



hope

European Hospital and
Healthcare Federation

Evidence - informed healthcare management

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HOPE AGORA 2019

Agenda

- some definitions
- problems
- main challenges
- future
- and final remark

Definition

Evidence-informed healthcare management is the systematic application of the best available evidence to management decision-making, aimed at improving the performance of health service organizations.

We live in evidence-based era:

„What matters is what works!“

Evidence based medicine (EBM)

The use of scientific data to confirm that proposed diagnostic or therapeutic procedures are appropriate in light of their high probability of producing the best and most favorable outcome.

EBM = EBM + common knowledge and experience

Evidence categories

- scientific evidence - the researchers' view
- colloquial evidence - the broader view outside the scientific community

The commonest forms of evidence used in EIDM of Victorian health service managers (Howard et al.'s study):

- internally developed data
- best practice reports
- information from within organization and
- own experience

Implementation of evidence based knowledge

- will lead to standardized and cost effective approach for most diseases
- data on outcomes should increasingly be used to develop standard protocols for treating many diseases, resulting in a movement toward quality and safety!
- **guidelines (process) should always bring us to the best outcome (result)**

How come we came so far...

- **8 - 12% of all patients admitted to hospitals exposed to adverse events***
- **20 - 25% of care is not needed or is potentially harmful**
- **20% of health spending is wasteful****

* European Commission – Public Health – Patient safety

**Health at a Glance: Europe 2018 STATE OF HEALTH IN THE EU CYCLE

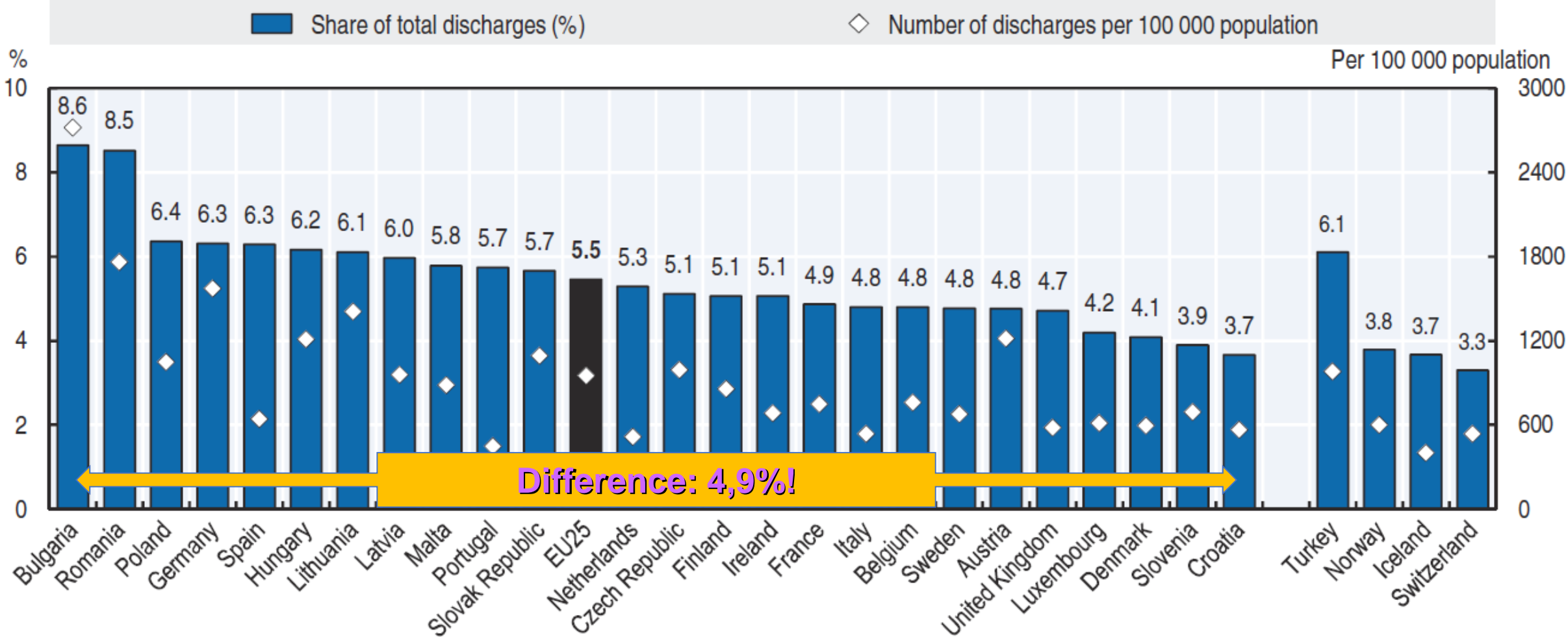
How come we came so far...

