



# QUALITÀ DEL SERVIZI SANITARI

Francesca Colombo  
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## Di cosa vorrei parlare oggi...

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- Progetto sugli indicatori qualità
- Studi analitici su cancro e CVD
- Studi paese sulla qualità
  - Le prossime ‘slides’ in inglese



# MEASURING QUALITY



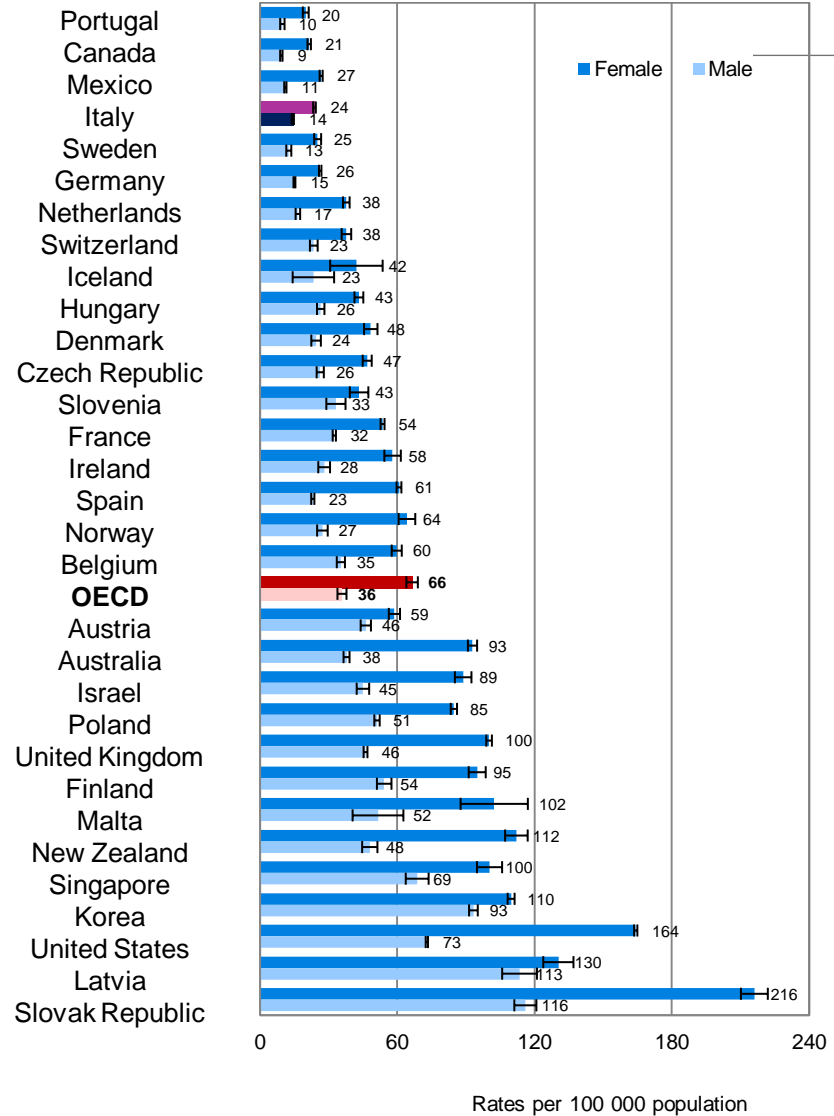
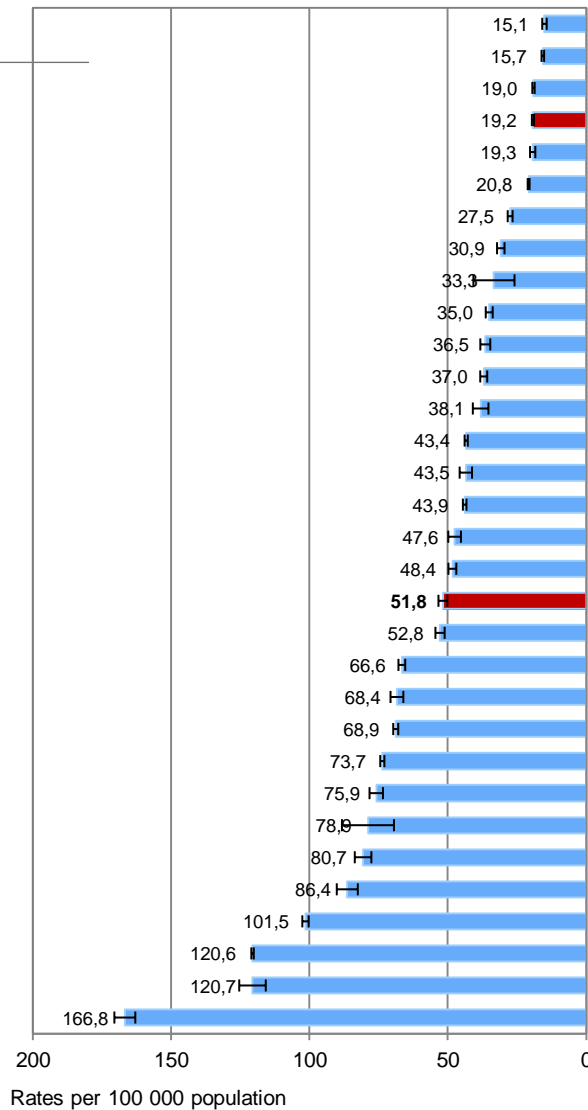
## Indicator areas

