

Health Services Research related to benchmarking and performance indicators

- Klazinga, Fischer, Plochg. April 8th 2010

Dept Social Medicine



Type of research questions and methods

Research to develop performance measures (literature reviews, focus groups, concept mapping, nominal group techniques, definitions and conceptual frameworks).

Research on the validity of performance measures (content, construct, criterium validity)

Research on the reliability and relevance of performance measures

Research on the use of performance measures (benchmarking)

Dept Social Medicine



Performance indicators and benchmarking related to mortality data

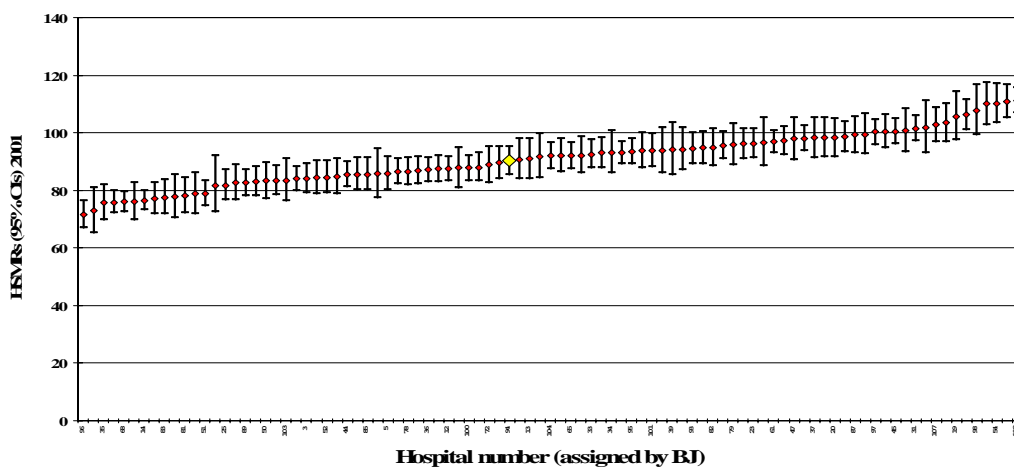
- avoidable mortality (health system level)
- standardized mortality rates (hospital level)
- limitations of death statistics

Dept Social Medicine



Dutch hospital standardised mortality ratios 2001-3 (HSMRs) vs hospital

(standardised for age, sex, urgency/readmission, LOS within 50 CCS groups leading to 80% all deaths, excluding small hospitals and those with poor data recording, using year 2000 standard)