- 8 - 12% of all patients admitted to hospitals exposed to adverse events*
 - **indirect expenditure app 1,5% health care expenditures**
 - **up to 44% are preventable**
- 20 - 25% of care is not needed or is potentially harmful
 - **potentially avoidable hospital admissions for some chronic conditions consume over 37 million bed days each year****
- 20% of health spending is wasteful**
 - **could be reduced without undermining health system performance**

* European Commission – Public Health – Patient safety

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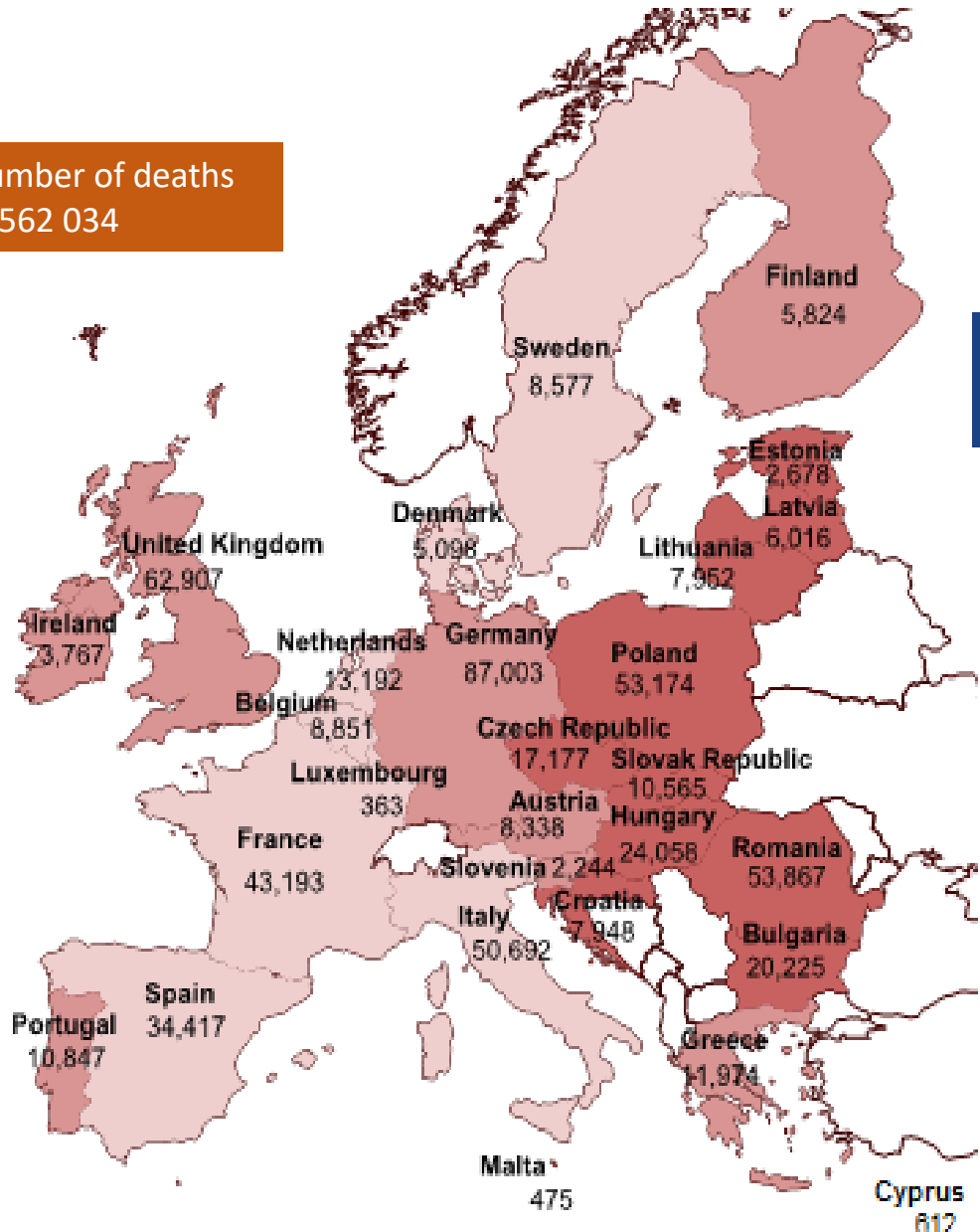
Share of potentially avoidable hospital admissions due to five chronic conditions, EU countries, 2015



Source: OECD Health Statistics, <https://doi.org/10.1787/health-data-en> and Eurostat Database.