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1. Primary Care: hospital admissions for chronic conditions
2. Acute Care: 30-day case fatality rates after hospital admission for AMI and stroke
3. Mental Health Care: re-admission rates
4. Cancer Care: survival, mortality and screening rates
5. Patient Safety Indicators
6. Patient Experiences
7. Infectious diseases (vaccination rates)



# 1. Asthma hospital admission rates, population aged 15 and over, 2009 (or nearest year)

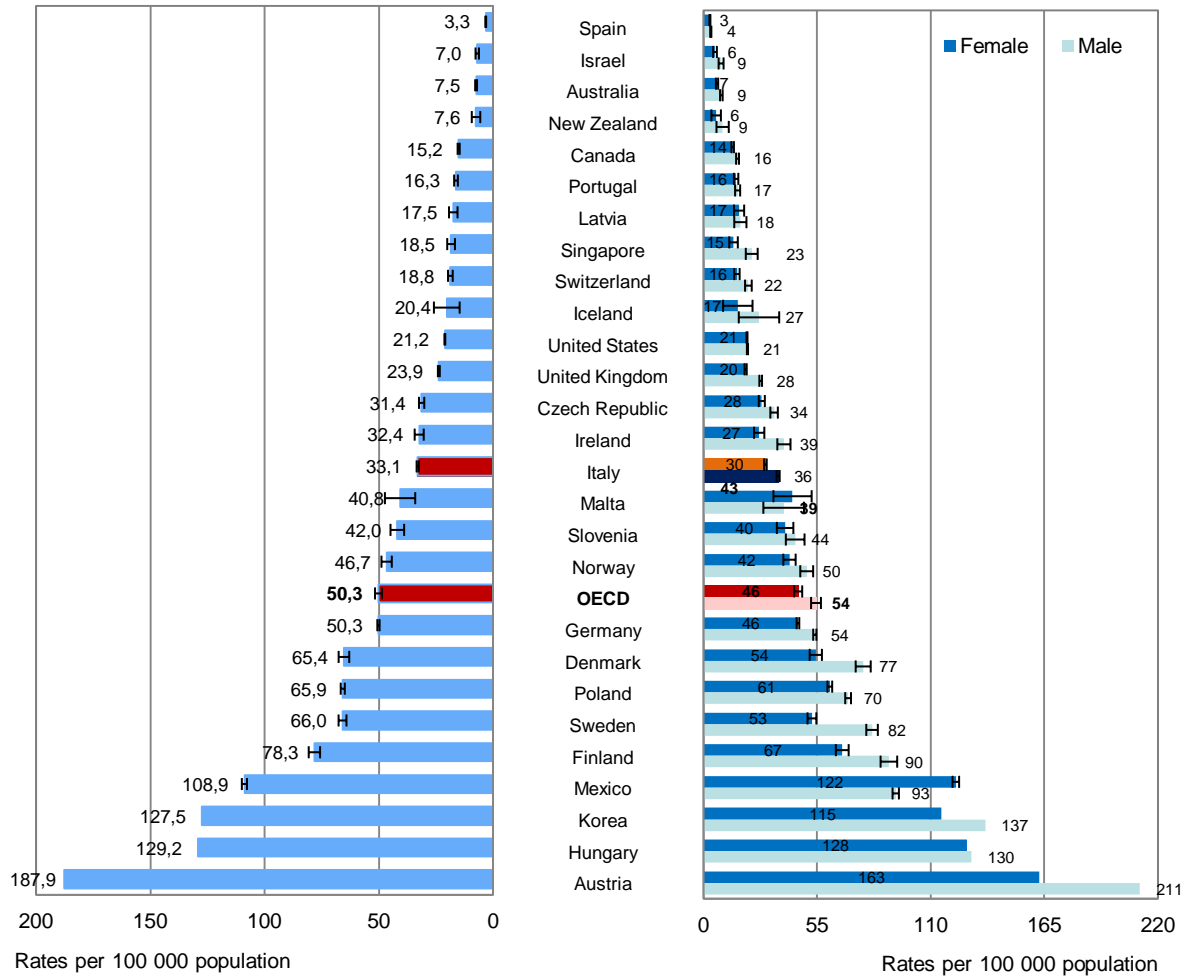


