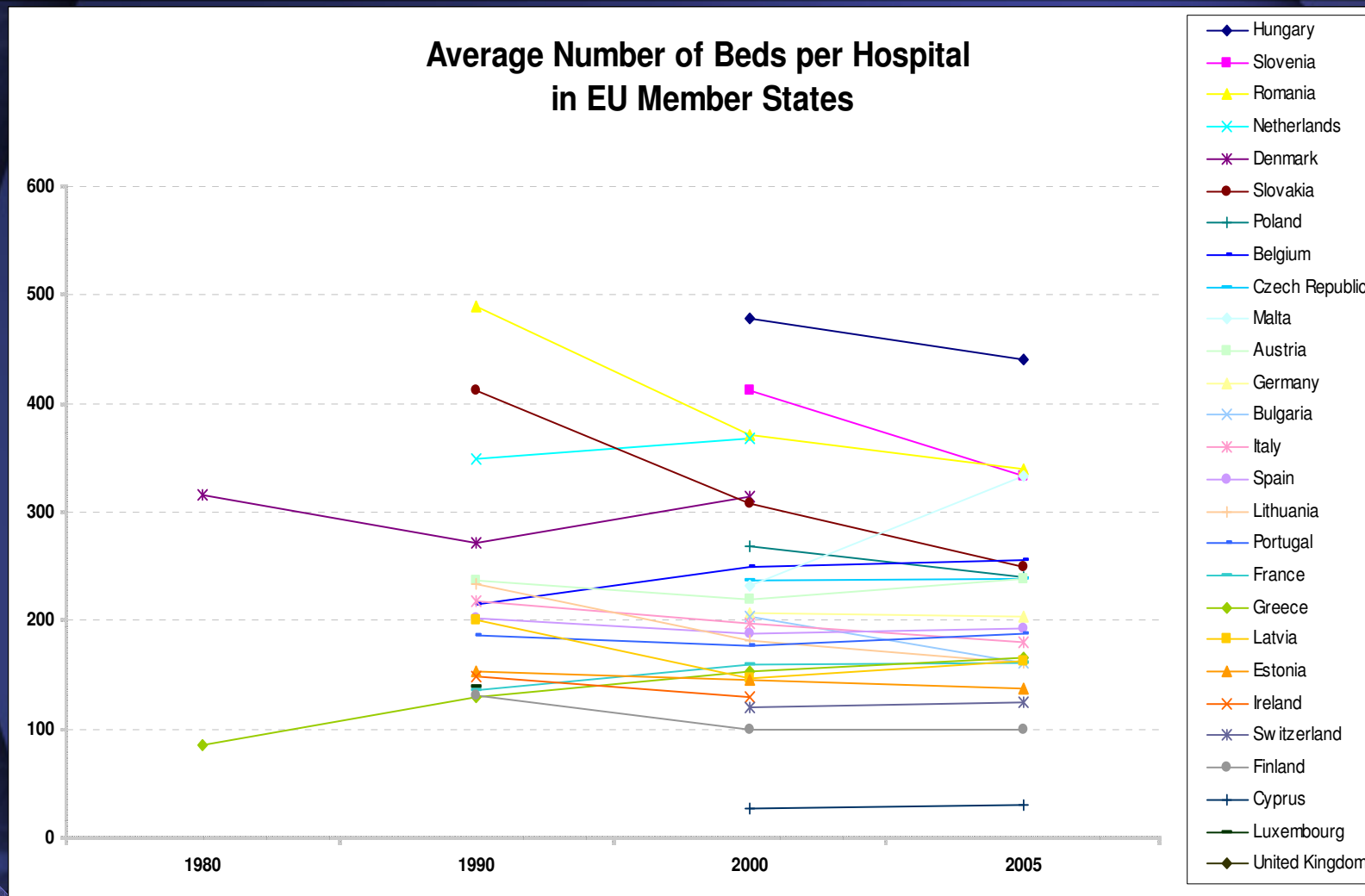
Do we see less beds?

Do we have more beds per hospitals?