Amenable mortality

Total number of deaths in EU = 562 034

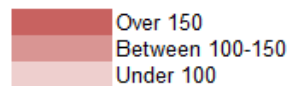


More than half a million deaths can be avoided with more timely and effective health care in the EU



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Colour coding (based on age-standardised rates per 100 000 population)



Amenable mortality is defined as premature deaths that could have been avoided through timely and effective health care.

Source: Eurostat Database (data refer to 2014).

Probably...

... never as much as today health care systems have been (should be) interested and involved with the potential benefits deriving from evidence, collaboration, participation, innovation, knowledge, integration and data management to increase quality and safety.

Where is the problem - what matters?



- Fundamental goal of health care is to improve value for patients

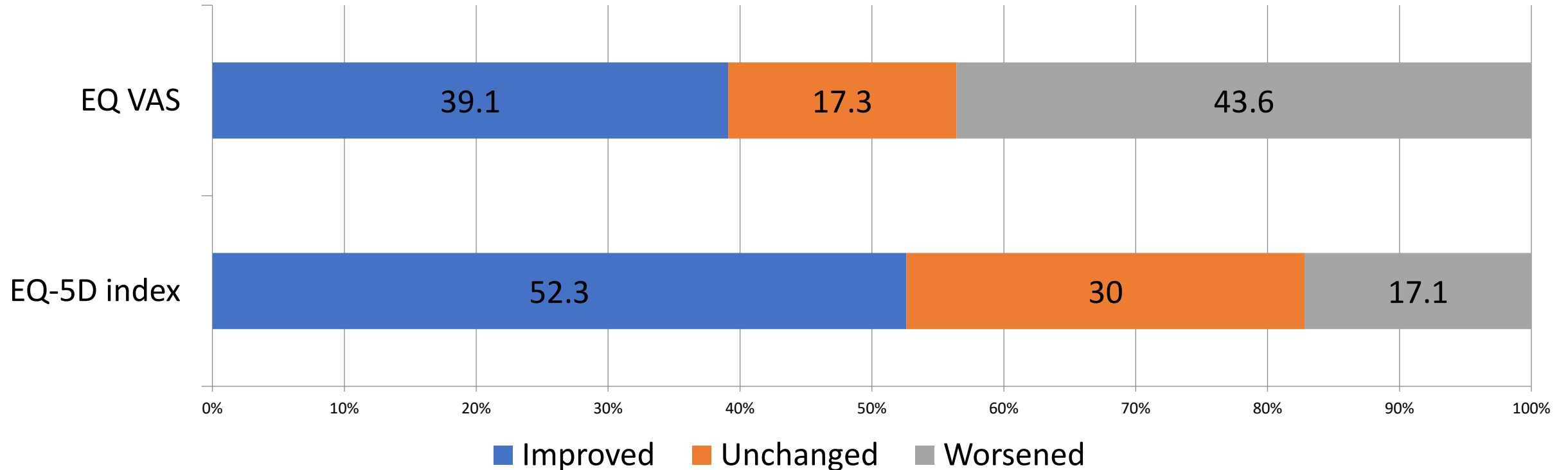
$$\text{Value} = \frac{\text{Health outcomes that matter to patients}}{\text{Costs of delivering these outcomes}}$$

- Health outcomes are condition-specific and multidimensional: for any medical condition, no single outcome captures the results of outcomes of care.

... in belief that omitting deviations will guarantee optimum outcomes ...
However, do we measure appropriate outcomes?