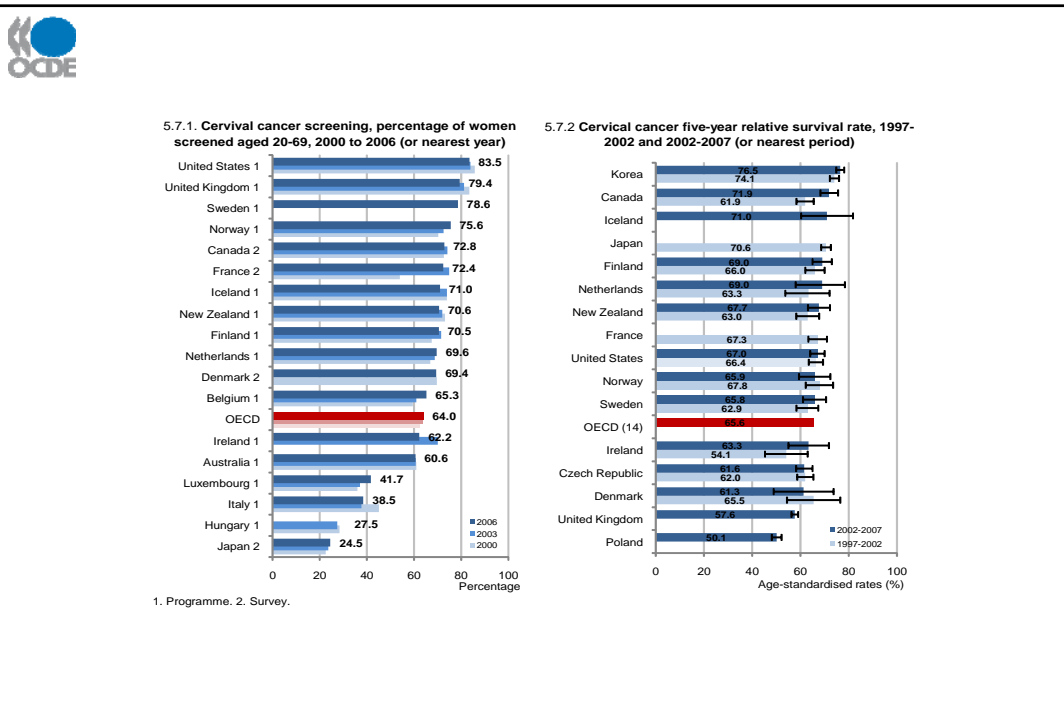


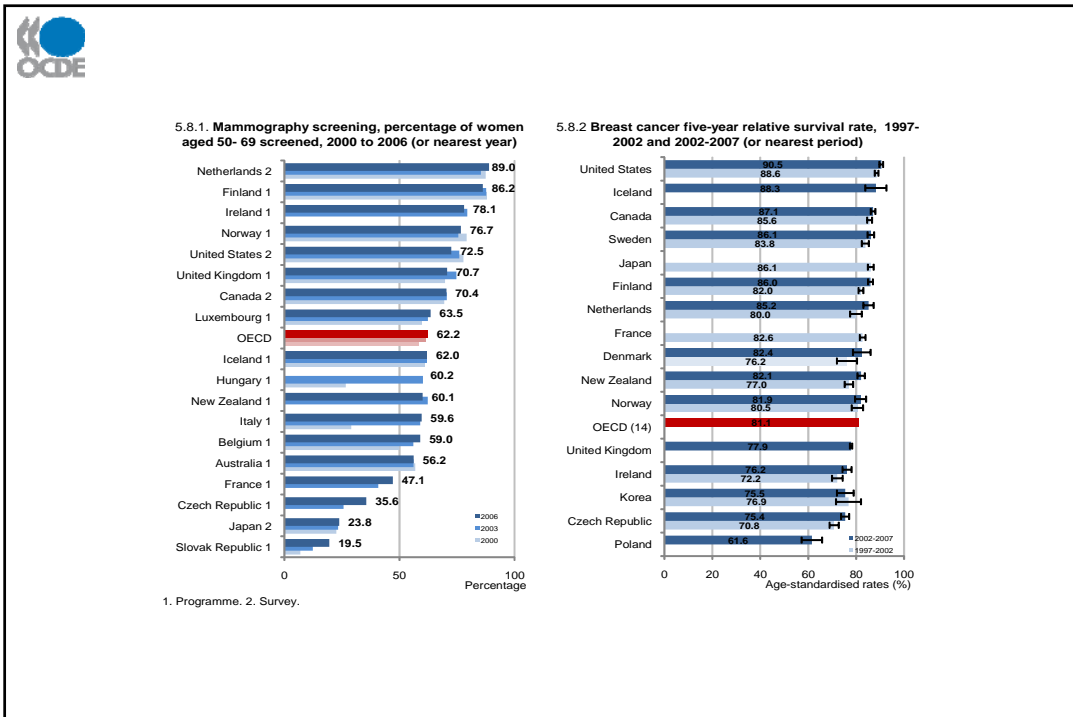
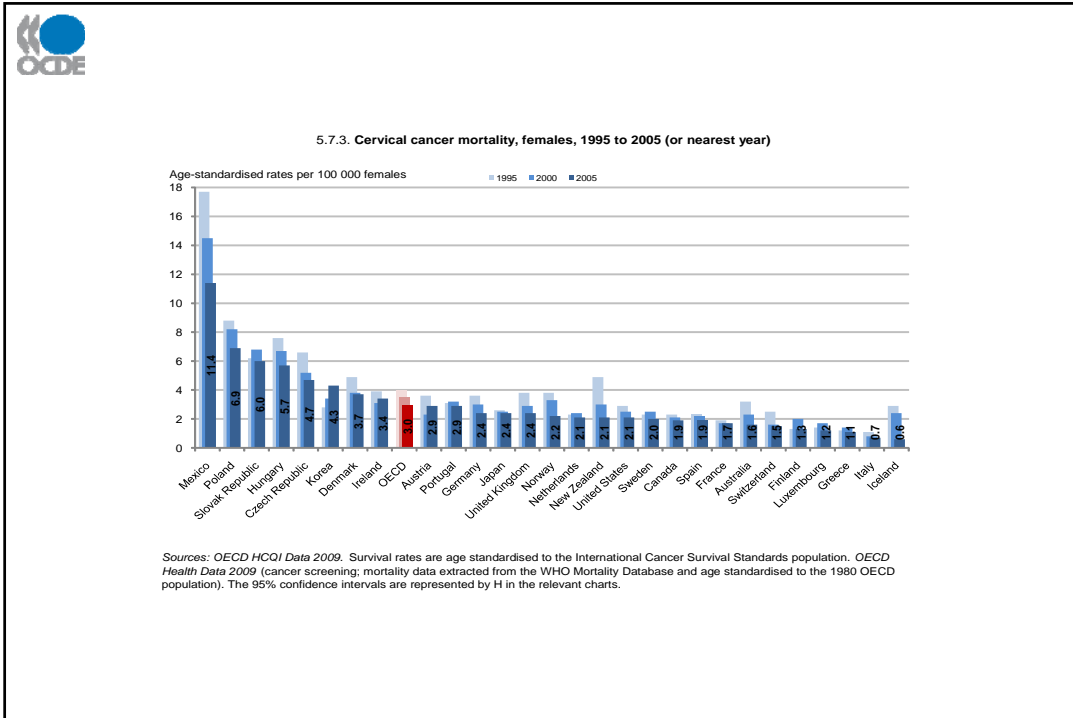
Performance indicators and benchmarking related to cancer care