Stable or slightly decreasing number of hospitals

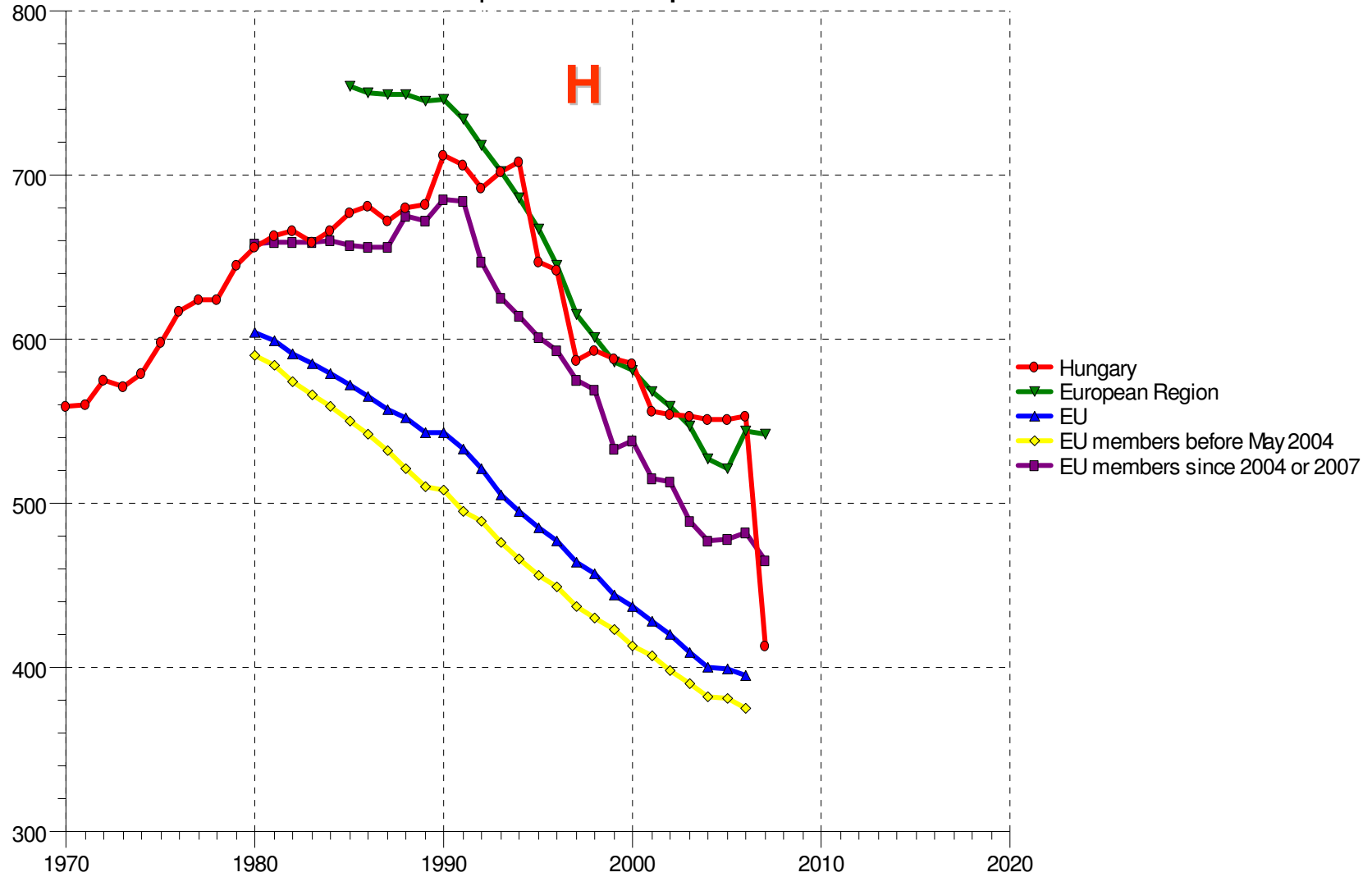


(not so) decreasing number of beds per hospitals



But major decreases in number of acute beds

Acute care hospital beds per 100000



Visible on input and output?

Classical inputs: human resources

How do we provide healthcare?