Select treatment with PROM

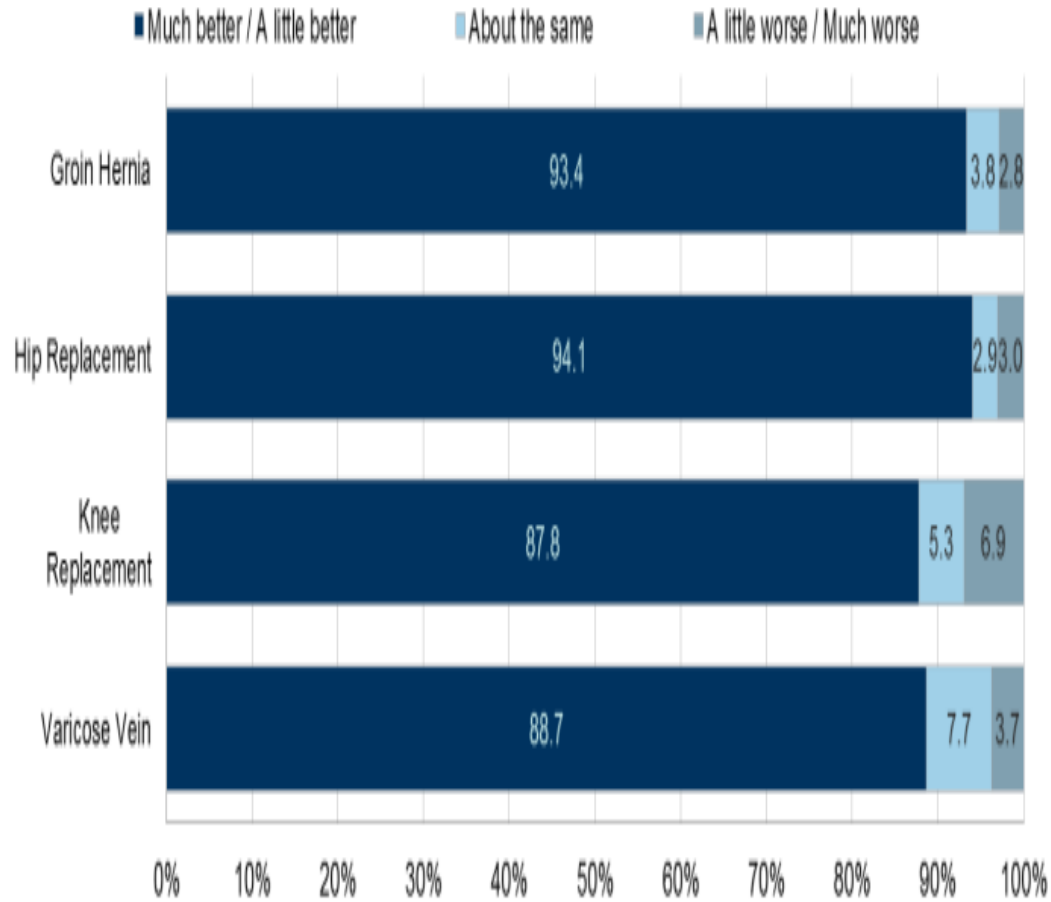
Example: groin hernia (2017)



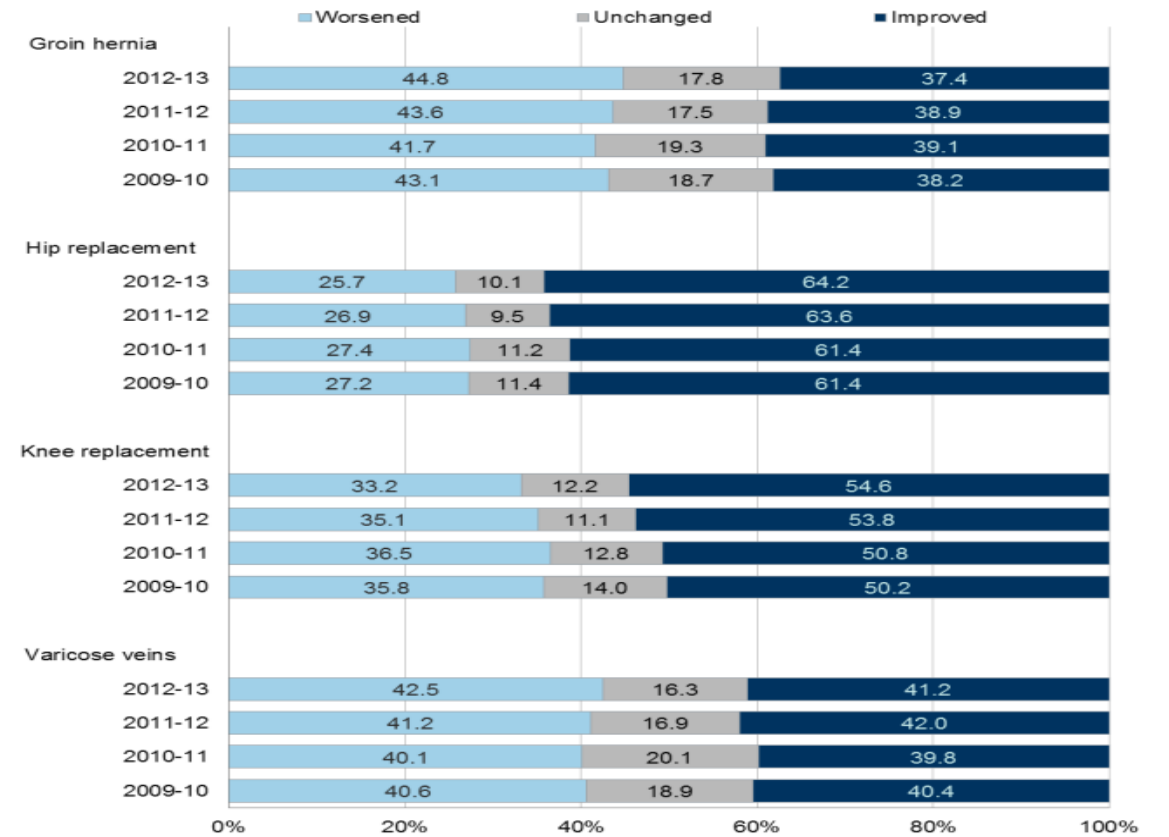
„A surgeon I visited showed me some of the PROMs data on hernias. I decided not to have the operation, but to wait and monitor how I feel, how much pain I am in and so on. I thought this is great surgeon using these national data with me and not operating. Unfortunately, I don't think most surgeons would do that; they just want to operate.“