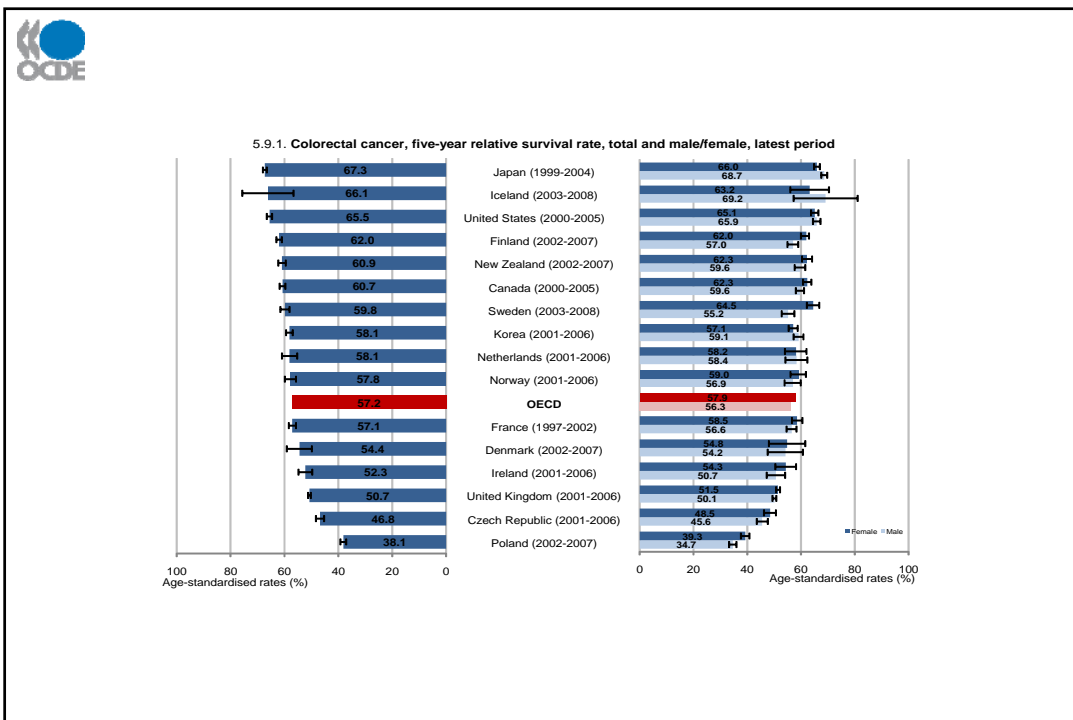
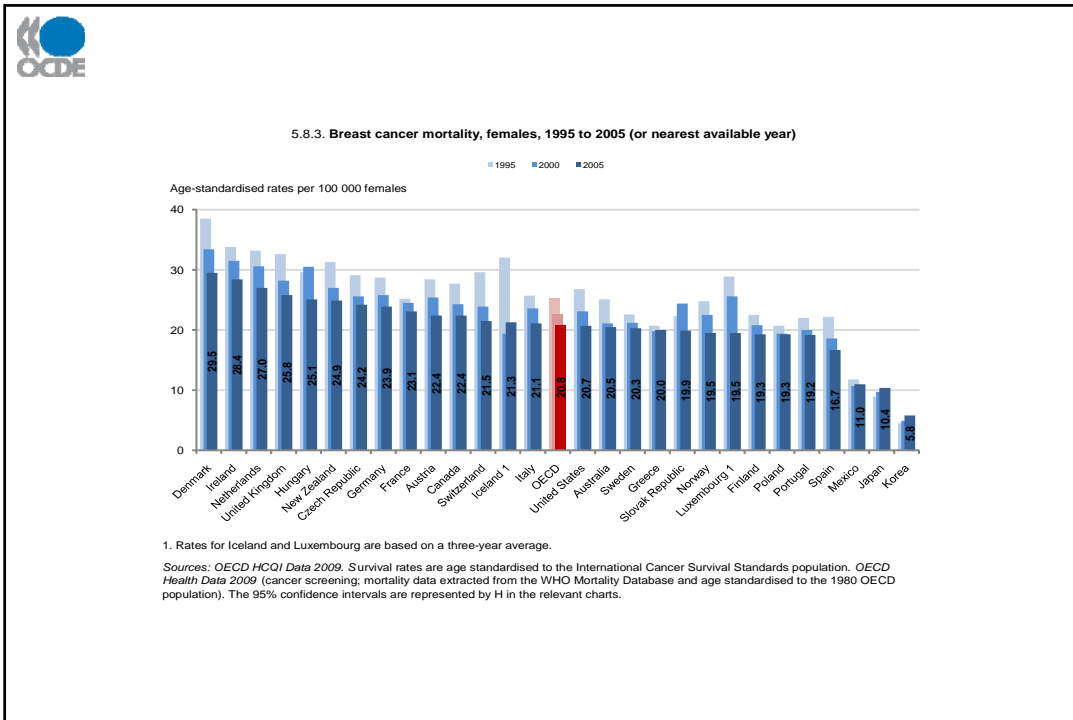
- CONCORD study
- Eurocare
- Limitations of cancer registries and limited possibilities for linking with other (administrative) data-bases

