



Update on OECD's Health Care Quality Indicator Project

Measurement, Information Systems,
Policies and Governance in OECD
countries

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Patient Safety and Quality of Care
Working Group, Brussels, March 13 2014

History OECD's Health Care Quality Indicator Project

- Ministerial Conference Ottawa 2000
- Founding work Nordic Countries and Commonwealth Fund
- Expert group and subgroups (37 countries in 2010)
- Conceptual framework
- Systematic selection of quality indicators and pilot testing
- Refinement methodology
- Publication in Health at a Glance (2007,2009, 2011,2013)
- Ministerial October 2010
- Analytical work (Cancer, Cardiovascular Diseases)
- Country Reviews on Quality (Korea, Denmark, Israel, Sweden, Turkey, Norway, Czech Republic, Italy, Japan, Australia)
- Work on strengthening national information infrastructures

OECD HCQI Conceptual Framework

- Developed in 2006
- Guided development of the current set of indicators
- Measures 'quality of health care' within a wider performance framework

	Healthcare System Performance How does the health system perform? What is the level of quality of care across the range of patient care needs? What does this performance cost?				
	<u>Dimensions</u>				
	<u>Quality</u>			Access	Cost/ expenditure
<u>Health care needs</u>	Effectiveness	Safety	Responsiveness/ Patient centeredness	Accessibility	
Staying healthy					
Getting better					
Living with illness or disability					
Coping with end of life					

Current focus
of HCQI
Project

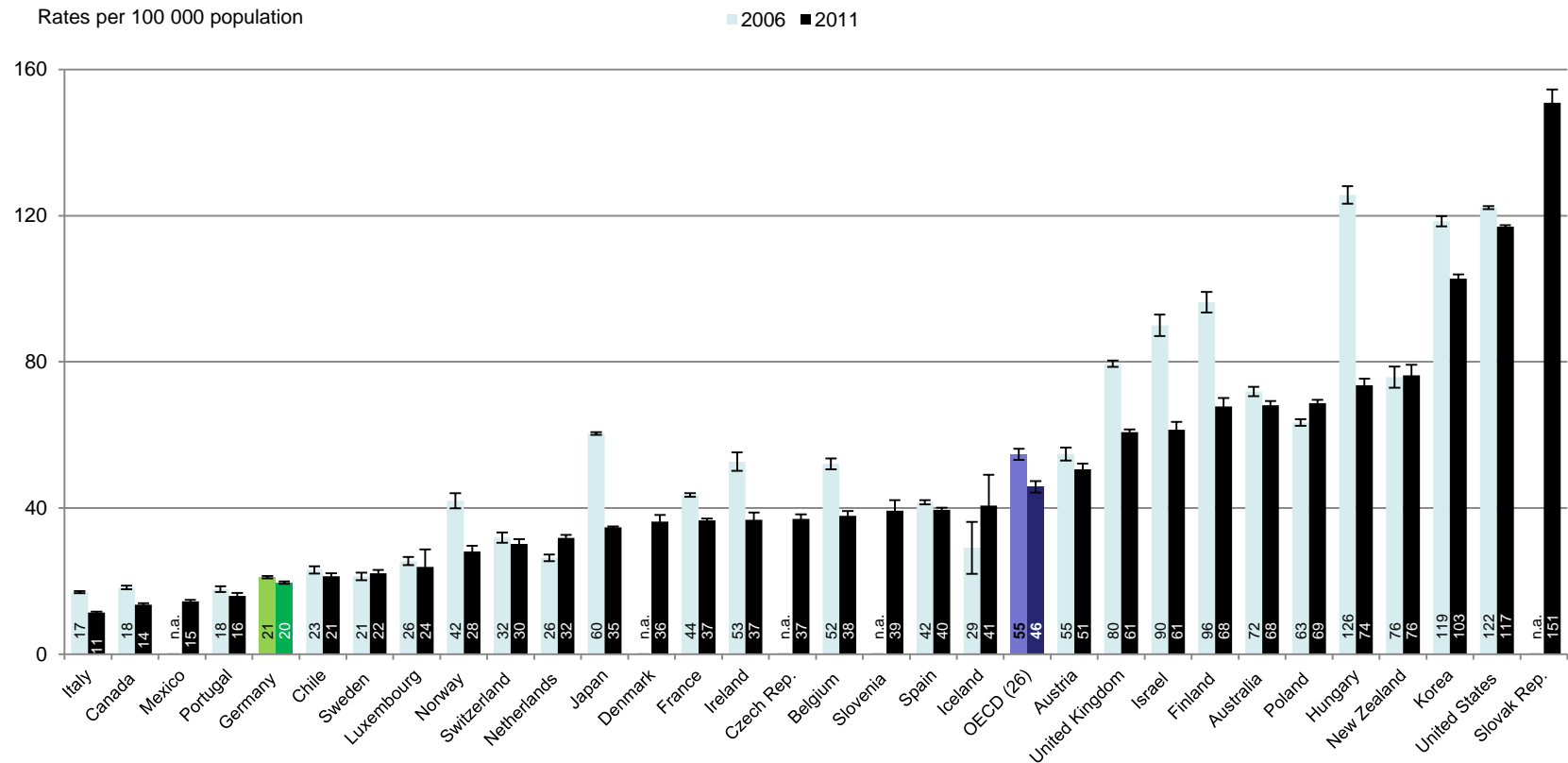
OECD's HCQI program

- **Measurement** (Chapter on Quality of Care in Health at a Glance 2013, HAG Europe 2012 and HAG Asia/Pacific 2012, OECD website)
- **Information Systems** (Strengthening Information Infrastructures for measuring Quality 2013)
- **Policies and Governance** (Cancer Care; assuring quality to improve survival 2013, Country reviews on Quality of Care)

Measurement

- Health promotion, prevention and primary care
- Acute care
- Mental Health Care
- Cancer care
- Patient safety
- Patient experiences

Asthma hospital admission in adults, 2006 and 2011 (or nearest year)

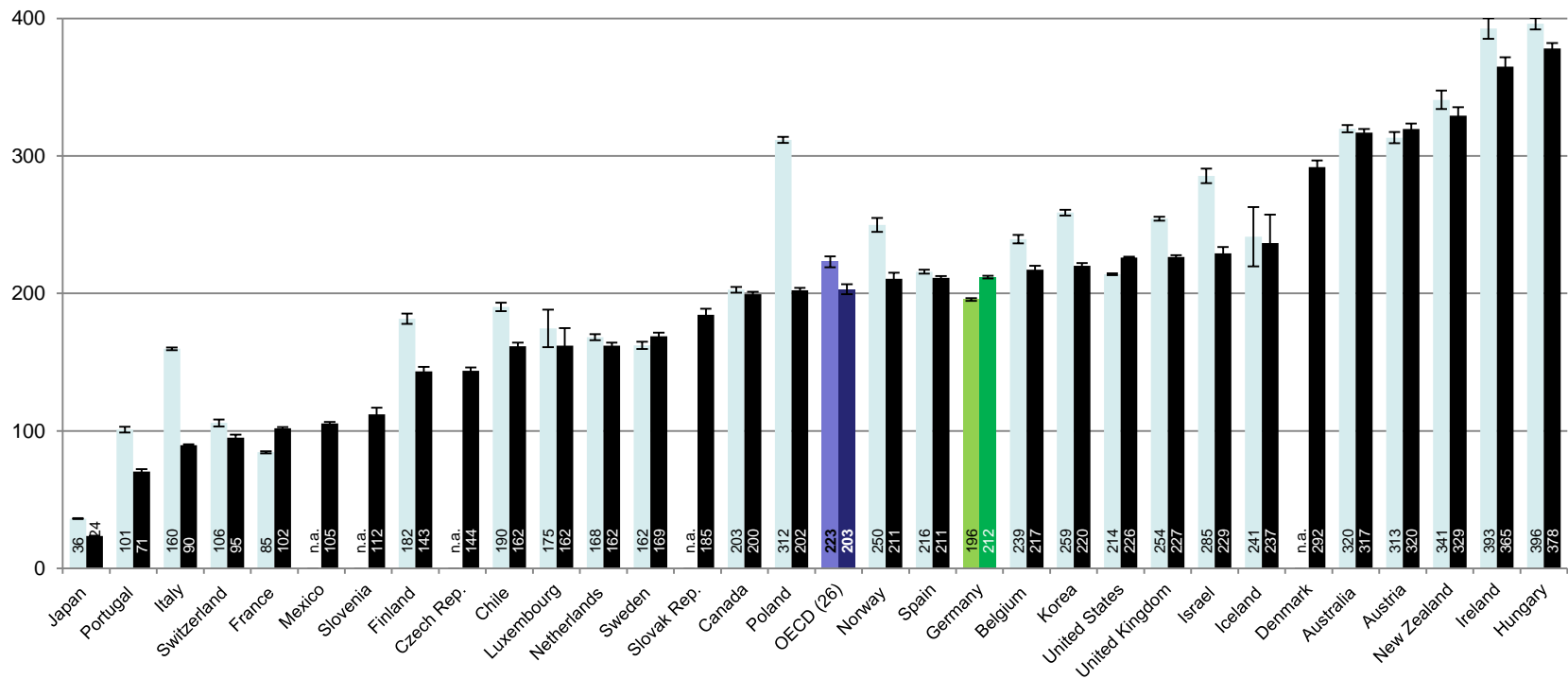


Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.

OECD COPD hospital admission in adults, 2006 and 2011 (or nearest year)

