Health Systems Research
why, what and how

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www.healthservicesresearch.eu
http://jhsrp.rsmjournals.com/
Challenges facing the European Health Systems

- Need for better integration of care both within the health sector and with other sectors
- Increasing demand for health care
- Providing more patient-centred care
- Assuring and improving quality of care
- Demand for workforce in health care
- Improving efficiency and productivity in health systems
Average OECD health expenditure
Growth rates in real terms, 2000 to 2010, public and total
Average annual growth in health spending
Real terms, 2000-2010

Note: Growth rates for 2009/10 are not available for Australia, Japan, Luxembourg, Israel, Spain and Turkey.

Source: OECD Health Data 2012.
Practising doctors per 1 000 population, 2009 and change between 2000 and 2009

1. Data include not only doctors providing direct care to patients, but also those working in the health sector as managers, educators, researchers, etc. (adding another 5-10% of doctors).
2. Data refer to all doctors who are licensed to practice.
3. Data for Chile include only doctors working in the public sector.

Source: OECD Health Data 2011; WHO-Europe for the Russian Federation and national sources for other non-OECD countries.
Reduction in in-hospital case-fatality rates within 30 days after admission for AMI, 2000-2009 (or nearest year)

Note: Rates age-sex standardised to 2005 OECD population (45+). 95% confidence intervals represented by H.

Source: OECD Health Data 2011.
Breast cancer five-year relative survival rate, 1997-2002 and 2004-09 (or nearest period)

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95% confidence intervals are represented by H.

Source: OECD Health Data 2011.
Health Services Research

• HSR is the multidisciplinary field of scientific investigation that studies how social factors, financial systems, organisational structures and processes, health technologies and personal behaviours affect access to health care and ultimately, the health and wellbeing of citizens.
Types of international HSR in Europe

- Descriptive research
- Exploratory research
- Hypotheses testing research (experimental, quasi-experimental, non-experimental)
- Research on measurement instruments
Conceptual notions

- Boundaries Health (Care) System
- Health System ad a dependent or independent variable
- Comparability constructs
- Comparability measures
- Limitations inference and generalizability
Health production model for health systems research

“actions of other sectors to address the determinants of health”

Population health status (need)

Human resources

Technologies

Financial resources

Environment
  Nutrition/ agriculture
  Other sectors

Direct intended and unintended effects of health system activities

“public and private organizations, institutions and resources to improve, maintain or restore health”

Patients

Structures and organisation

Process

Health care outcome:
  satisfaction, complications etc.

Final effects/outcomes of health systems

Health gain/Outcome

Stewardship/ regulation/ incentives
  “activities to influence the policies”

Contents and implementation of health system activities
EU projects on HSR

- The European Commission (EC) funds health services research through its frameworks for research funding, such as at present FP 7.
- Between 2007 and 2010, the EC, through its Seventh Framework Programme, spent €275 million on research aimed at “Optimising the delivery of healthcare”, of which €67.5 million was spent on translating clinical research outcomes into clinical practice (supporting 28 projects), €63.5 million on health services research, €47 million on health promotion and disease prevention (20 projects), and €97 million on international public health and health systems research (35 projects). This compares to a total budget for health and life science research of €2.5 billion (EC, 2010)
Participation in 62 EU funded projects on Health Services Research

- UK 50-14
- Spain 37-4
- Germany 35-8
- Italy 34-7
- Greece 31-3
- Netherlands 29-8
- France 27-5
- Belgium 24-7
- Poland 22-0
- Sweden 20-0
European HSR on benchmarking and quality indicators

Cumulative number of references 2000-2009
Focus of research on indicators/benchmarking

Percentages of references per identified topic

- Research on concepts and performance frameworks: 3.1%
- Performance indicators and benchmarking related to mortality data: 13.1%
- Performance indicators and benchmarking related to cancer care: 12.5%
- Performance indicators and benchmarking on care delivered in hospitals: 22.8%
- Patient safety indicators: 12.4%
- Performance indicators in primary care: 15.3%
- Patient experiences: 11.5%
- Research on the practice of benchmarking and performance improvement: 7.8%
HSR mortality data

• Avoidable mortality (AMIEHS project)

• Case-fatality rates and HSMR

• Death Certificate Registration
HSR and Cancer

• Cancer Screening

• Survival Rates

• Cancer Registration

• Incidence, Prevalence, Control, Staging
HSR on hospitals

- Performance Models
- Hospital Waiting Times
- Inequality in Waiting times
- Readmission rates
European publications on readmission rates

Graph showing publication per country in absolute numbers:
- UK: 152
- Spain: 44
- Denmark: 33
- Sweden: 25
- Italy: 19
- The Netherlands: 16
- France: 13
- Switzerland: 14
- Norway: 13
- Germany: 9
- Finland: 10
- Ireland: 8
- Greece: 7
- Poland: 3
- Austria: 2
- Belgium: 2
- Scotland: 1
- Spain: 1
- Turkey: 1
- Croatia: 1
European publications on readmission rates

![Bar chart showing number of publications per patient group or disease field. The top categories are cardiac and mental health, followed by others, children/newborns, COPD, abdomen, and surgery. The categories with the fewest publications are stroke, diabetes, and cancer.](image-url)
European Research on the practice of benchmarking and performance improvement

ECHO (small area-variation/ linking data-bases)

Marquis/ Duque (association between quality strategies, quality improvement and outcomes)

PATH project (WHO/Euro)

Patient Safety Research (EUNetPas, WHO)
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3 This table distinguishes training, associations, journals and conferences that are bespoke and involve all the disciplines contributing to health services research, as opposed to training, associations, journals and conferences relating to either related subjects (such as public health research, biomedical research) that may include health services research as one area of research among others or disciplines that contribute to health services research (such as health economics, epidemiology, medical sociology).
Strengthening Health Systems Research in Europe

- EU funded Health Services Research

- Common data-infrastructures (OECD Eurostat, WHO)

- Comparable requirements for data-protection and security

- Common European HSR Community