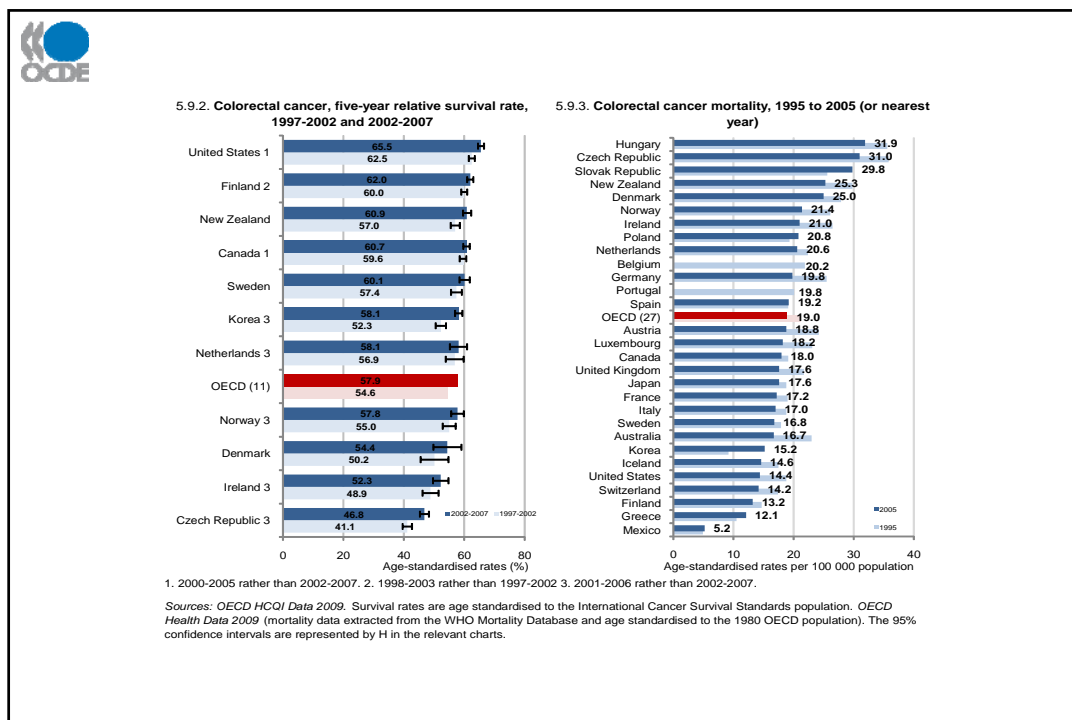


Dept Social Medicine









Performance indicators and benchmarking on care delivered in hospitals