Rates per 100 000 population

2006 2011

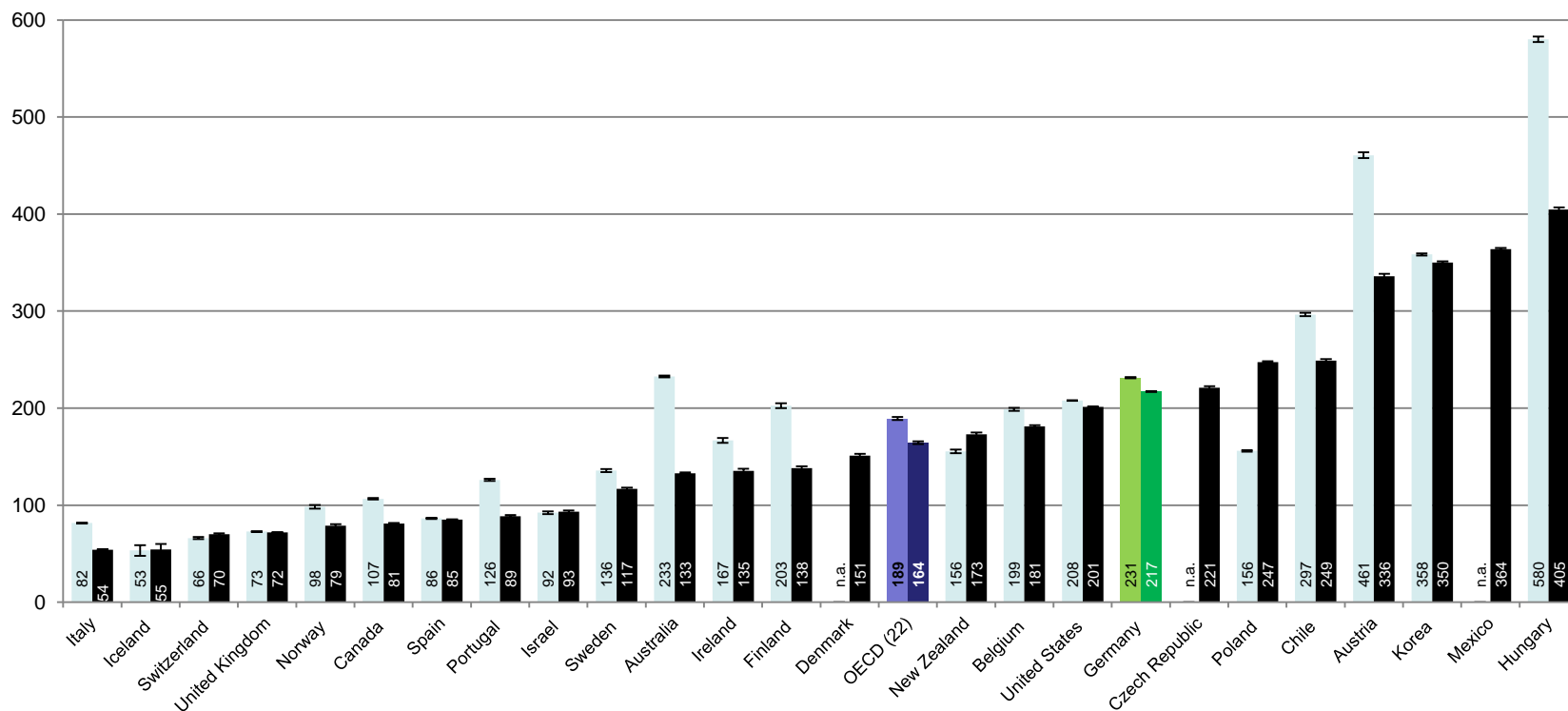


Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.

Diabetes hospital admission in adults, 2006 and 2011 (or nearest year)

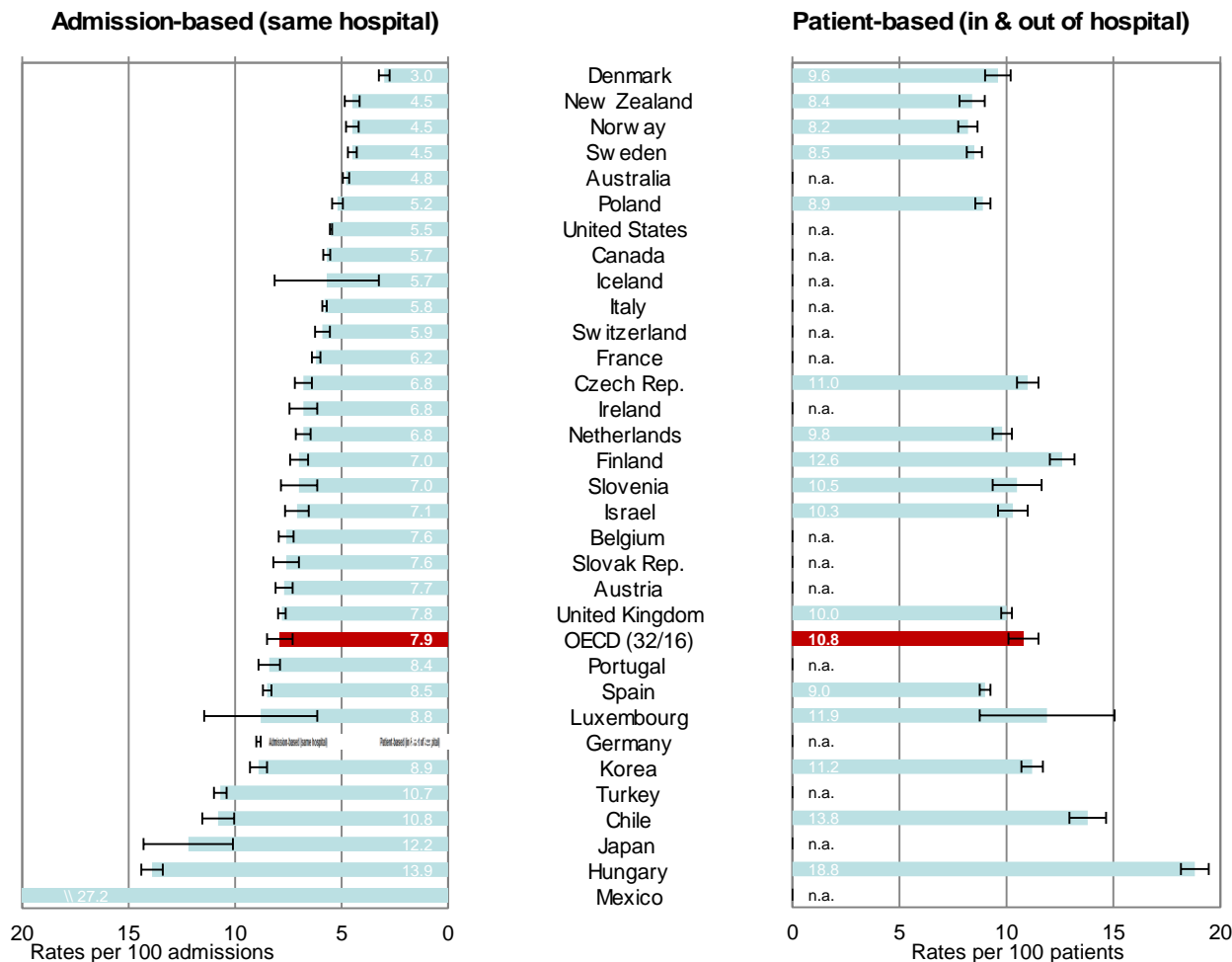
Rates per 100 000 population

2006 2011



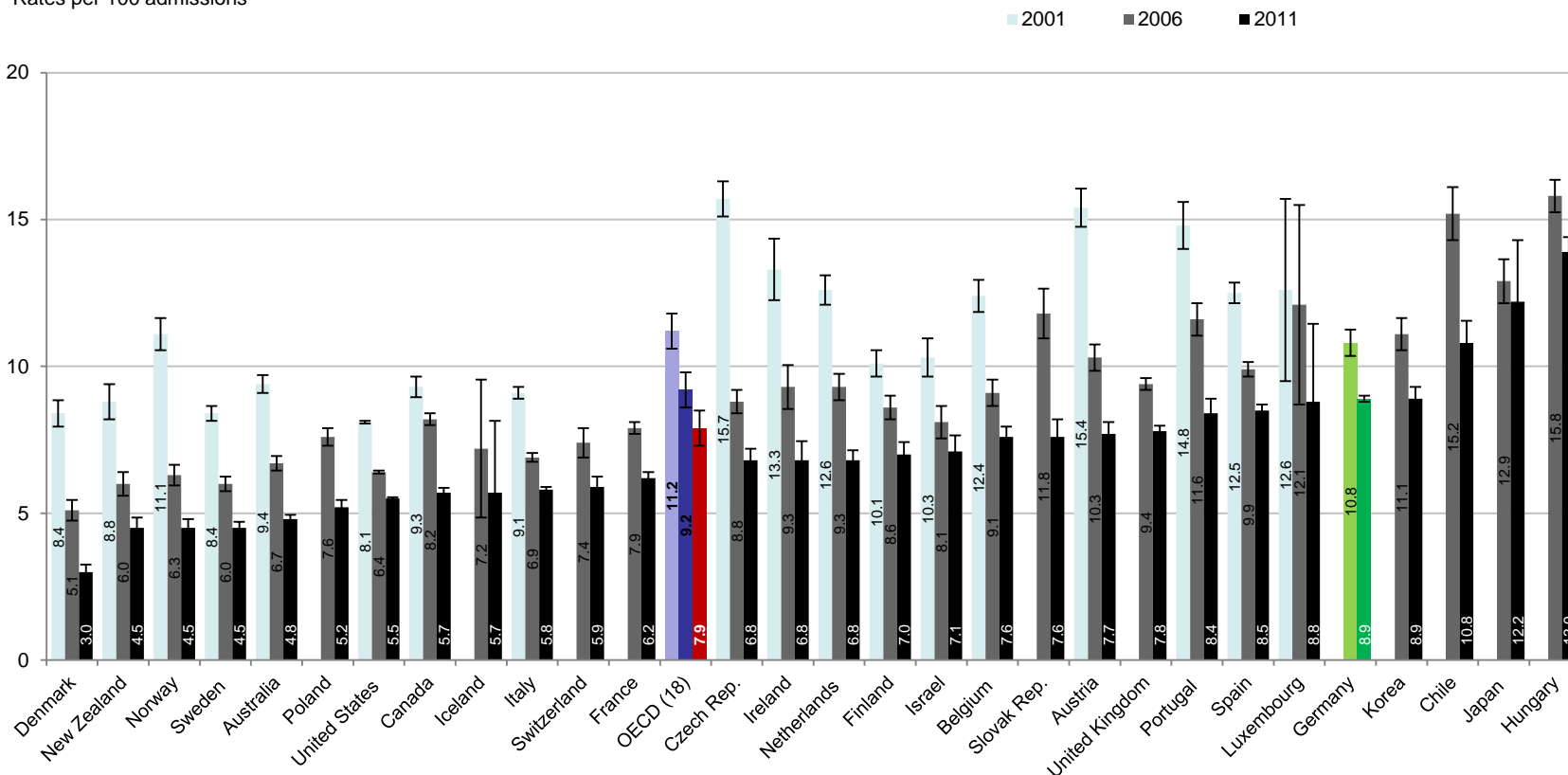
Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.