Surgery success ...

defined by Surgeons:



Defined by patients



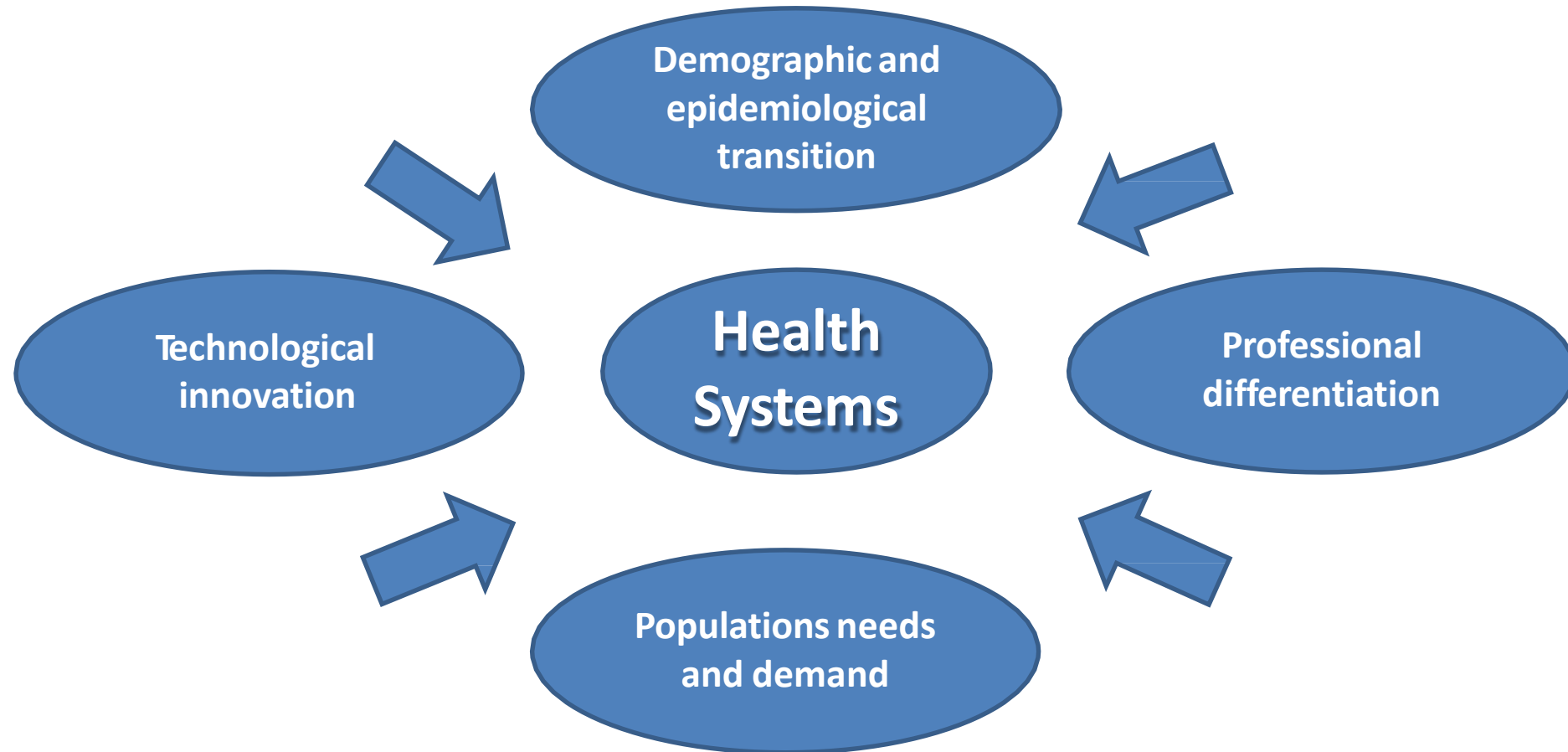
The times they are a changing

- Changes in
 - **information technologies** (electronic medical record, e-health capacities, tablet-based patient management, centralized Big Data)
 - **citizen expectations** (choice of provider, equal and rapid access, privacy)
 - **patient expectations** (participation in decision-making, second opinions, international quality standards, patient rights)
 - **payment systems** (public and private): case-based payment, penalties for poor outcomes (re-admission, re-treatment), volume based contracting