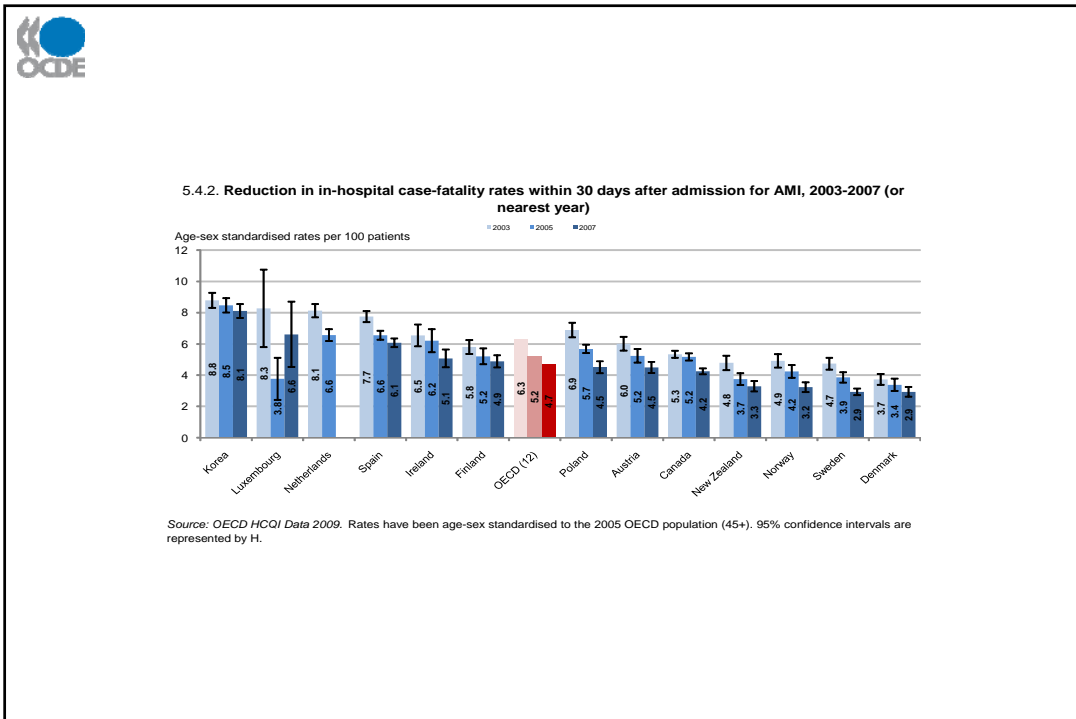
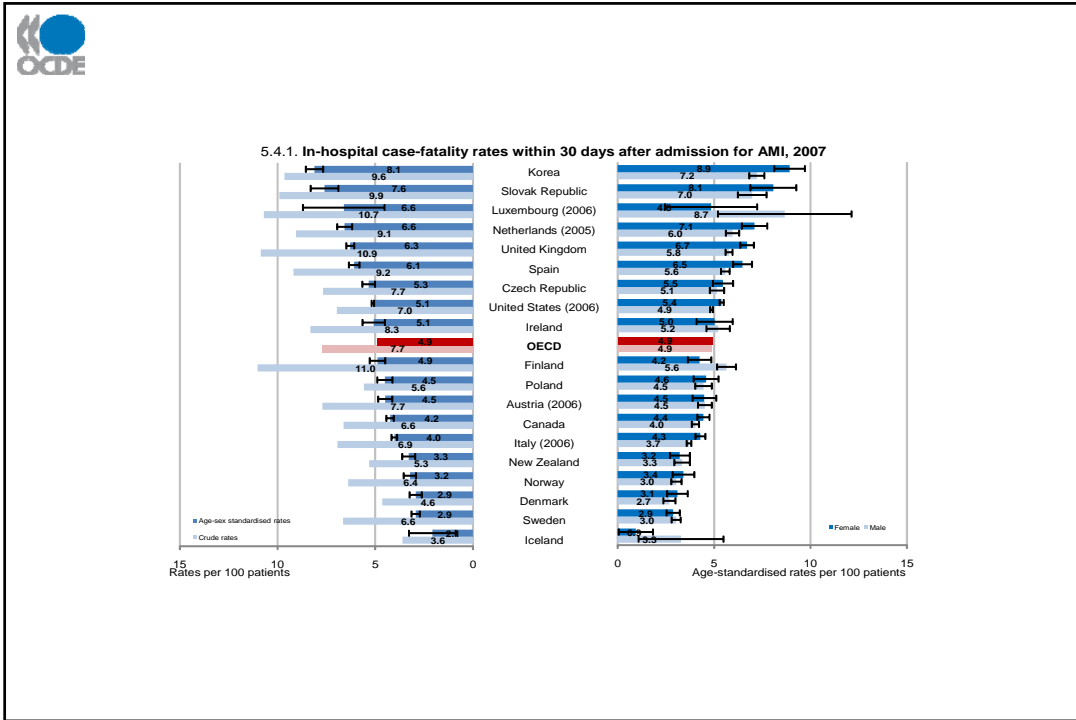
PATH, OECD, many national projects