Case-fatality in adults aged 45 and over within 30 days after admission for AMI, 2011 (or nearest year)



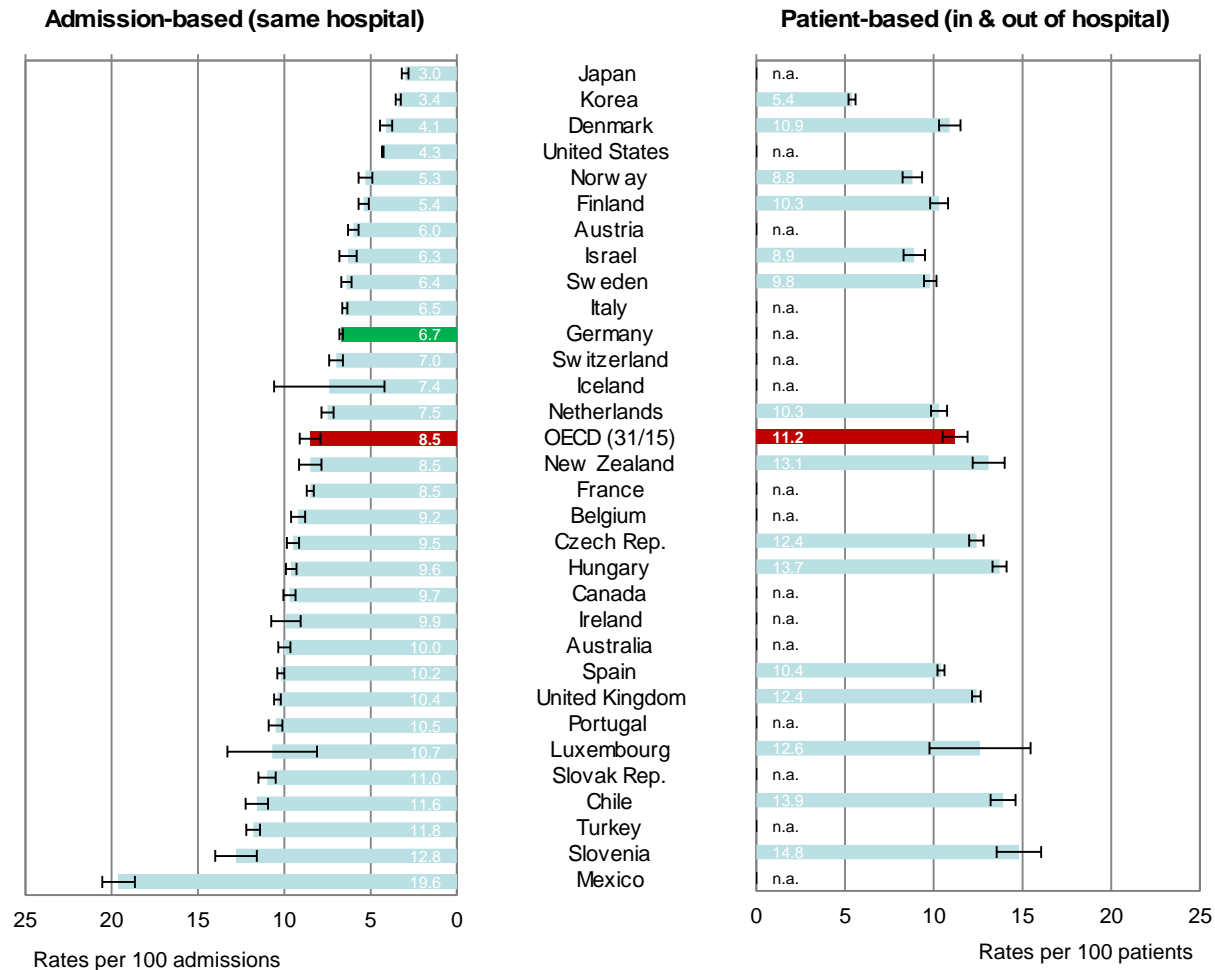
Reduction in case-fatality within 30 days after admission for AMI, 2001-2011 (or nearest year)

Rates per 100 admissions



Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.

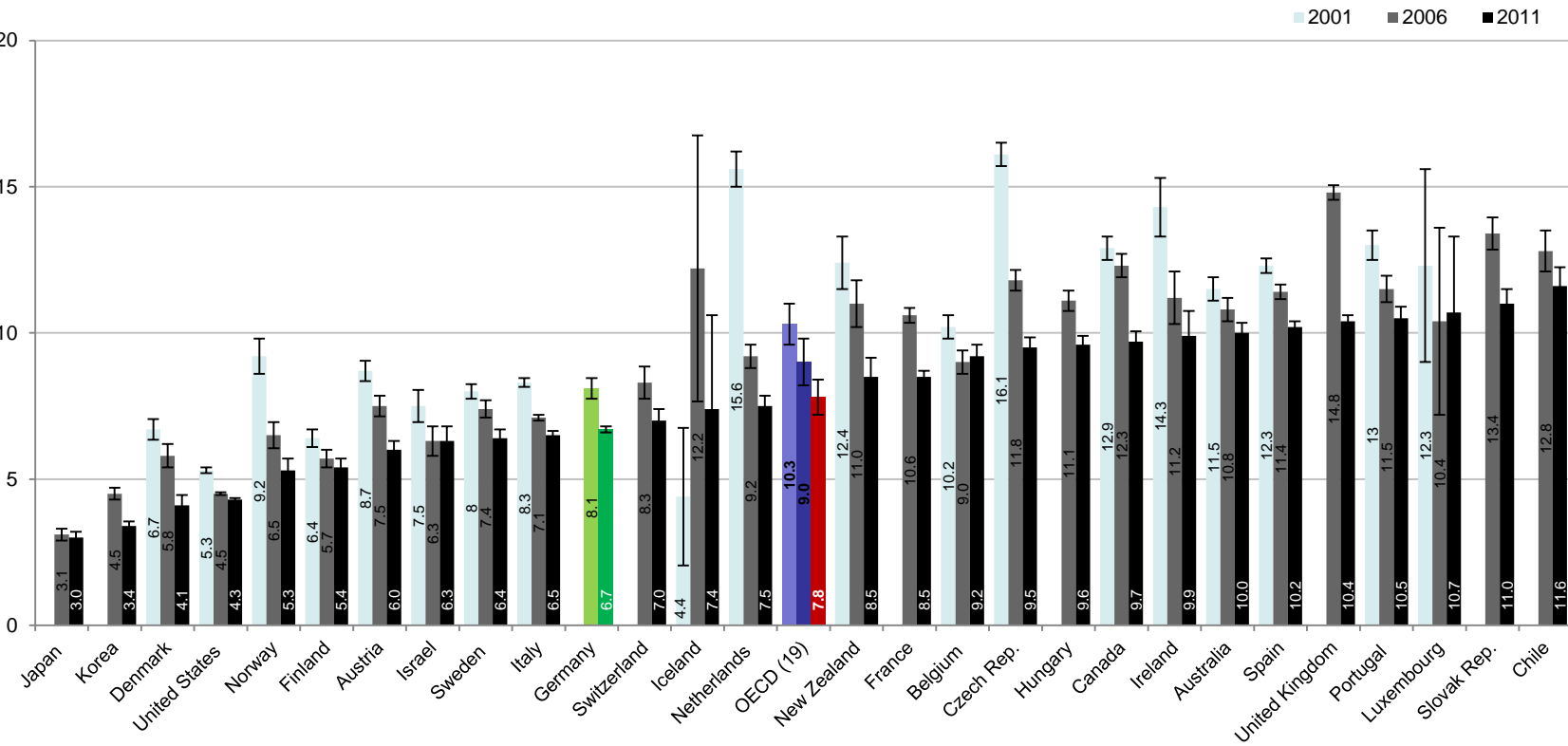
Case-fatality in adults aged 45 and over within 30 days after admission for ischemic stroke, 2011 (or nearest year)





Reduction in case-fatality within 30 days after admission for ischemic stroke, 2001-2011 (or nearest year)

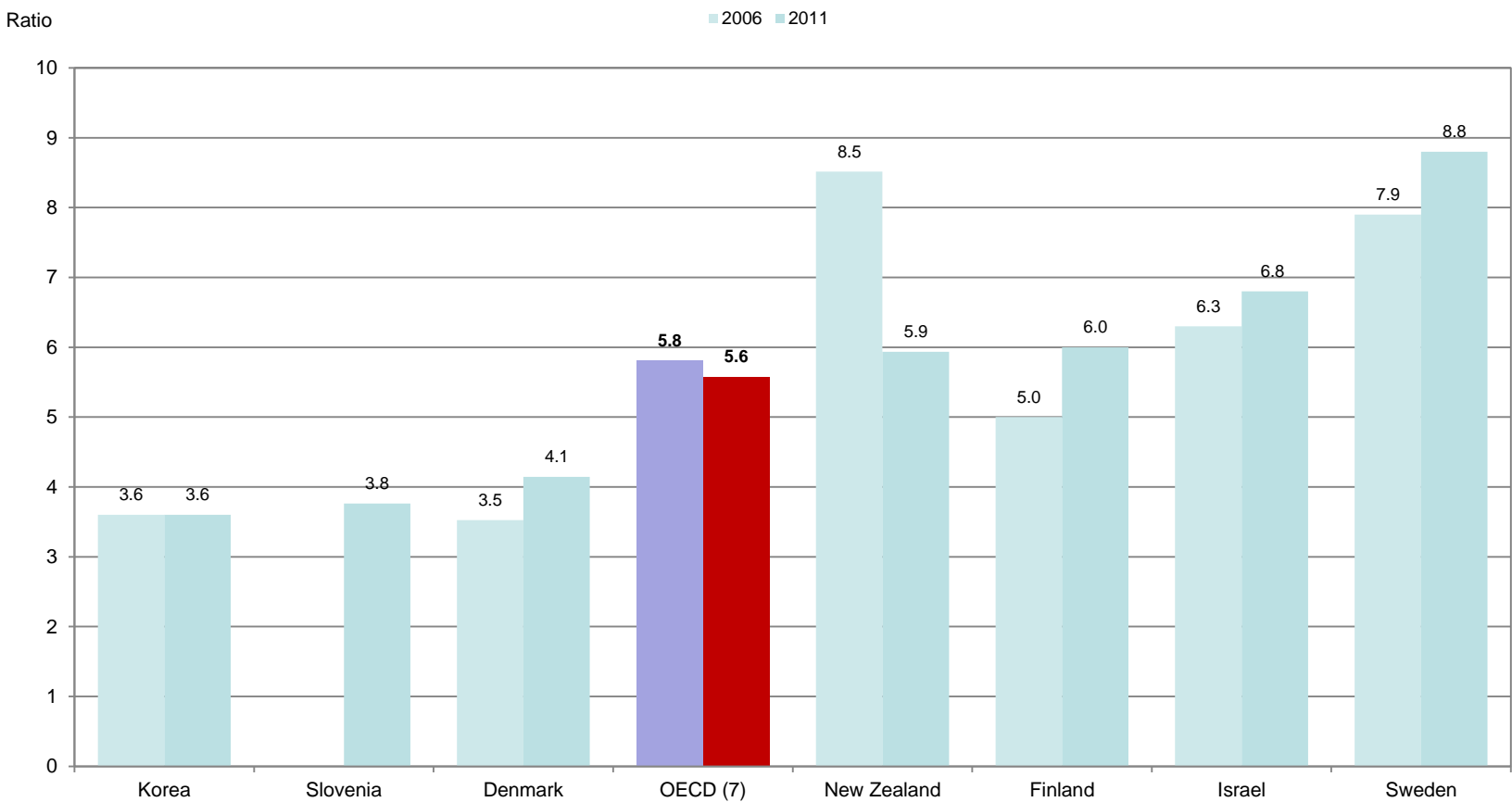
Rates per 100 admissions



Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.