Note: Rates are age-sex standardised to 2005 OECD population. 95% confidence intervals are represented by H.

Source: OECD Health Data 2011.



# 1. Uncontrolled diabetes hospital admission rates, population aged 15 and over, 2009 (or nearest year)



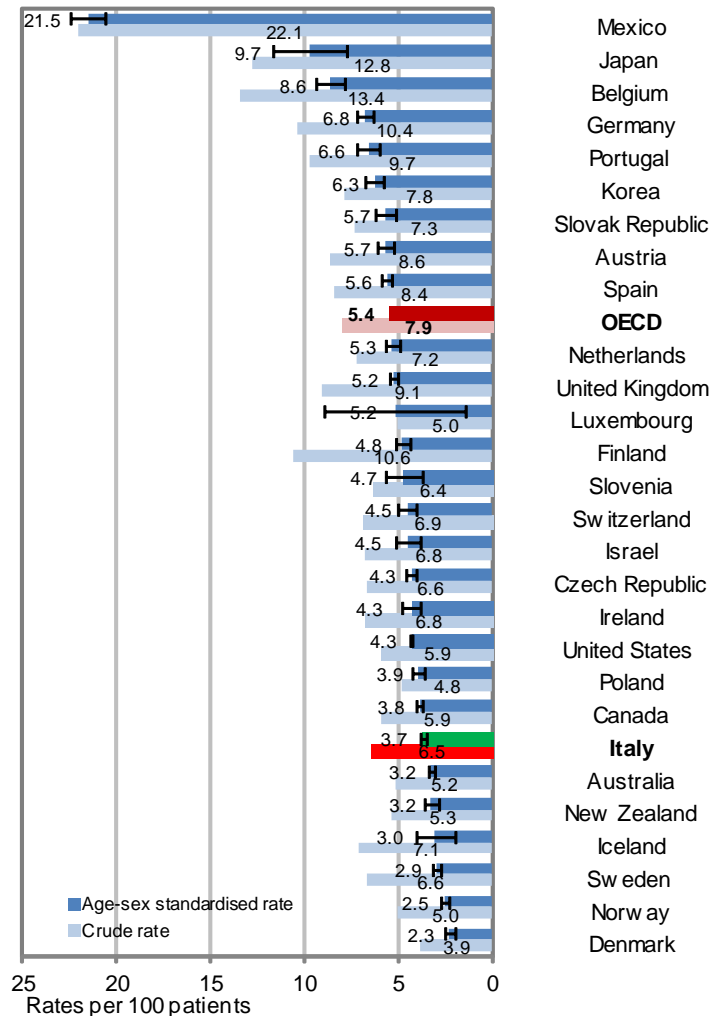
Note: Rates are age-sex standardised to 2005 OECD population. 95% confidence intervals are represented by H.  
 Source: OECD Health Data 2011.