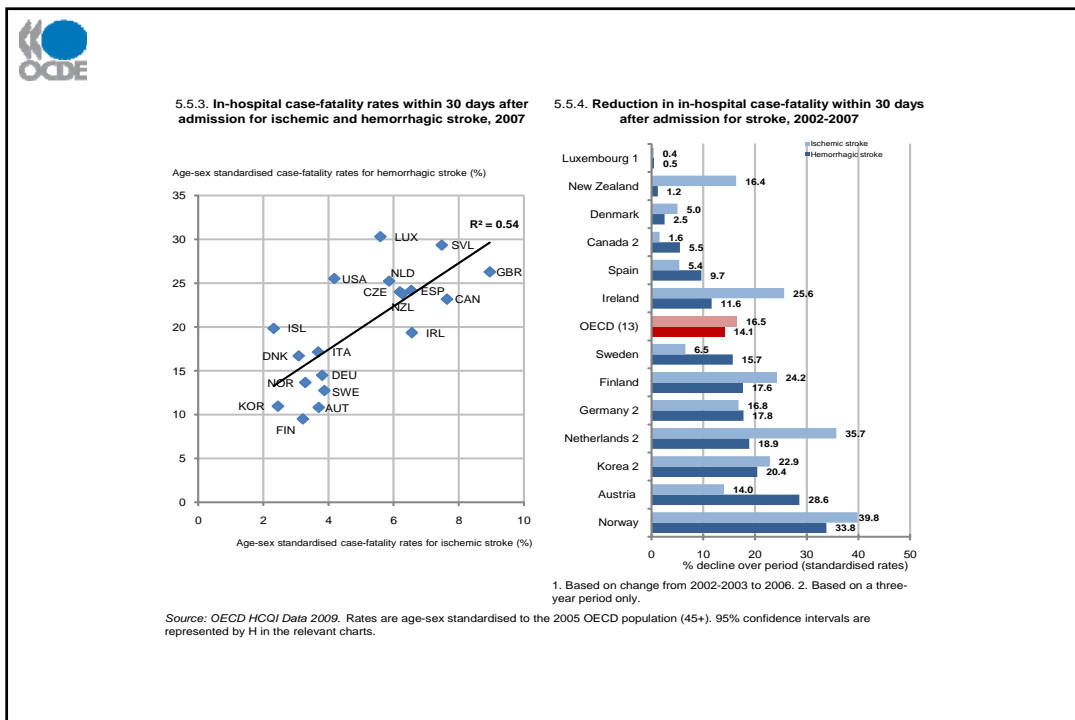
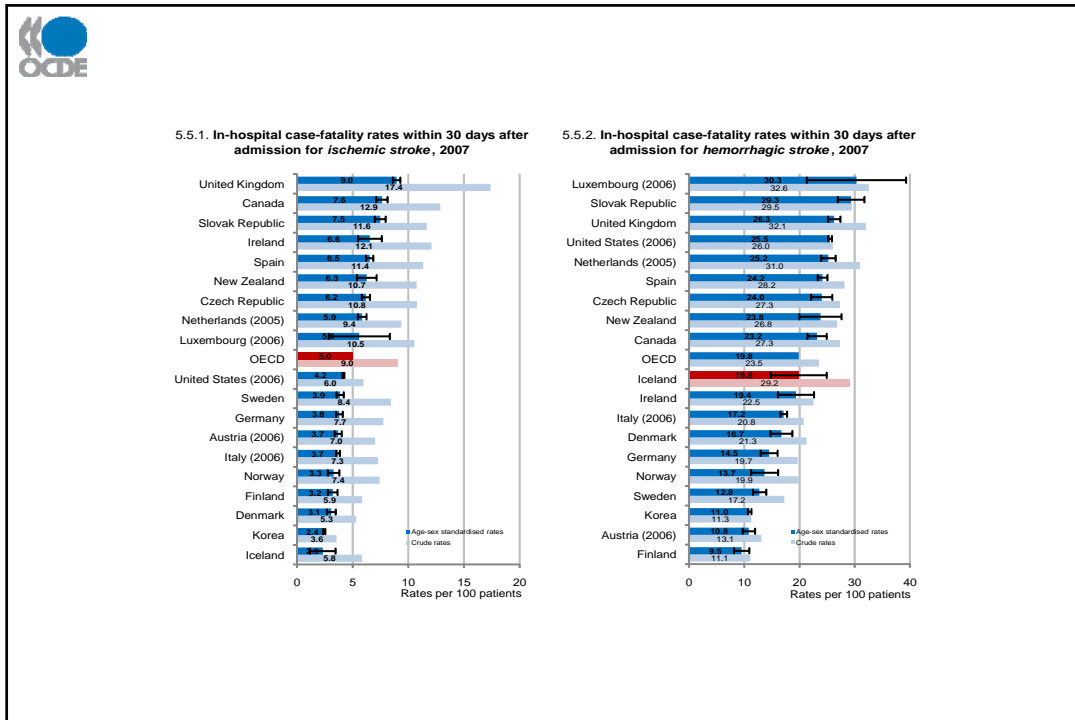
Limitations (administrative) data-bases

- Quality of coding practices
- Lack of (internationally) standardized procedure codes
- Lack of coding of secondary diagnoses
- Lack of present at admission coding
- Lack of linking via UPI's
- Limitations Electronic Health Records



Dept Social Medicine





Patient Safety Indicators

- Indicators based on administrative databases
- Adverse event reporting
- Safety culture