 - **provider configuration** (consolidating hospitals and services, integrating health and social care)

Transforming health care

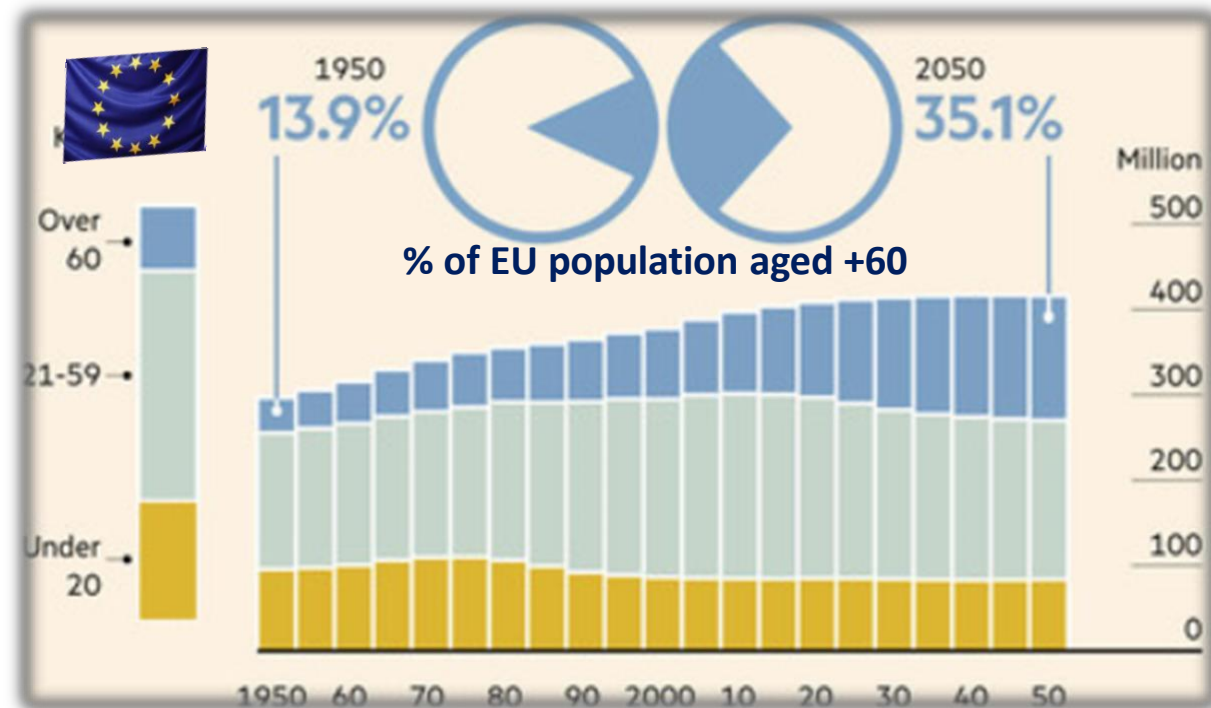
20 th CENTURY HEALTHCARE	21 ST CENTURY HEALTHCARE
Doctor centred	Patient centred
Patient as passive complier	Patient as co-producer
Hospital	System
Bureaucracy	Network
Driven by finance	Driven by knowledge
High carbon	Low carbon
Focussed on effectiveness	Focussed on value and waste
Challenges met by growth	Challenges met by transformation