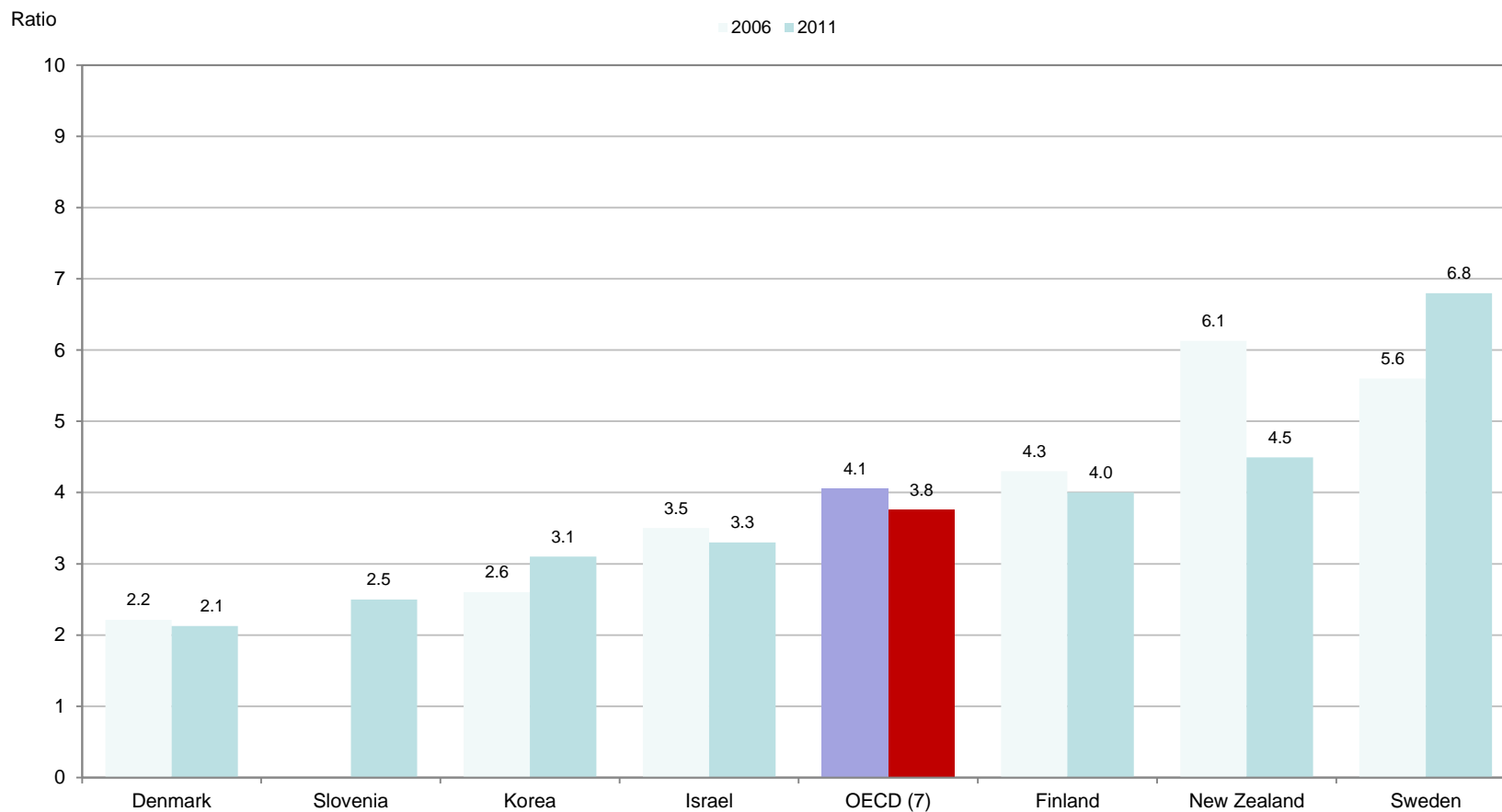


Excess mortality from schizophrenia, 2006 and 2011 (or nearest year)



Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.

Excess mortality from bipolar disorder, 2006 and 2011 (or nearest year)

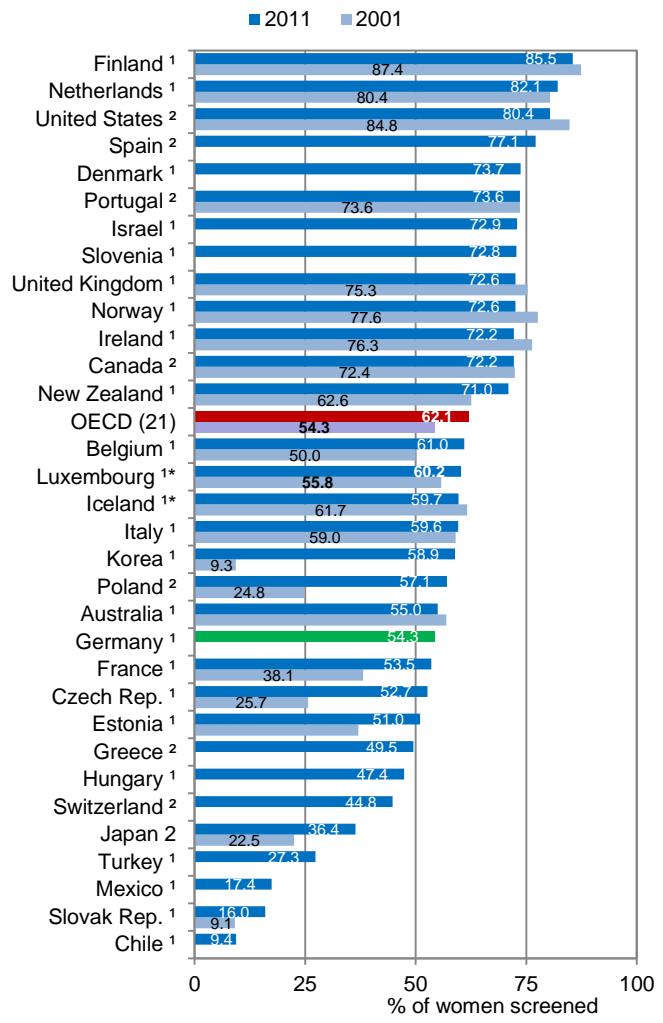


Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.



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Mammography screening in women aged 50- 69, 2001 to 2011 (or nearest year)

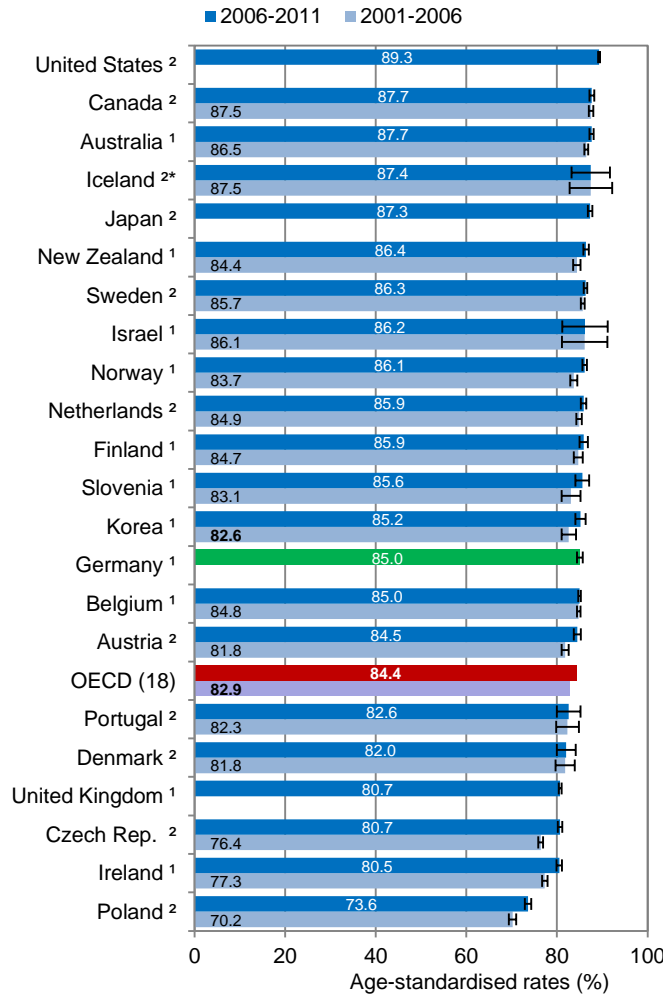


Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.



OECD

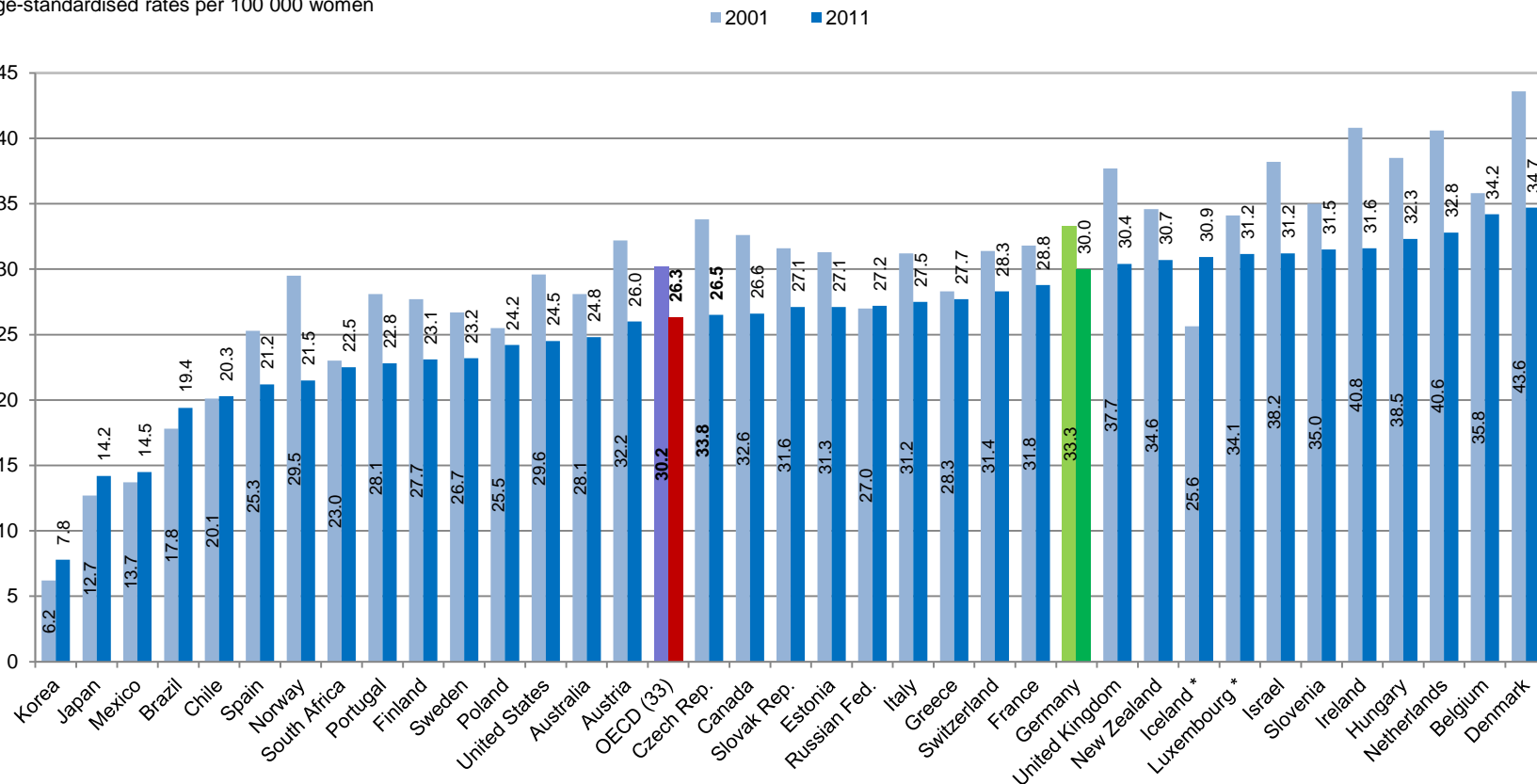
Breast cancer five-year relative survival, 2001-2006 and 2006-2011 (or nearest period)



Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.