Dept Social Medicine



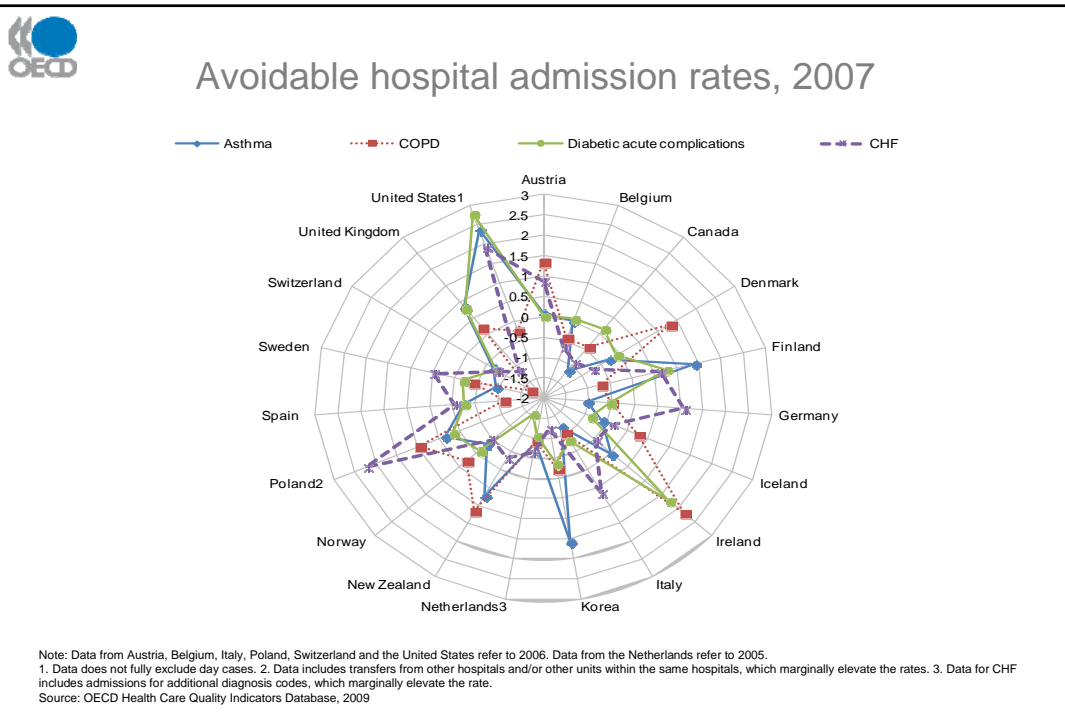
Indicators

- Foreign body left in during procedure (PSI 5)
- Catheter related bloodstream infections (PSI 7)
- Postoperative pulmonary embolism or deep vein thrombosis (PSI 12)
- Postoperative sepsis (PSI 13)
- Accidental puncture and laceration (PSI 15)
- Obstetric trauma -- vaginal delivery with instrument (PSI 18)
- Obstetric trauma -- vaginal delivery without instrument (PSI 19)

Performance indicators in primary care

- Avoidable hospital admissions
- Lack of comprehensive administrative data-sets

Dept Social Medicine



Patient experiences

- Service based surveys (CAHPS, Picker, CKZ)
- Population based surveys (Eurobarometer, WHO, CWF)
- Lack of standardization
- Lack of research on validation
- Lack of research on use

Dept Social Medicine



Research on concepts

- Health System Performance Frameworks
- Health Services Performance Framework
- Link with governance and management theory
- Ownership by users
- Link between Quality and Costs