## 2. Hospital quality of care indicators: finding better indicators than mortality

### Case fatality rates within 30 days after admission for AMI, 2009 (or nearest)

#### Admission-based rates (same hospital)

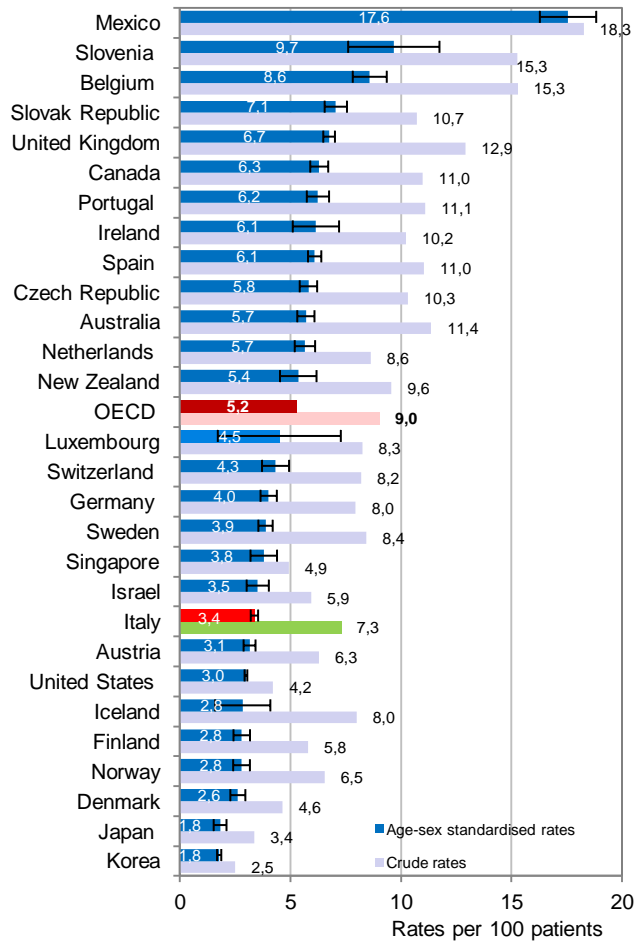


Note: Rates age-sex standardised to 2005 OECD population (45+). 95% confidence intervals represented by H.

Source: OECD Health Data 2011.