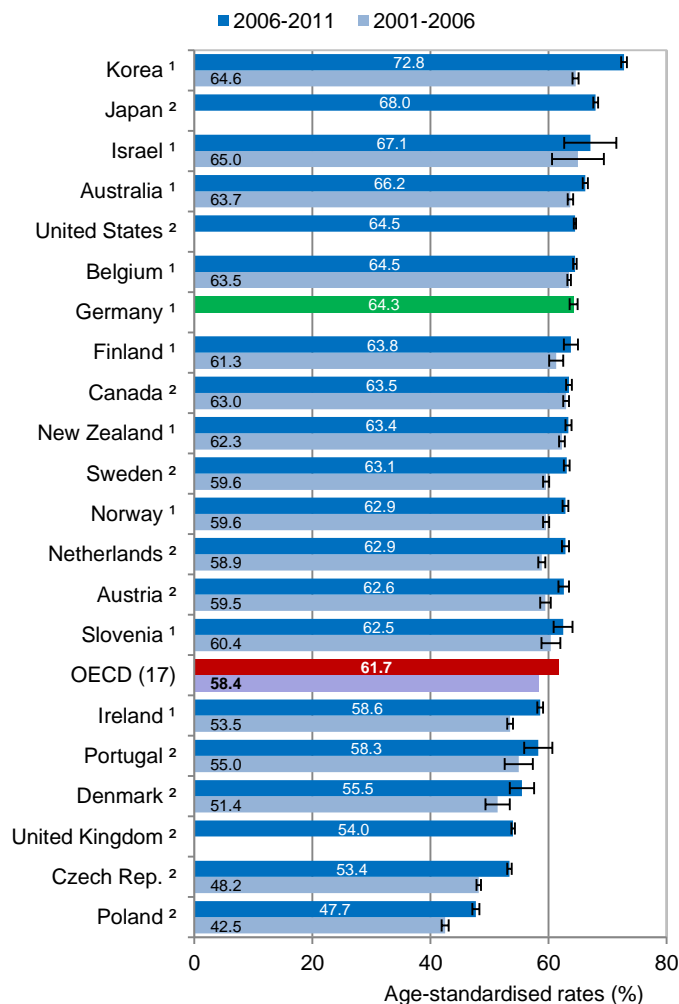
Breast cancer mortality in women, 2001 to 2011 (or nearest year)

Age-standardised rates per 100 000 women



Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.

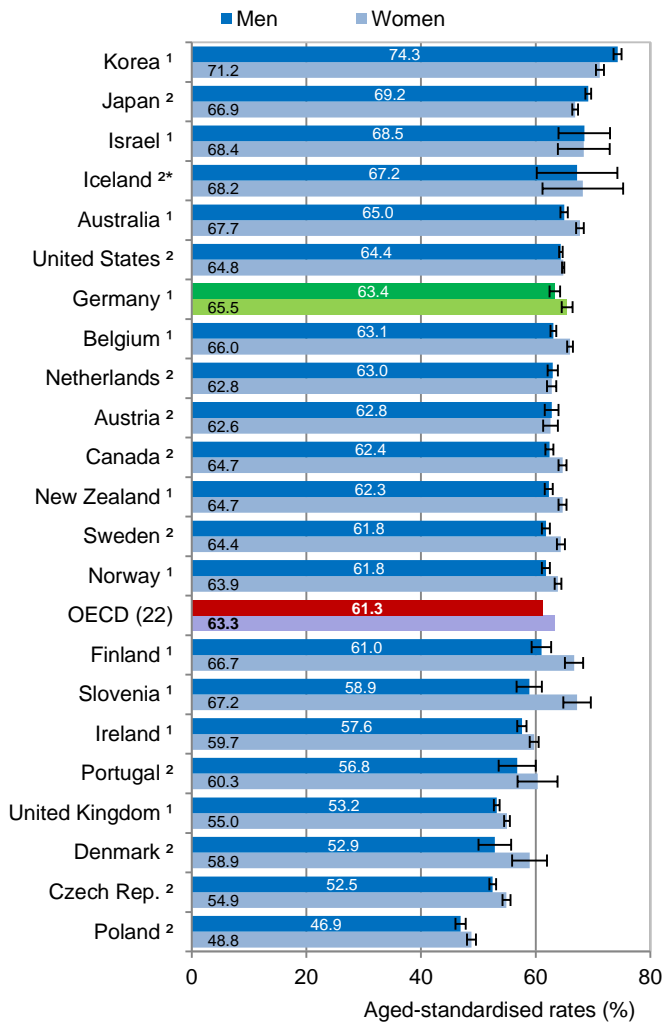
Colorectal cancer, five-year relative survival, 2001-2006 and 2006-2011 (or nearest period)





OECD

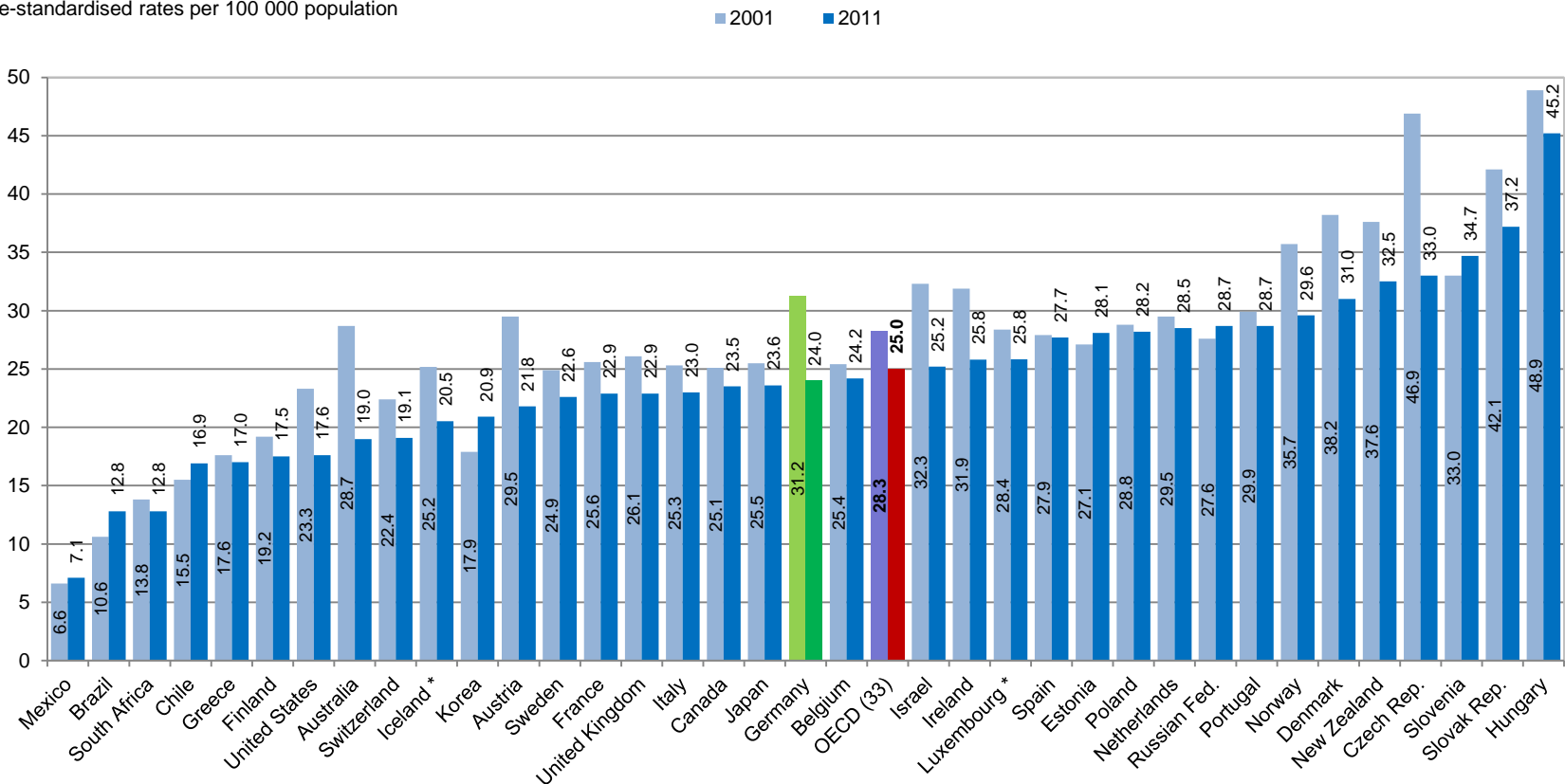
Colorectal cancer, five-year relative survival by gender, 2006-2011 (or nearest period)



Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.

Colorectal cancer mortality, 2001 to 2011 (or nearest year)

Age-standardised rates per 100 000 population



Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.



Patient Safety Indicators

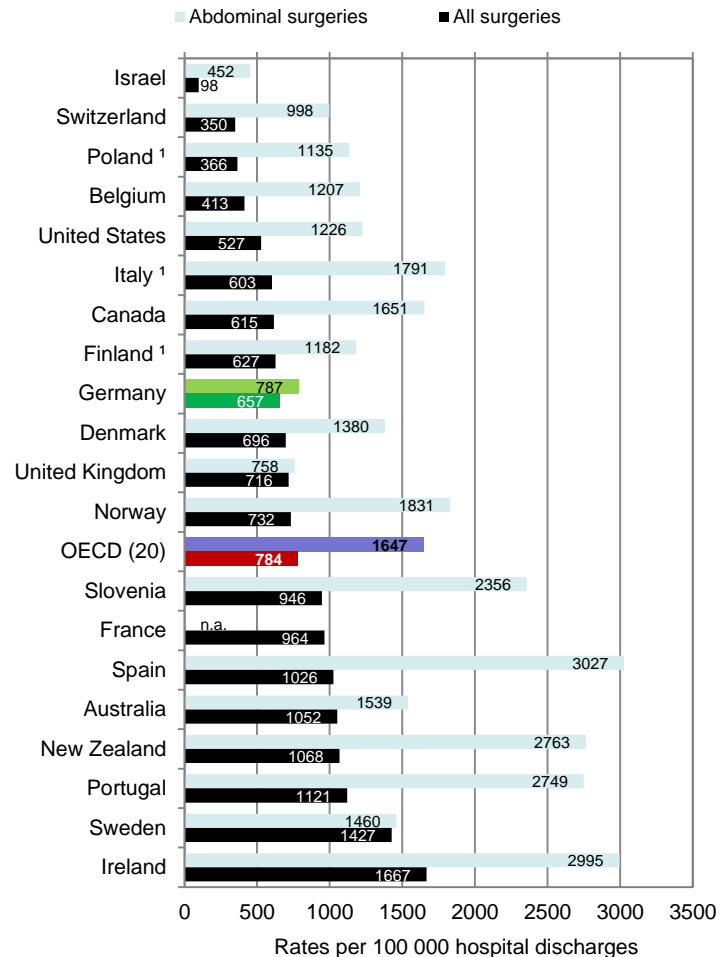
Indicators

- 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)