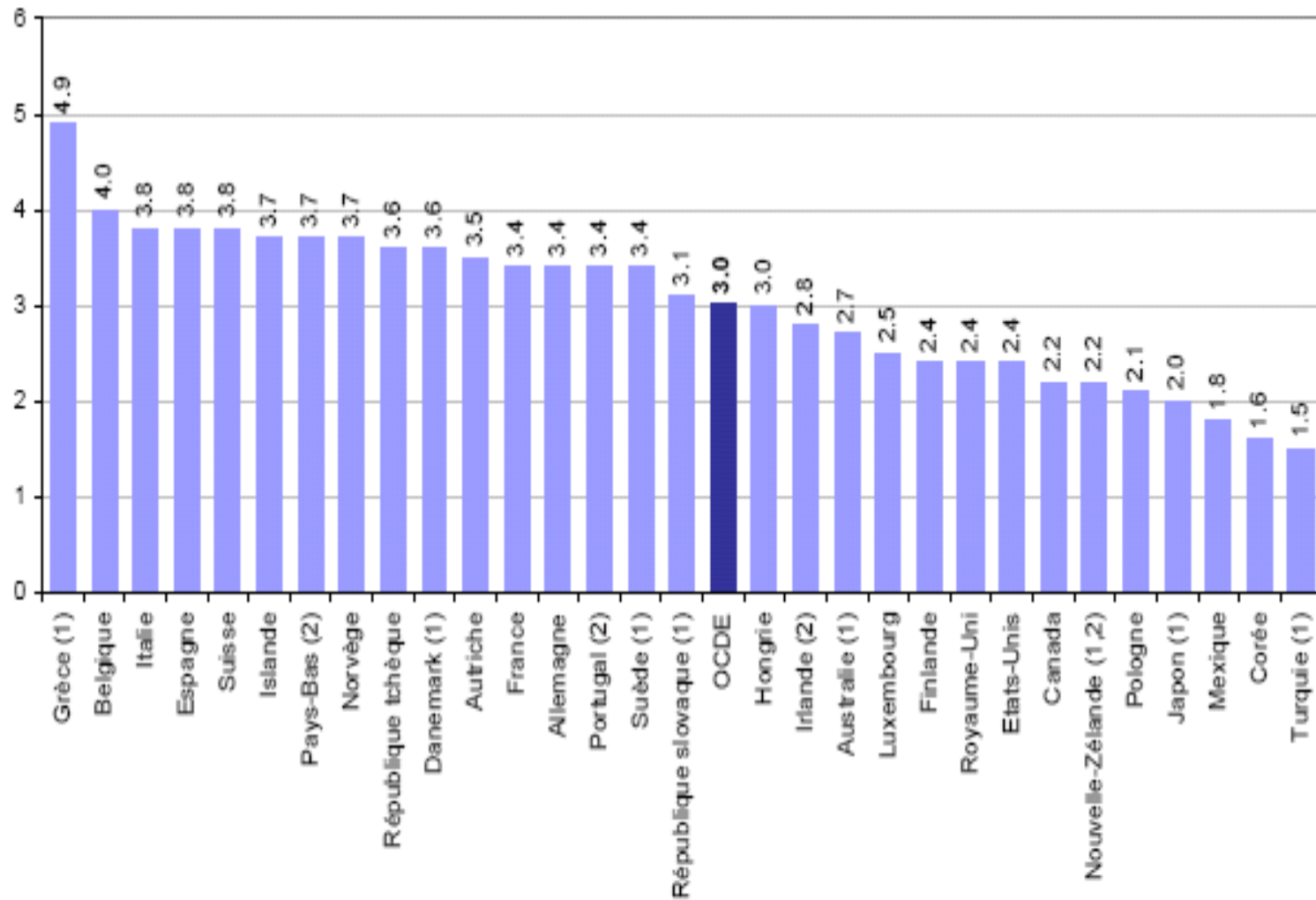
With how many doctors, nurses?

In hospital care/primary care?