Dept Social Medicine



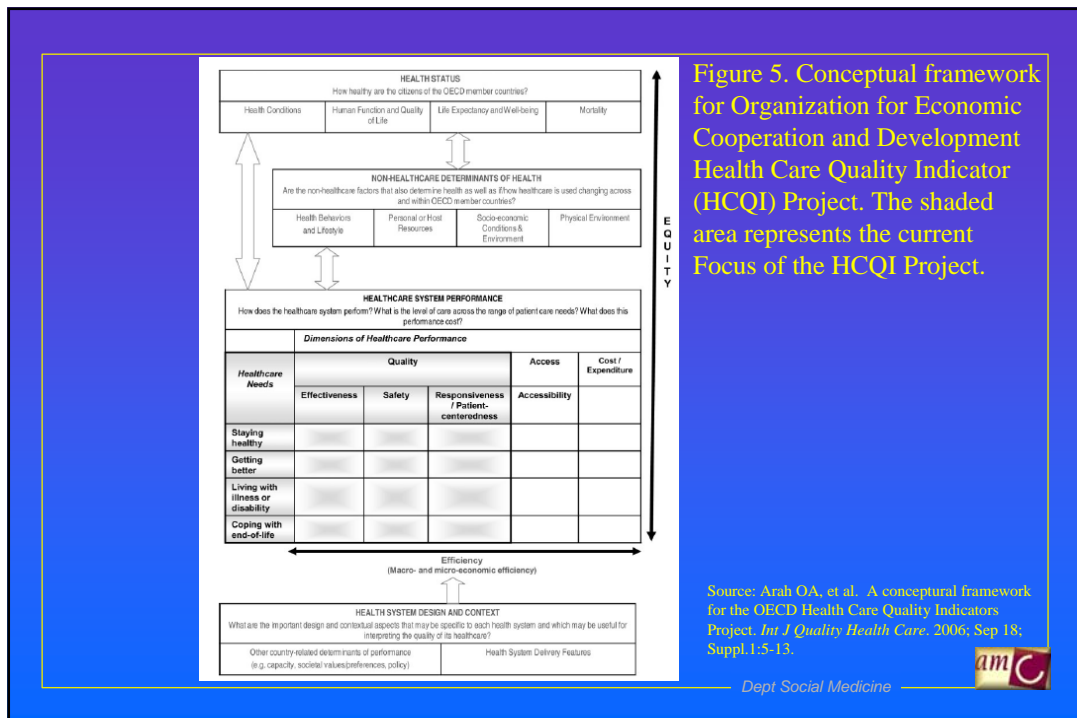
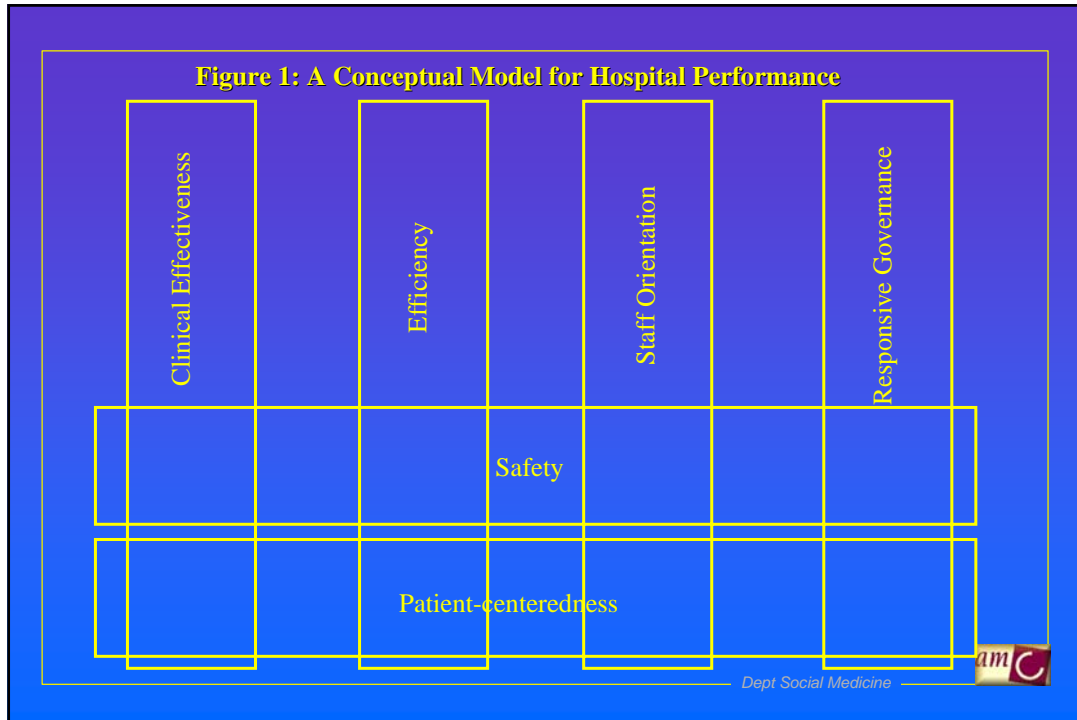



Figure 5. Conceptual framework for Organization for Economic Cooperation and Development Health Care Quality Indicator (HCQI) Project. The shaded area represents the current focus of the HCQI Project.


Source: Arah OA, et al. A conceptual framework for the OECD Health Care Quality Indicators Project. *Int J Quality Health Care*. 2006; Sep 18; Suppl. 1:5-13.

Research on the practice of benchmarking and performance improvement


- Descriptive, explorative and some hypotheses testing studies
- Marquis project on quality of care in hospitals



 Dept Social Medicine



1.2. Analysis of strategies inter-connection

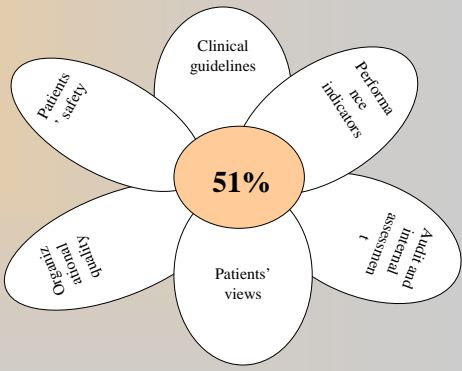



MARQUIS - Methods of Assessing Response to Quality Improvement Strategies

Exploratory Factor Analysis

Strategies	Loading weights
- Patient Safety Systems	.857
- TQM	.822
- Performance Indicators	.694
- Systems for getting Patients Views	.581
- Clinical guidelines	.578

Hospital Level		
Q.I. Strategies		
Ward Level		
AIM	Deliveries	Appendicitis
QI Strategies	QI Strategies	QI Strategies
Outputs	Outputs	Outputs





recommendations

- 1. Research on both development and use of performance indicators
- 2. Development (validity, reliability, relevance) Use (effective embedding in policy, management and practice)
- 3. Active involvement users
- 4. Combined bio-medical and social sciences competences

Dept Social Medicine



recommendations

- 5. data-availability is a conditio sine qua non.
- 6. strengthening clearinghouse function
- 7. sharing research results with users
- 8. networking between research groups
- 9. theme in FP8: benchmark and performance indicators
- 10.

Dept Social Medicine



Caroussel Questions

- Research on the validity of indicators
- Requirements for national information infrastructures
- Use and misuse of performance indicators

Dept Social Medicine