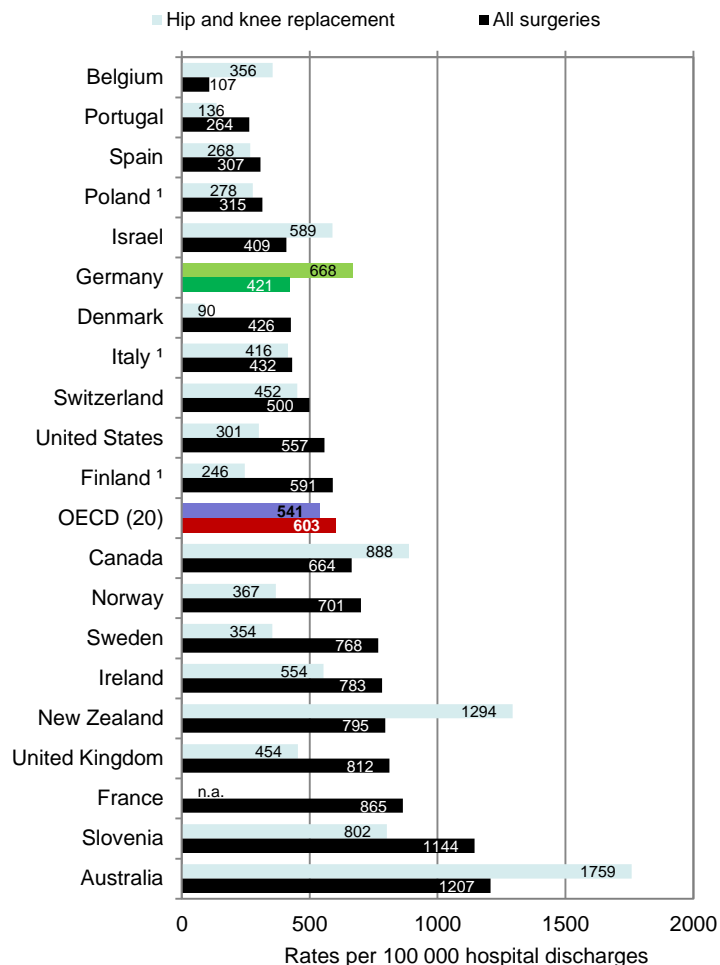
Patient Safety Indicators

- Dependent on administrative data-bases
- Comparability coding practices
- Importance secondary diagnosis
- Importance “present at admission” code
- Importance UPI

Postoperative sepsis in adults, 2011 (or nearest year)

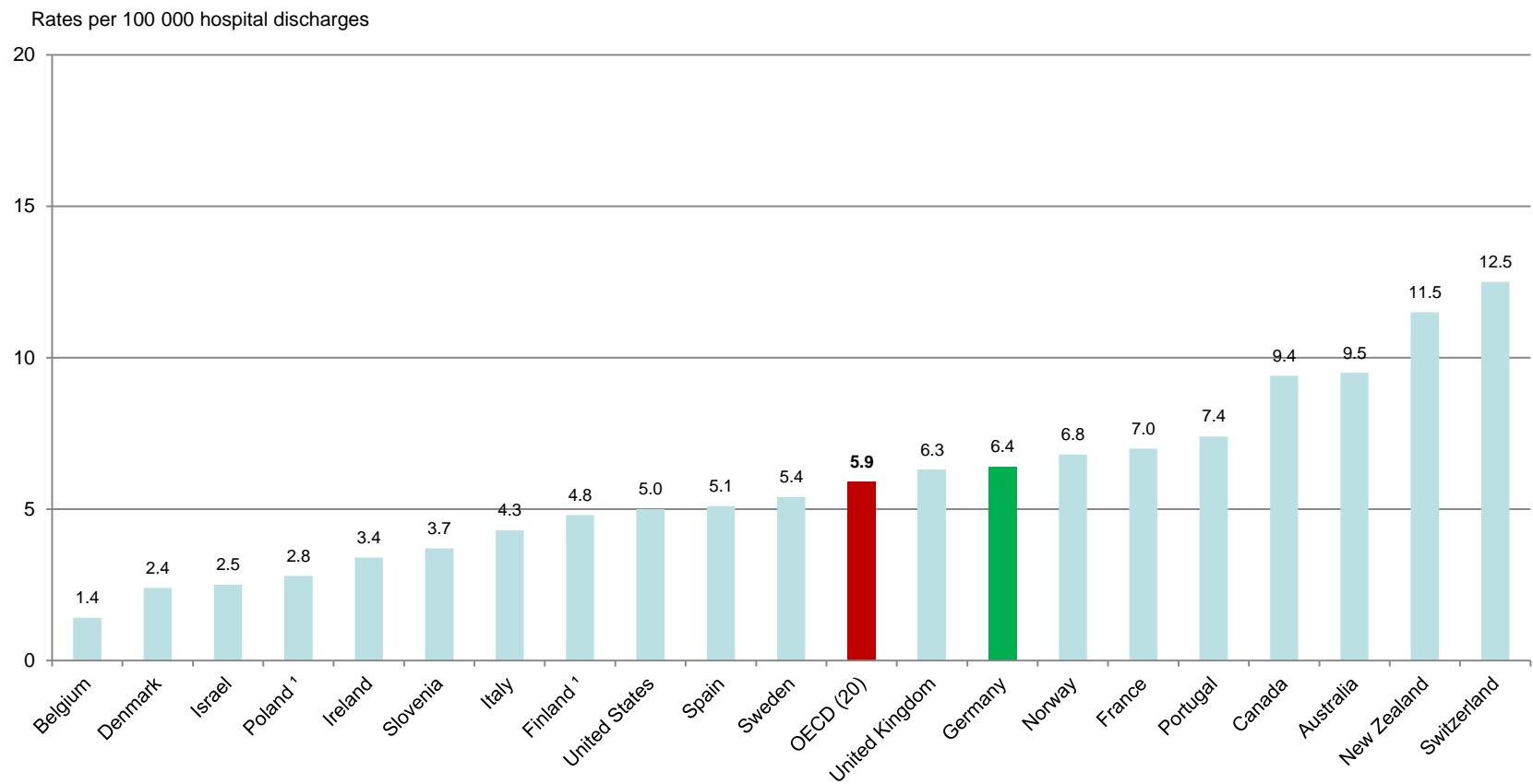


Postoperative pulmonary embolism or deep vein thrombosis in adults, 2011 (or nearest year)



Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.

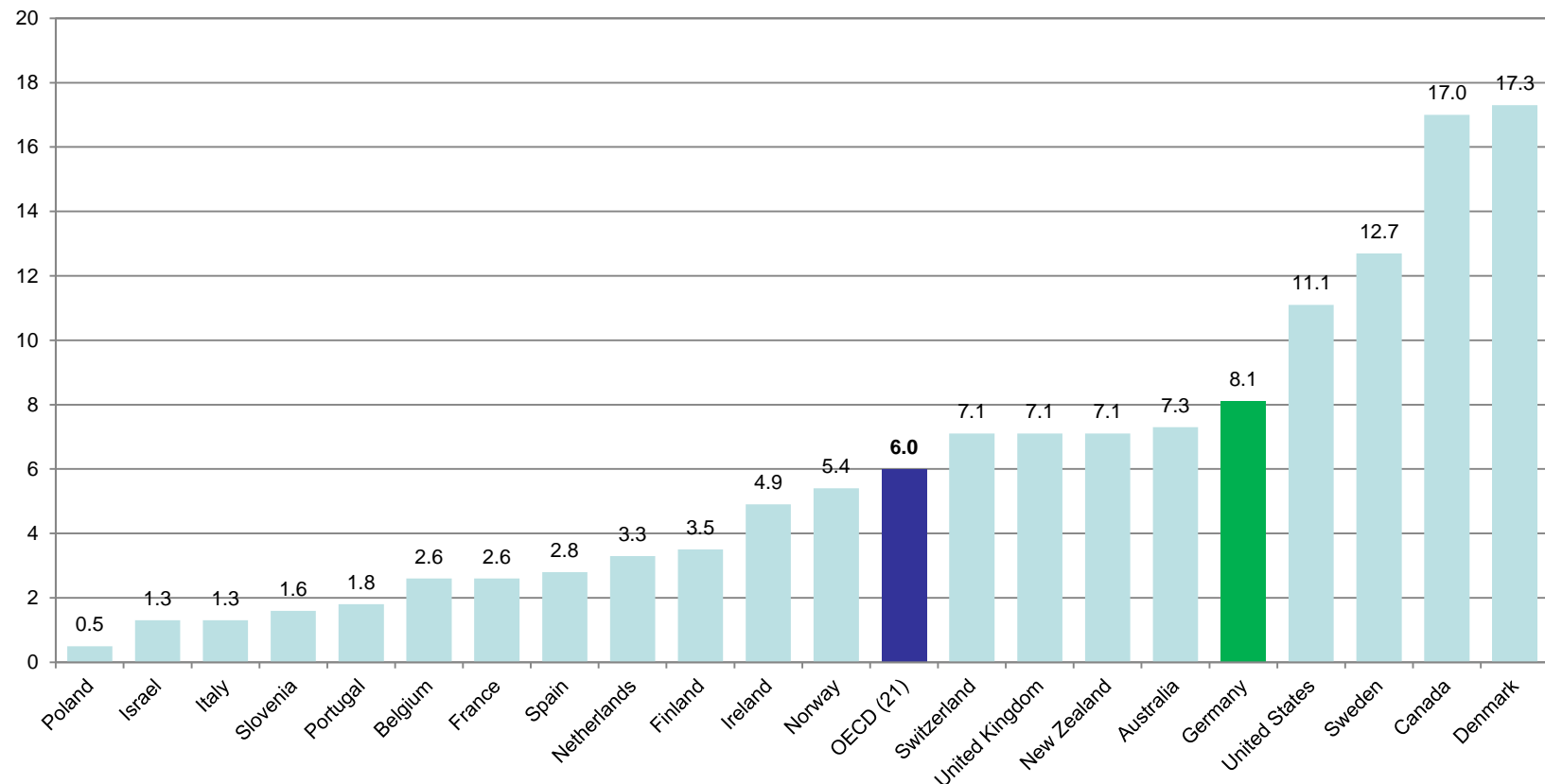
Foreign body left in during procedure in adults, 2011 (or nearest year)



Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.