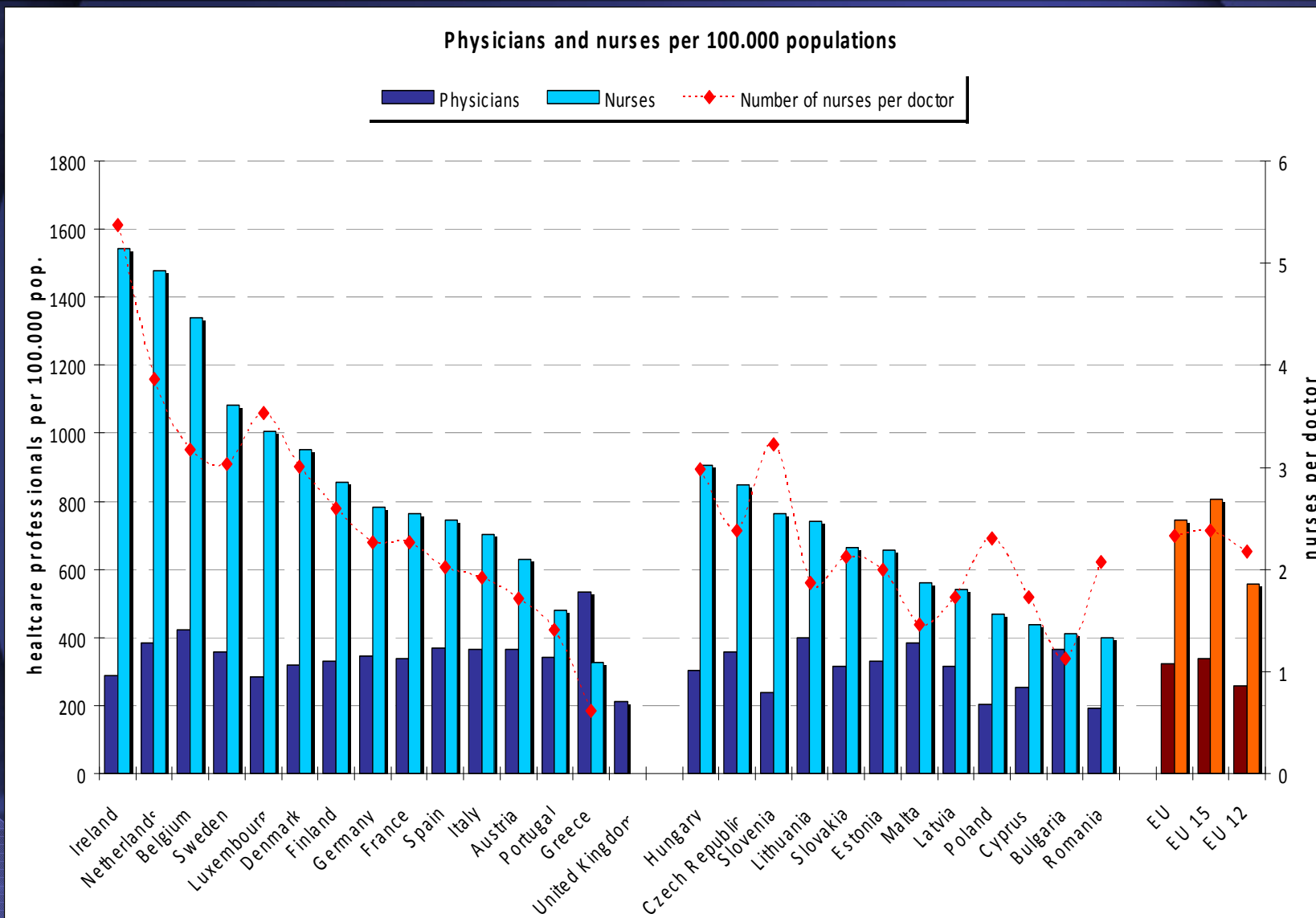
From 2 Doctors in activity to 5

Graphique 1. Médecins en activité pour 1000 habitants, pays de l'OCDE, 2005

Pour 1 000 habitants