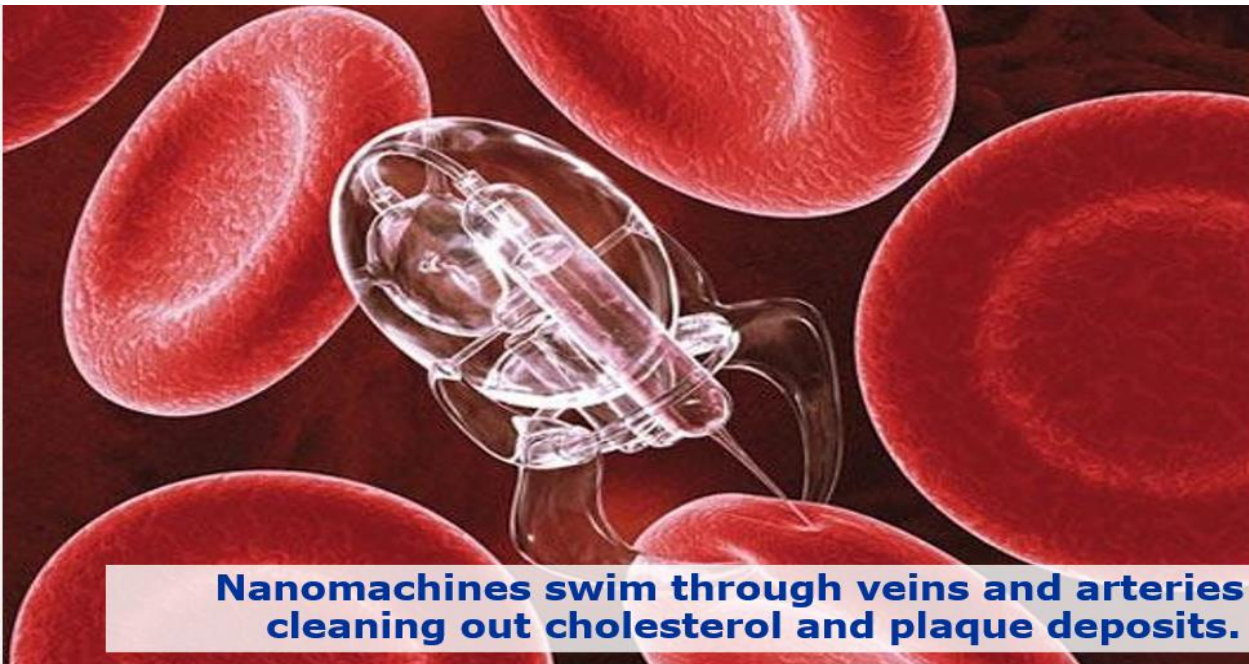
Health care system challenges



Demographic and epidemiological transition

- It has been estimated that the commonest chronic conditions are costing the EU countries more than 1 trillion Euros per year, which is expected to increase to 6 trillion Euros by the middle of the century.
- In UK the cost of chronic conditions such as stroke, heart diseases, diabetes, cancer and dementia pile up to over 50% of total healthcare expenditure.





Nanomachines swim through veins and arteries cleaning out cholesterol and plaque deposits.



Nanotechnology can explore the process of thoughts and perception at the molecular level.

Contrary to general opinion the main reason for fast expenditures growth in health care (France, 1992-2000) is NOT ageing:

- 23% contribute new health care technologies and methods
- 5% demographic changes
- 30% other changes
- while epidemiologic changes decrease the costs (-8%)
- half of the growth was not explained. (Dormont et al, 2006)



Neural implants can counteract Parkinson's disease and tremors from multiple sclerosis.



Shirts with sensors can monitor heartbeat and other vital signs directly to a doctor.

Potential approach: relay on evidence-based decision making



Figure. Domains that influence evidence-based decision making. Source: Satterfield JM et al (2).

Barriers to the practice of EIDM

- **Broader level**

- Insufficient policy support and political will
- Inadequate financial resources to support the practice
- Lack of accessibility and presentation of management research evidence

- **Organization**

- Lack of senior management encouragement of the practice
- Resistance to change among staff and management
- Insufficient time available for managers to adopt evidence based approach