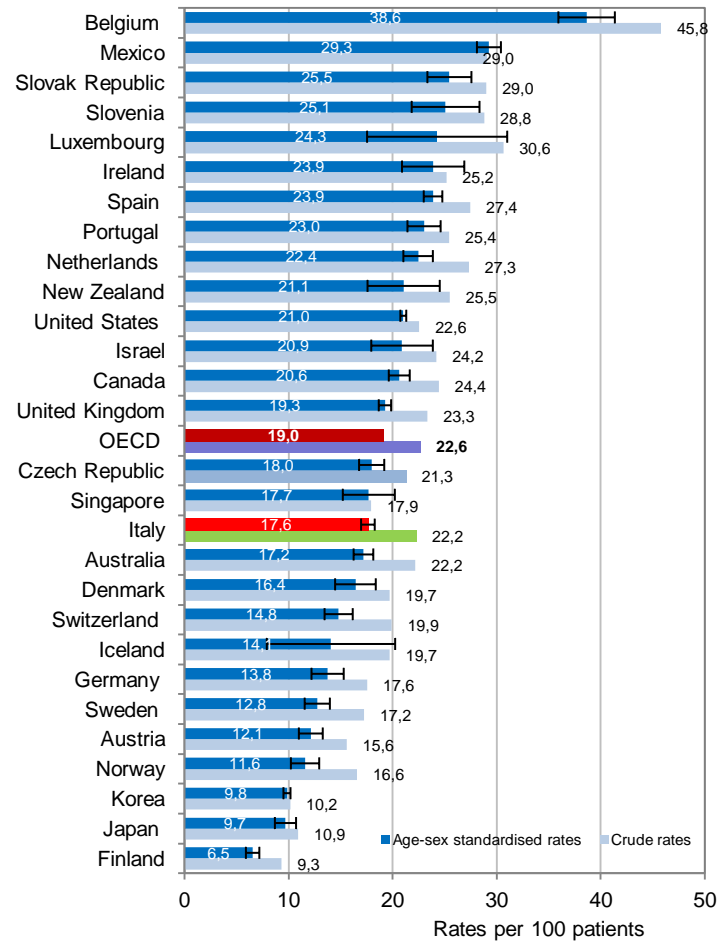


## 2. In-hospital case-fatality rates within 30 days after admission for ischemic and hemorrhagic stroke, 2009 (or nearest year)



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

Source: OECD Health Data 2011



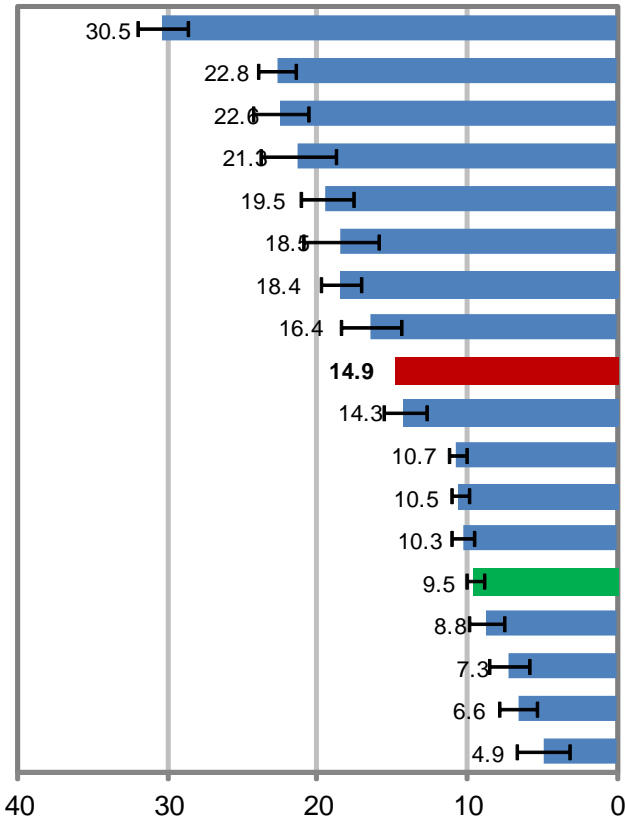
Note: Rates age-sex standardised to 2005 OECD population (45+). 95% confidence intervals represented by H.

Source: OECD Health Data 2011.