Obstetric trauma, vaginal delivery with instrument, 2011 (or nearest year)

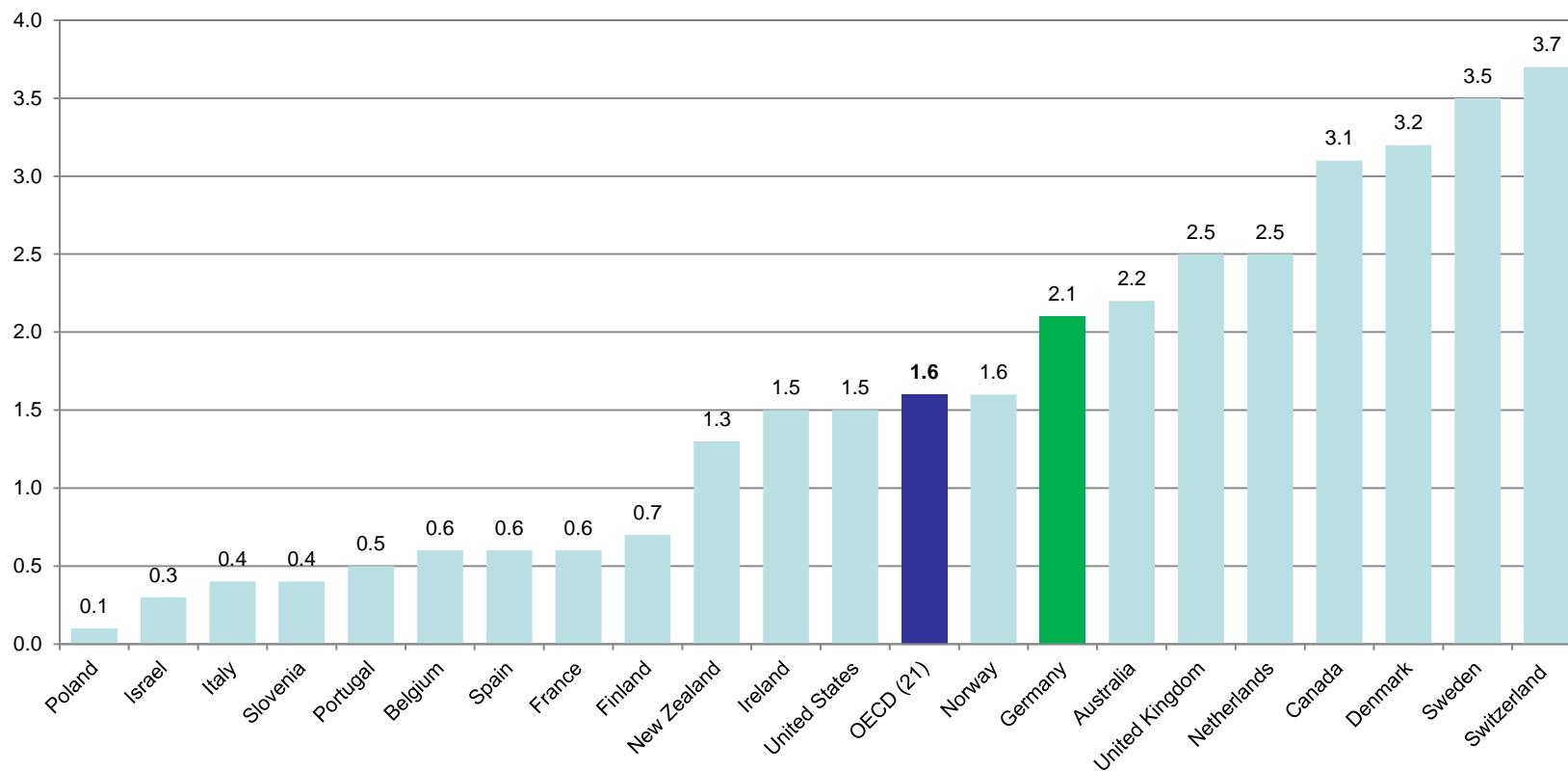
Crude rates per 100 instrument-assisted vaginal deliveries



Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.

Obstetric trauma, vaginal delivery without instrument, 2011 (or nearest year)

Crude rates per 100 vaginal deliveries without instrument assistance

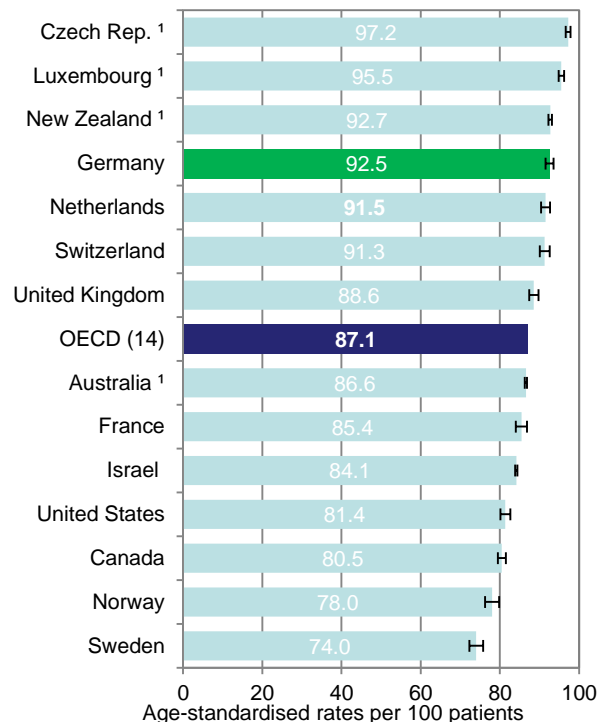


Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.

Patient Experiences

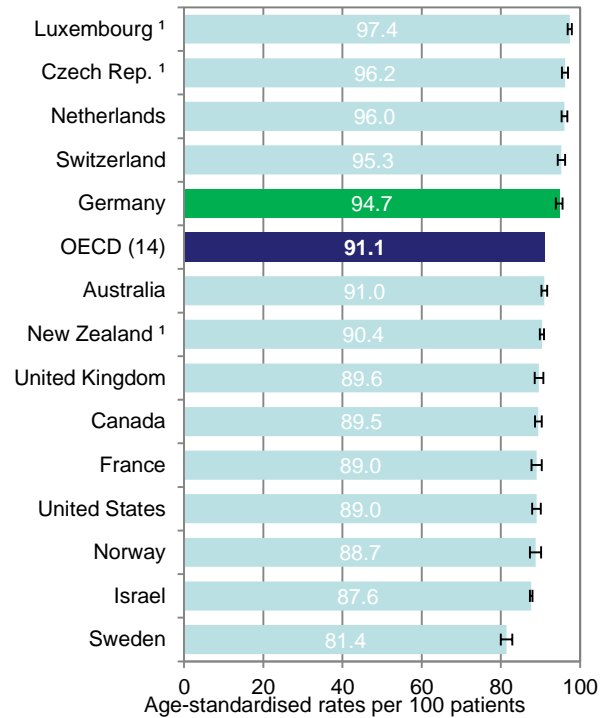
- Common set of questions for population based statistics under development on access, autonomy and communication
- Basic set of principles for setting up national systems for measuring patient experiences

Regular doctor spending enough time with patient in consultation, 2010 (or nearest year)



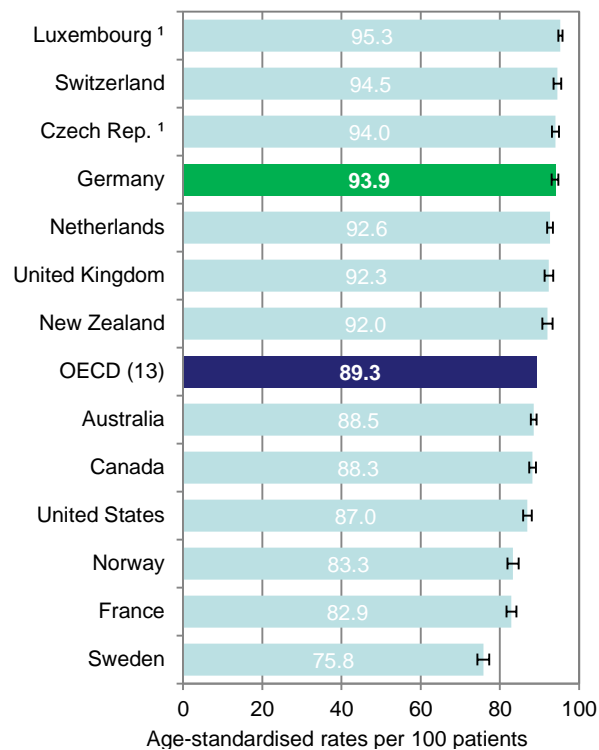
Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.

Regular doctor providing easy-to-understand explanations, 2010 (or nearest year)



Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.

Regular doctor giving opportunity to ask questions or raise concerns, 2010 (or nearest year)

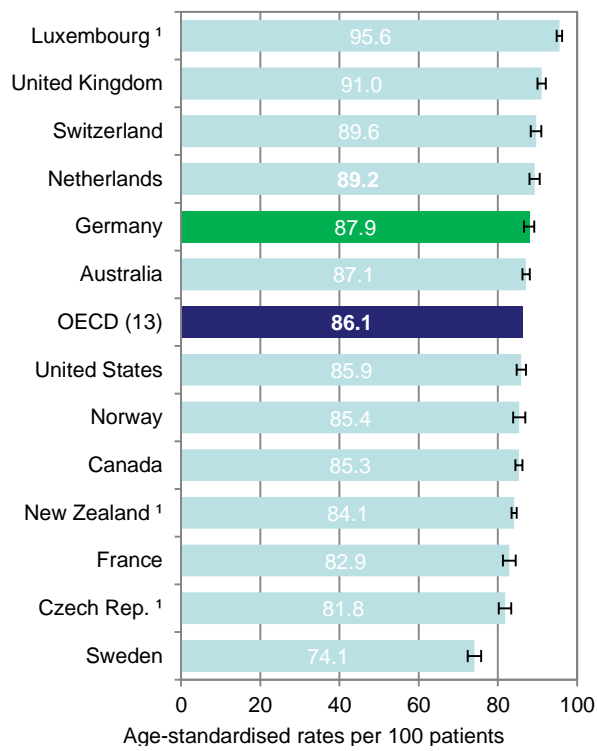


Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.



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Regular doctor involving patient in decisions about care and treatment, 2010 (or nearest year)



Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.