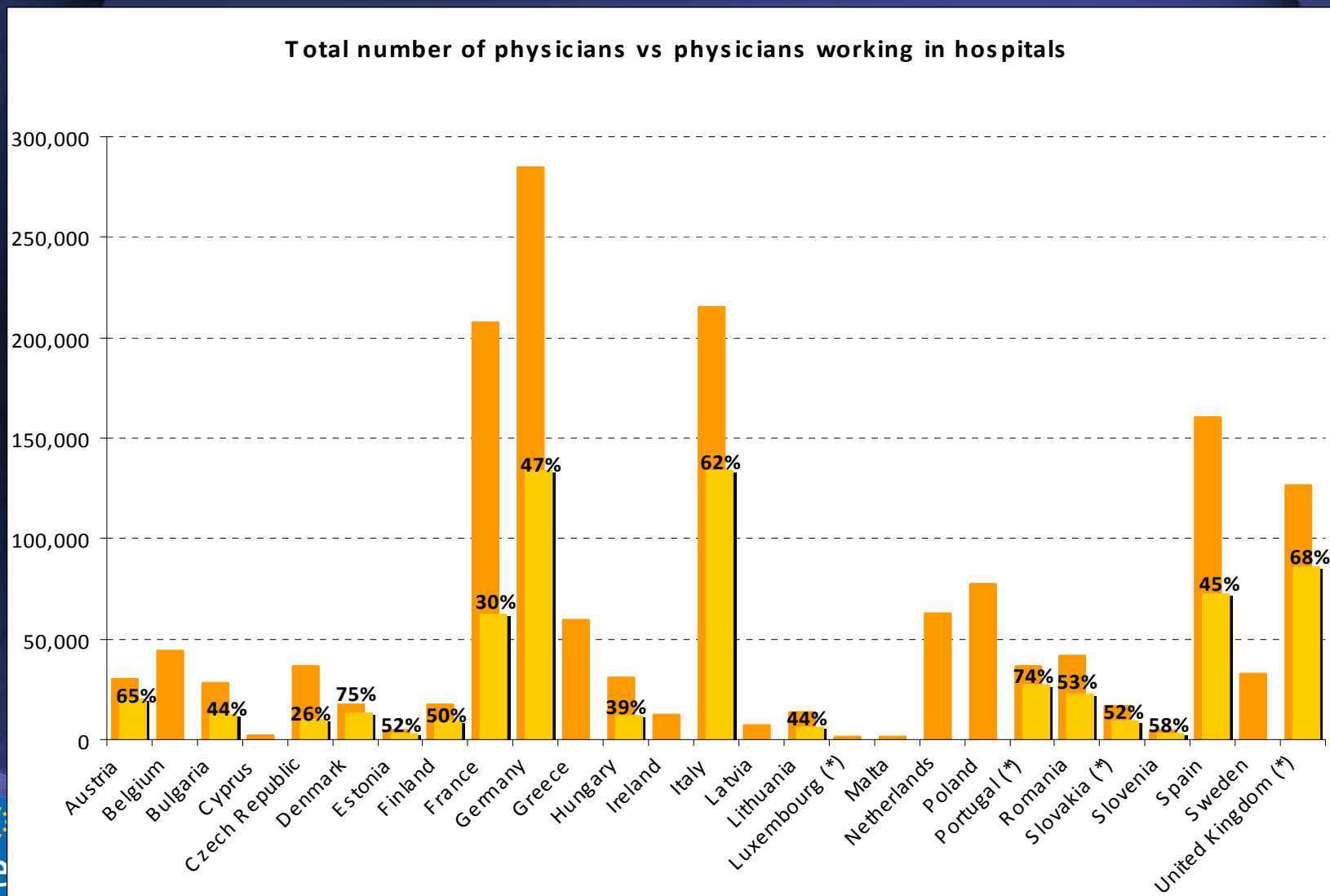


From 1 doctor for 5 nurses to 1 for 1



From 1 to 3 doctors working in hospitals

Total number of physicians vs physicians working in hospitals



Visible on processes?