- **Individual manager**

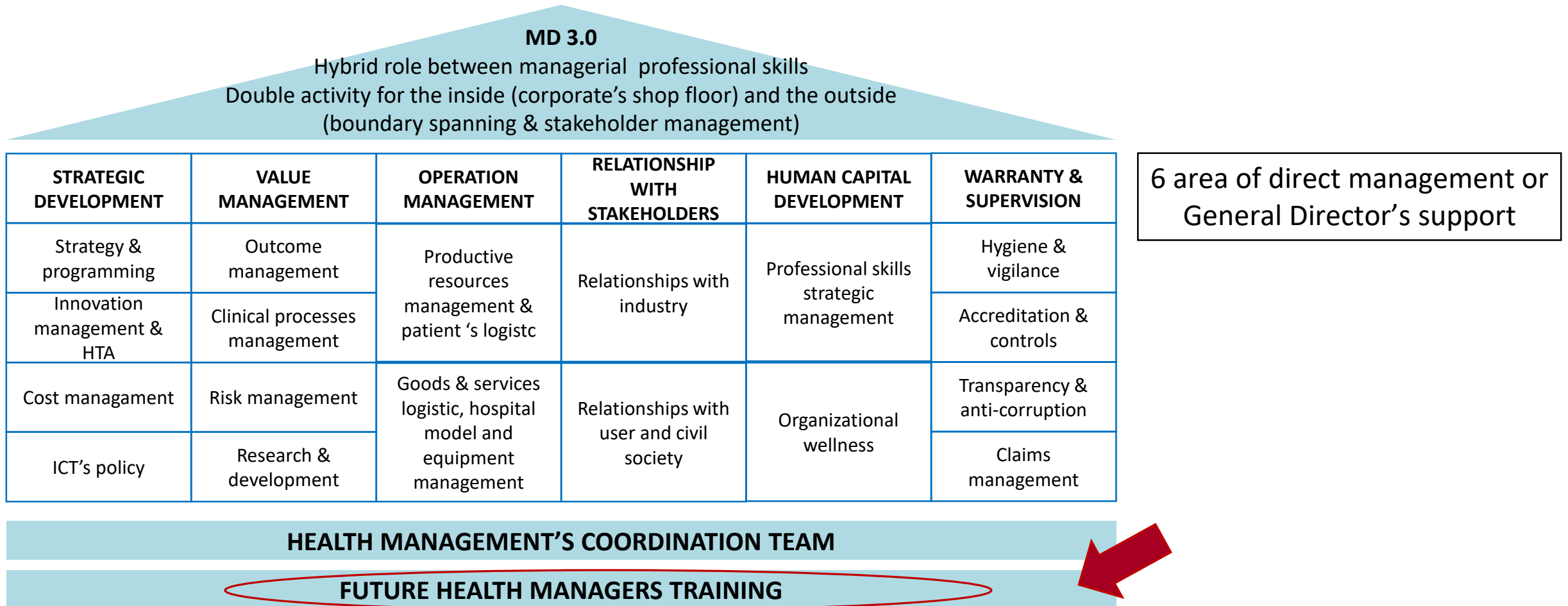
- Lack of the perceived relevance of management research
- Inadequate skills in searching for and appraising evidence

Organizational factors that encourage the uptake of EIDM

- role of health service boards
- defining and promoting the success of previous EIDM
- strong leadership
- promotion of new skills and capabilities
- provision of incentives
- focusing on quality
- up-to-date information and information systems
- clinical governance as a promotor of standards of clinical practice



The new medical director profile = super health care manager



So...

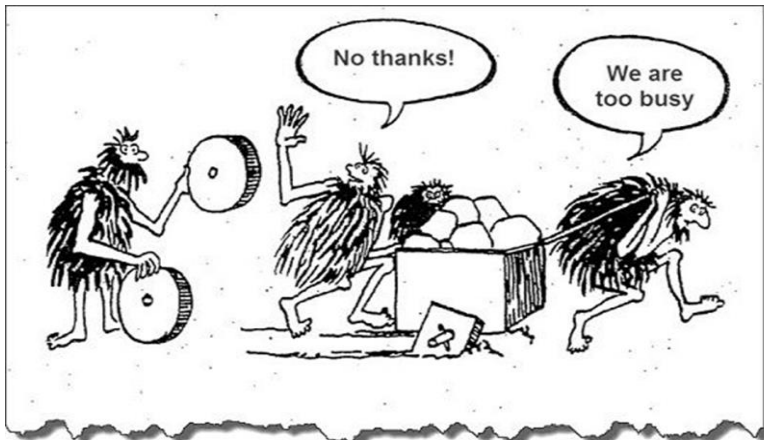
Evidence-informed decision-making is (can be) important in improving the quality of management decisions, and hence, improving effectiveness, efficiency, quality and safety of service delivery.



**“The search for truth takes you where the evidence leads you,
even if, at first, you don't want to go there.”**

Bart D. Ehrman

**I would like to thank you
for your attention and questions?**



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