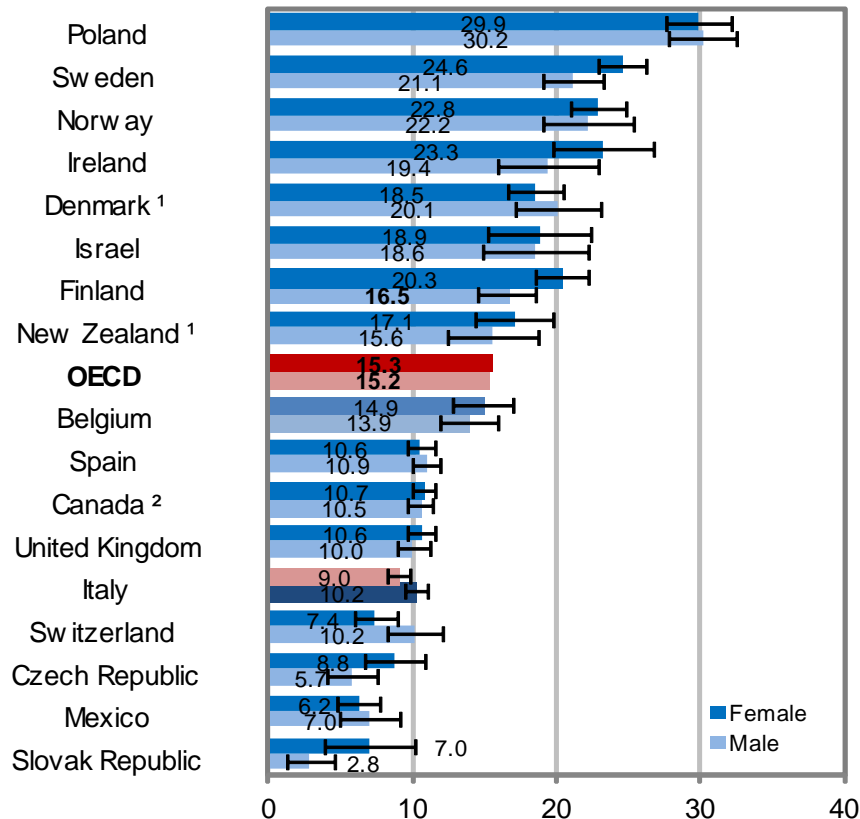




# 3. Bipolar disorder re-admissions to the same hospital, 2009 (or nearest year)



Rates per 100 patients



Rates per 100 patients

Rates age-sex standardised to 2005 OECD population. 95% confidence intervals represented by H.

1. Data do not include patients with secondary diagnosis of schizophrenia and bipolar disorder.
2. Only readmissions within 30 days of the initial hospitalization were counted as readmissions.

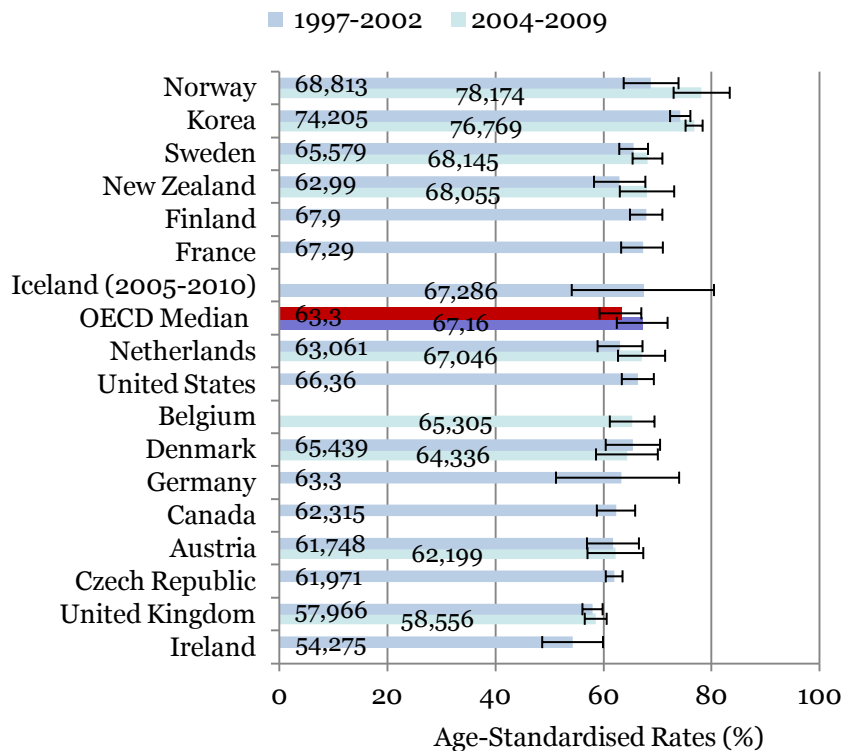
Source: OECD Health Data 2011.