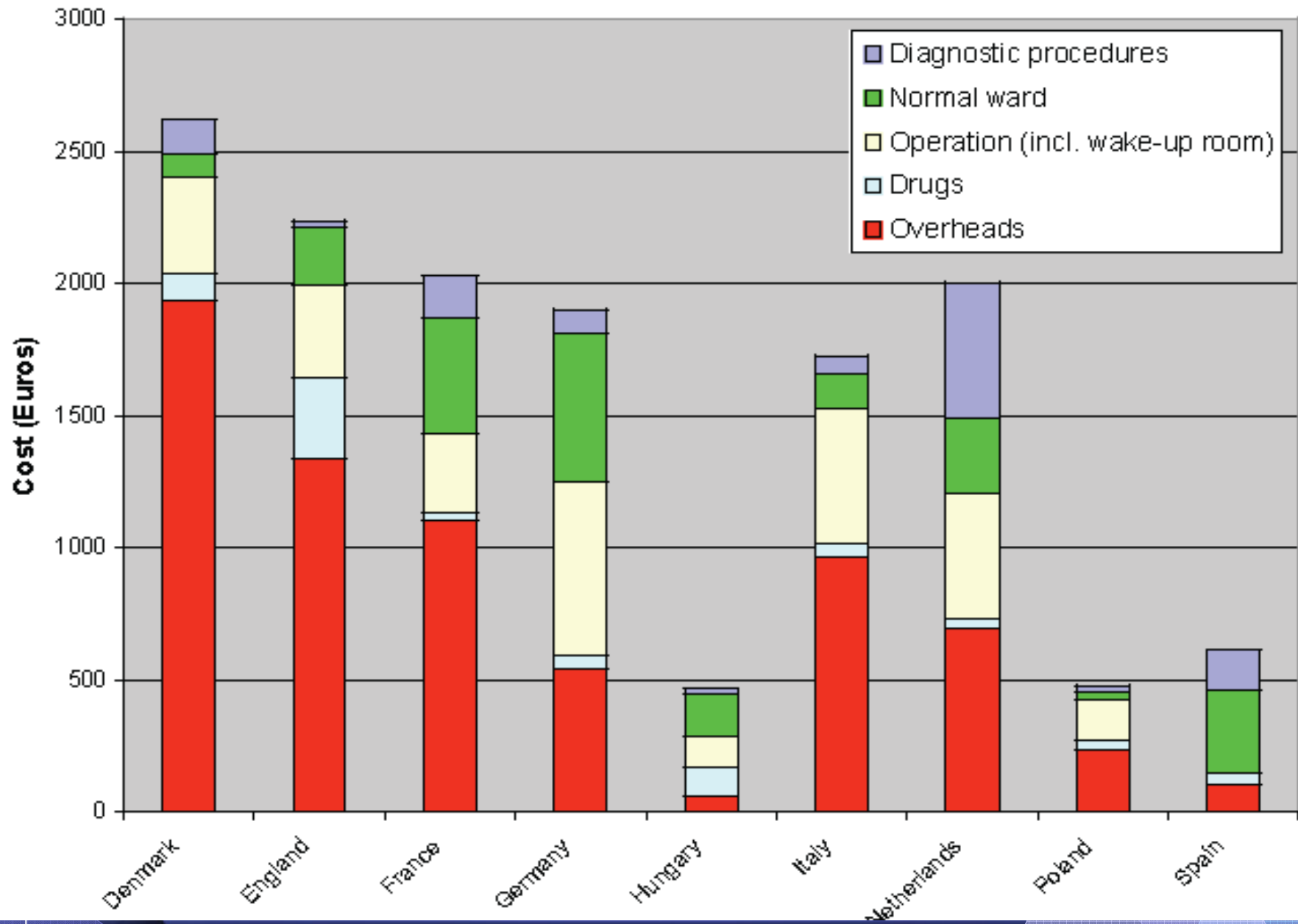
On total cost by procedure?

On cost structure?

How do we provide healthcare?

With how many doctors, nurses?

In hospital care/primary care?