R&D 2014 based on critical review of indicators in November 2013

- Potential preventable hospital admissions (coding and episode structure) England
- Compound indicator potential preventable hospital admissions, Canada
- Diabetes/amputation related indicators, Italy
- Patient Safety (in depth analyses PSI's, prescription data/Avery list, patient safety in surveys)
- Suicide related indicators, Denmark
- Excess mortality mental health, England
- Monitoring systematic measurement patient experiences
- Inventory use HCQI in national/regional reports, Netherlands

Link with the information systems

- Mortality statistics
 - Registries
 - Administrative data bases
 - Electronic Health Records
 - (patient) surveys
-
- Policies on data linkage and secondary data use EHR's (OECD report 2013)

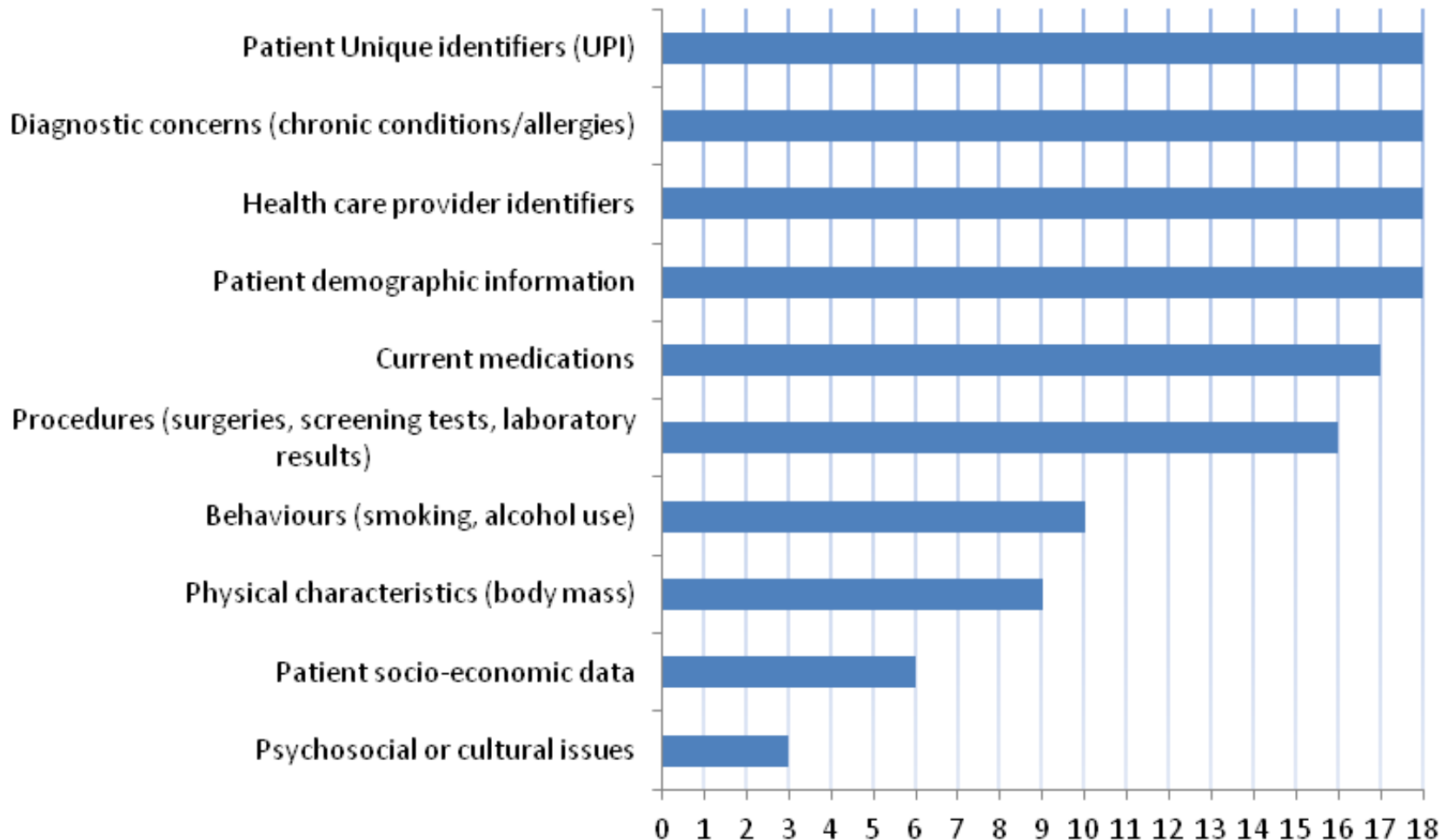


25 countries participated in an HCQI survey that found...

Progress	Europe (15)	Other (10)	Total (25)
70%+ of Doctors using EMRs	11	2	13
70%+ of Hospitals using EPRs	11	4	15
National plan to implement EHRs	12	10	22
Implementation started	12	8	20
Exchange among doctors and hospitals including medications, lab tests and images	8	6	14

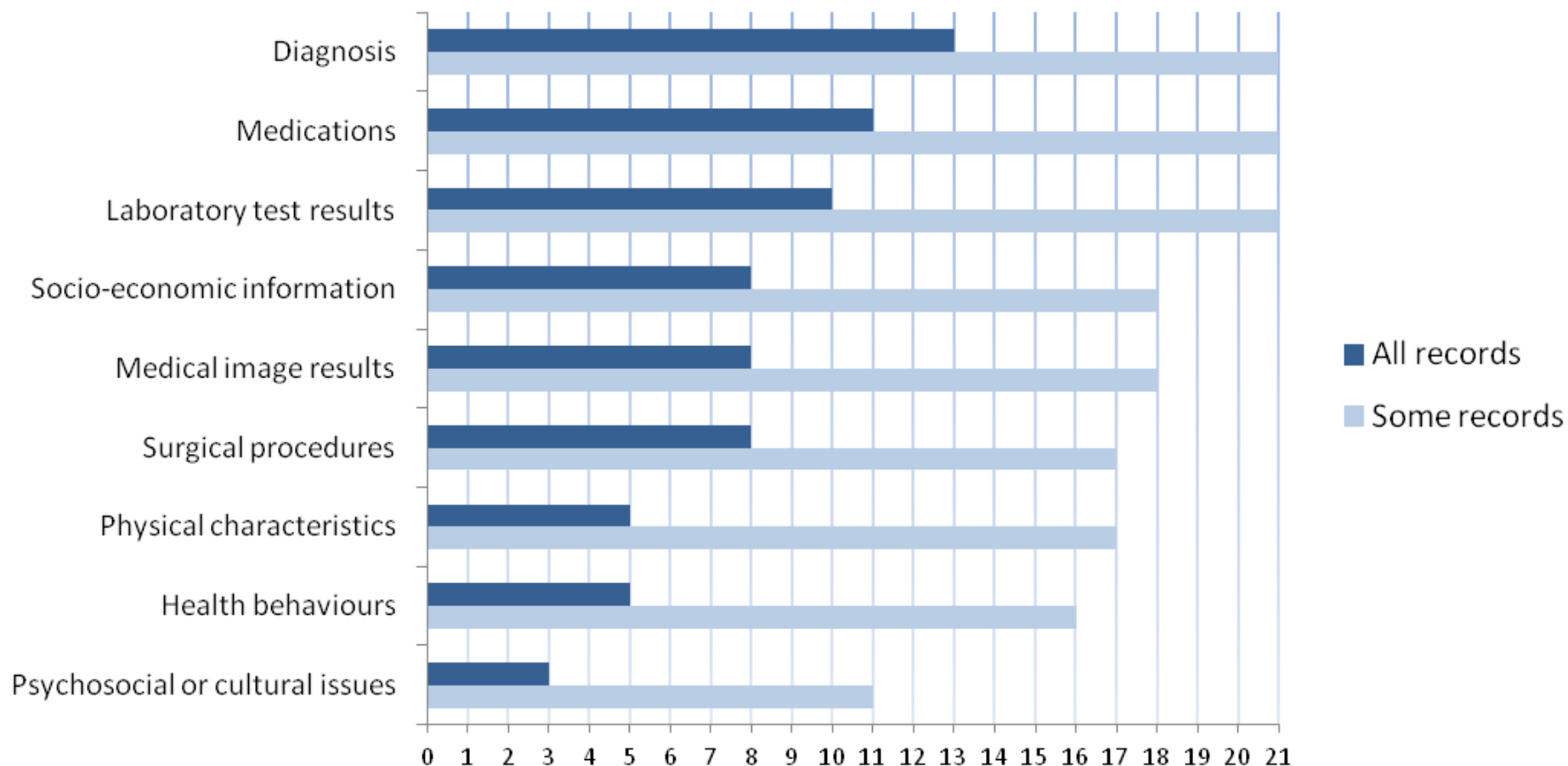


Countries reporting minimum data set elements





21 countries use clinical terminology standards for some elements





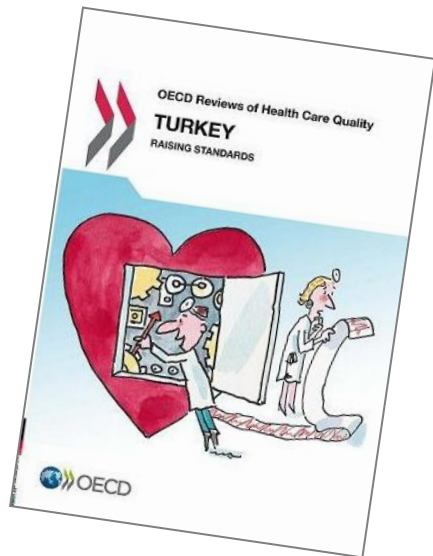
Some have adopted international terminology standards

International standard	Elements	Number of countries
ICD-10	Diagnosis	19
SNOMED	Diagnosis	5
ICPC	Diagnosis	4
ICD9-CM	Diagnosis	4
<i>DIACOM</i>	<i>Medical images</i>	<i>13</i>
LOINC	Lab tests	13
WHO ATC	Medications	12
ICD-9 (CM)	Surgical procedures	6
SNOMED	Surgical procedures	4



OECD Reviews of Health Care Quality

- Published: Korea, Israel, Denmark, Sweden, Turkey
- 2014: Czech Republic, Norway, Italy, Australia, Japan
- Further interest from several additional countries
- Final report after completion of reviews



Structure

- **Assessment and Recommendations**
 - analysing instructive differences in approach or outcomes across the four countries, strengths and weaknesses in their approach compared to each other and to other OECD countries, and opportunities for strengthening
- **“Core chapter”** reviewing national health care quality indicators, policies & governance structures
 - **Legal framework and governance** , incl. patient safety and medical malpractice
 - **Inputs** : credentialling of workers, accreditation of facilities, licensing of drugs and devices
 - **Processes**: guidelines, pathways and incentives
 - **Information infrastructure**: indicators, data linkage, data transparency
 - **Public reporting and citizen participation**
- **Three topic chapters** chosen by the country

Since May 2013:

- **Norway**
 - primary care, mental health care, intermediate care
- **Czech Republic**
 - data infrastructure, preventive health care, diabetes and metabolic syndrome
- **Italy**
 - primary care, workforce and professional development, devolved governance in a federal system
- **Australia**
 - primary care, application of national standards, rural and remote health care

Strong emergent themes:

- **Primary and community care services**
 - asked to do more but often 'flying blind'
- **Integrated and co-ordinated care**
 - much discussed but yet to deliver much benefit for patients and their families
- **Data infrastructure**
 - likely to be the next frontier for sizeable quality gains
- **Governance**
 - central authorities playing an increasingly prominent role

Cooperation OECD with EU working group on patient safety and quality of care

- Measurement
- Information Systems
- Policies and Governance

More information

www.oecd.org/health/health-systems/cancer-care.htm

www.oecd.org/health/healthataglance

www.oecd.org/els/health-systems/oecdhealthdata.htm



Comments / questions