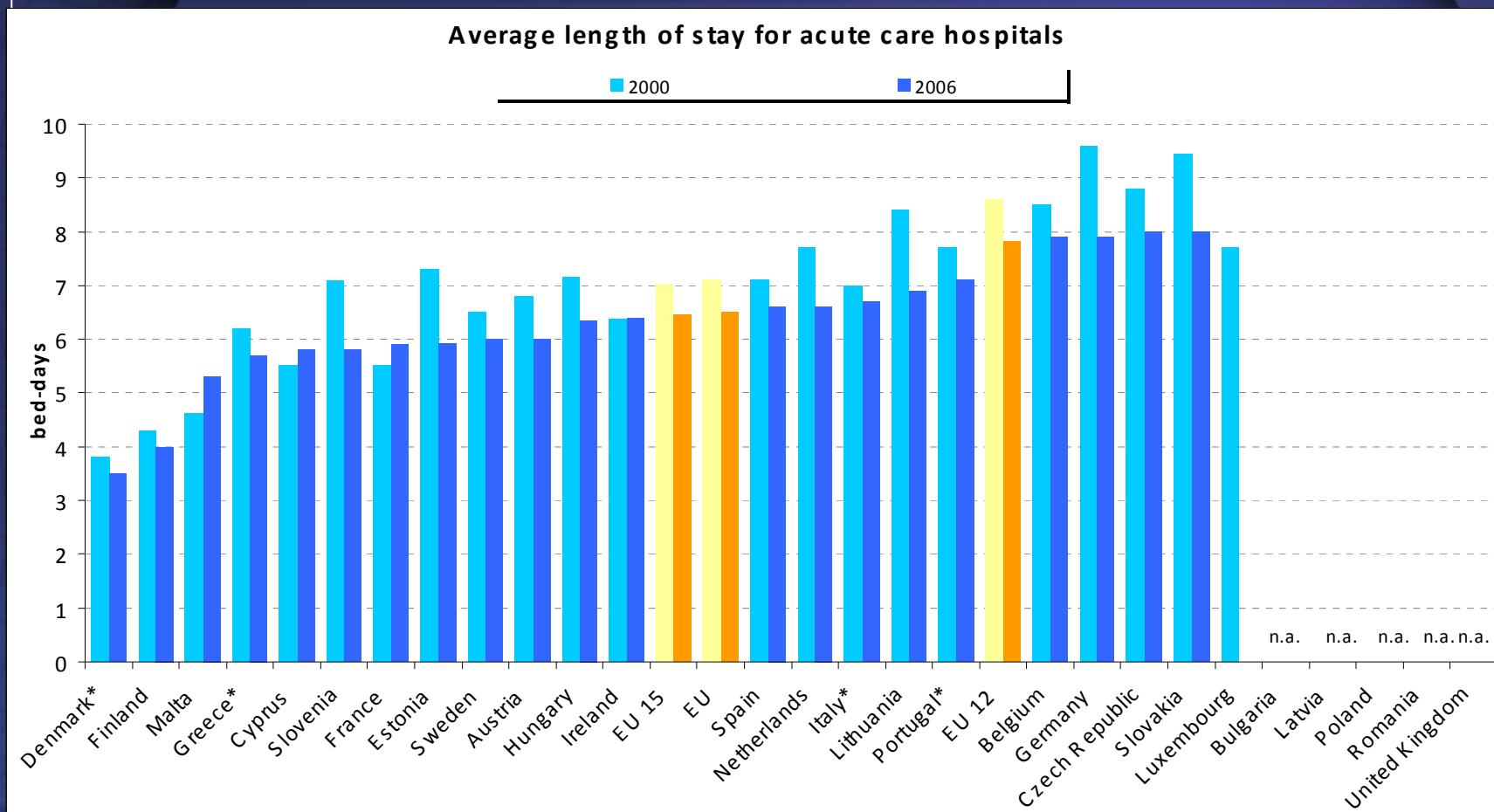
Visible on outputs?

Classical outputs:

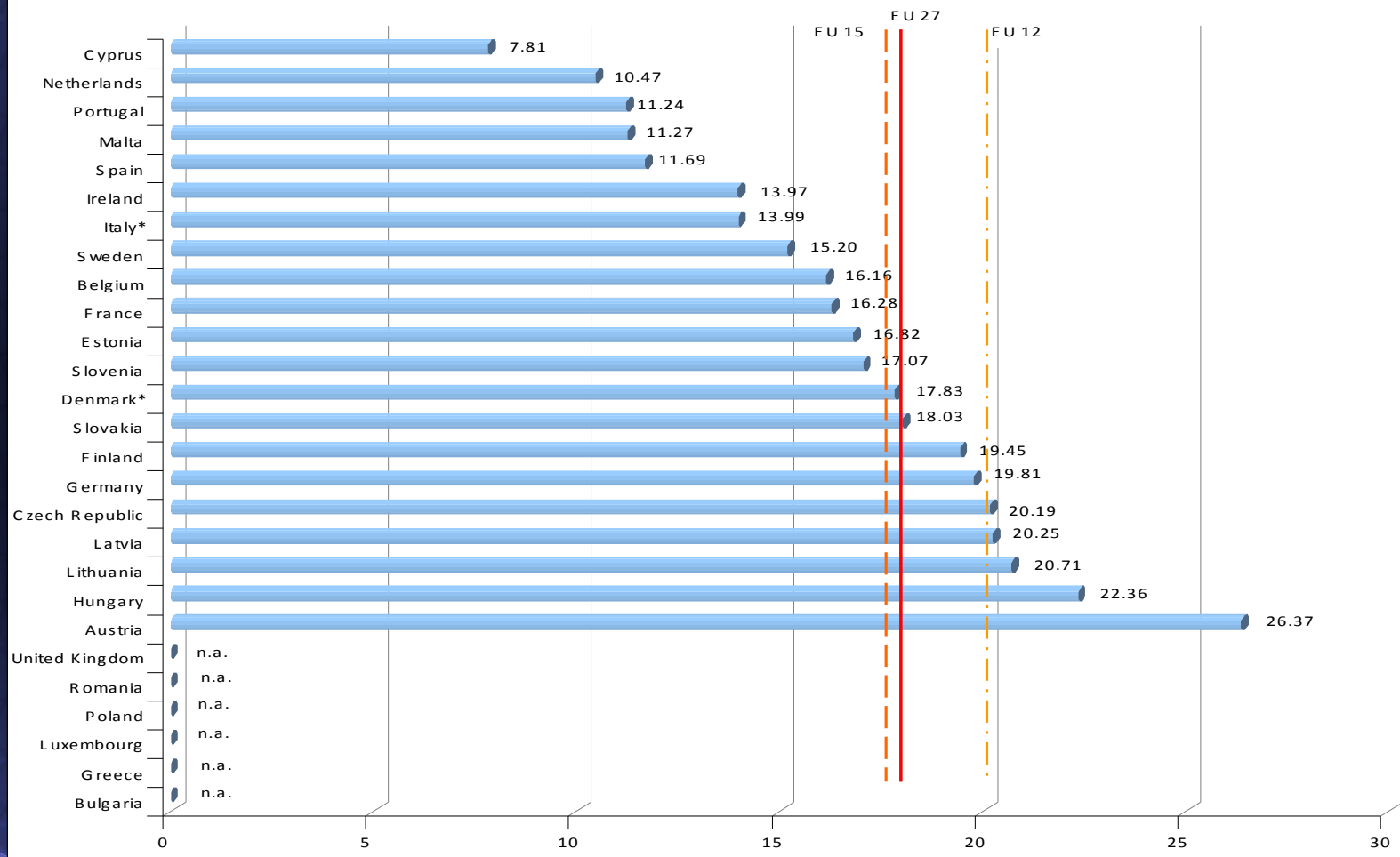
ALOS in hospitals?

Number of admissions?

Example of output: average length of stay in acute care



Acute care hospital admissions per 100 population



Visible on outcomes?

What is coming, what is already here ?

The buzz words.

- Chronic disease more important than acute
- Value for money
- Performance: how to measure the contribution of hospitals and healthcare services to health
- Safety concerns
- Hospitals as “modern cathedrals”, designed to impress rather than to function
- Traditional forms of financing hospitals (line-item budgets, global budgets, per diems) are replaced by DRG-type payments
- Changing public-private mix: public more equitable, private more efficient?

More generally:

- Health is a nation-wide issue – housing, environment, transport, food safety, etc.
- Focus on health status improvement instead of ill health and health care delivery – paradigm shift;
- Increased focus on personal and community responsibility;
- Evidence-based decision making.

Consequences : outdated offer

- Silos based on clinical disciplines
- Patients increasingly have multiple problems
- Designed for episodic treatment
- But many patients have chronic conditions
- Designed for batch & queue operation
- When complex modern medicine requires flow
- Often only fully work 5 days <40 hours a week
- Pace now requires 24/7 or at least 18/7 working

Consequences: rational use of resources

- Using primary care and referral systems more
- Greater use of outpatient care and ambulatory/daycase surgery
- Implementing new contracts and payments for providers
- Improving care coordination between types of health care: e.g. primary and secondary
- Controlling pharmaceutical expenditure

PHC
Health
Promotion
Prevention



PHC
Health
Promotion
Prevention
Early detection
Health
Maintenance



Coming next?

- Surgery
 - To free-standing surgical centres?
- Medicine
 - To polyclinics?
- Obstetrics
 - To free-standing midwife-led birthing centres?
- Imaging
 - CT scanners in trailers and ultrasound in offices?
- Laboratories
 - In desktop kits?

What are the implications for the hospital and healthcare services of the future?

- Flexibility
 - Expect the unexpected
 - Plan to be wrong
- Sustainability
 - Take a whole life perspective
- Seeing the big picture
 - Clinical networks
 - Transmural care
- Investing in staff
 - Buildings allow things to happen, people make them happen

Conclusions: all about changing

- The diseases needing to be treated
- The delivery of health care
- The settings for health care are changing
- The training of health professionals
- The generation of medical knowledge