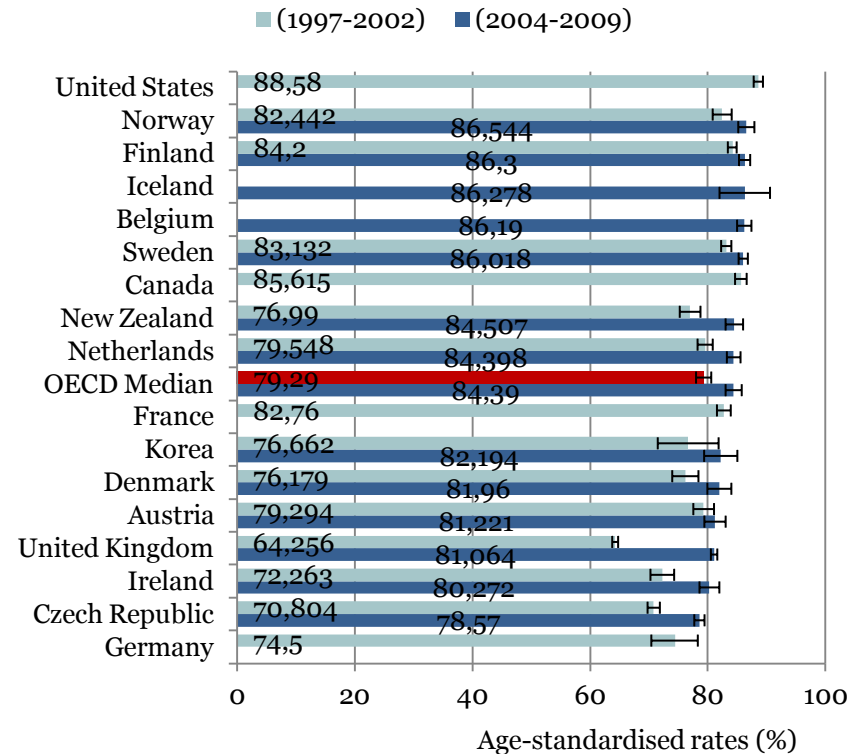
# 4. Cancer survival

Better indicator than mortality to measure effects of health system  
Five-year relative survival rates

## Cervical cancer



## Breast cancer

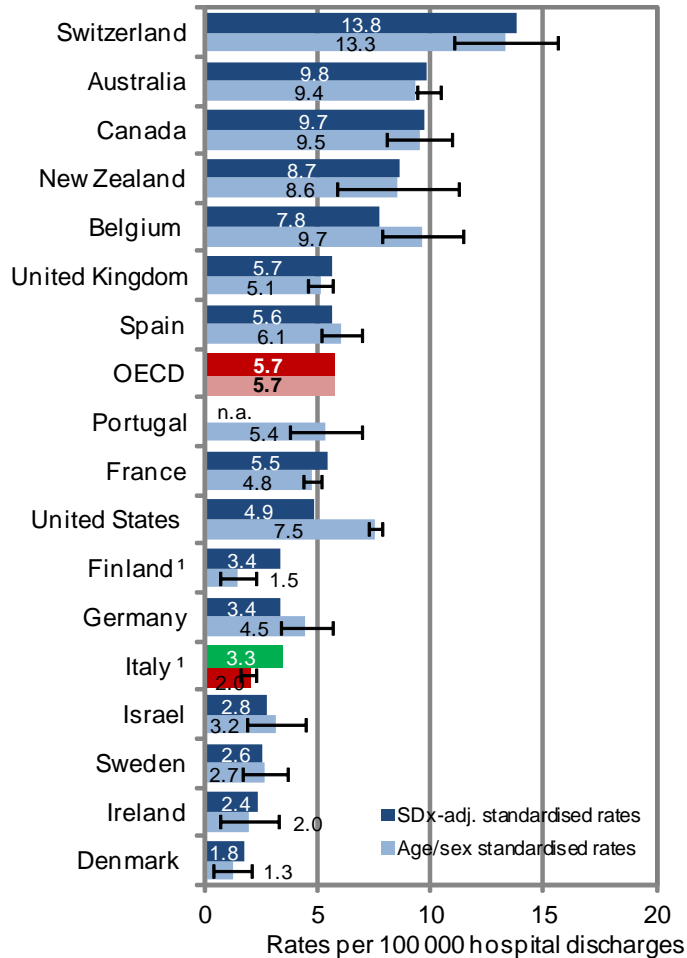


Note: Survival rates are age-standardised to the International Cancer Survival Standards Population.  
Source: *OECD Health Care Quality Indicators Data 2011*.



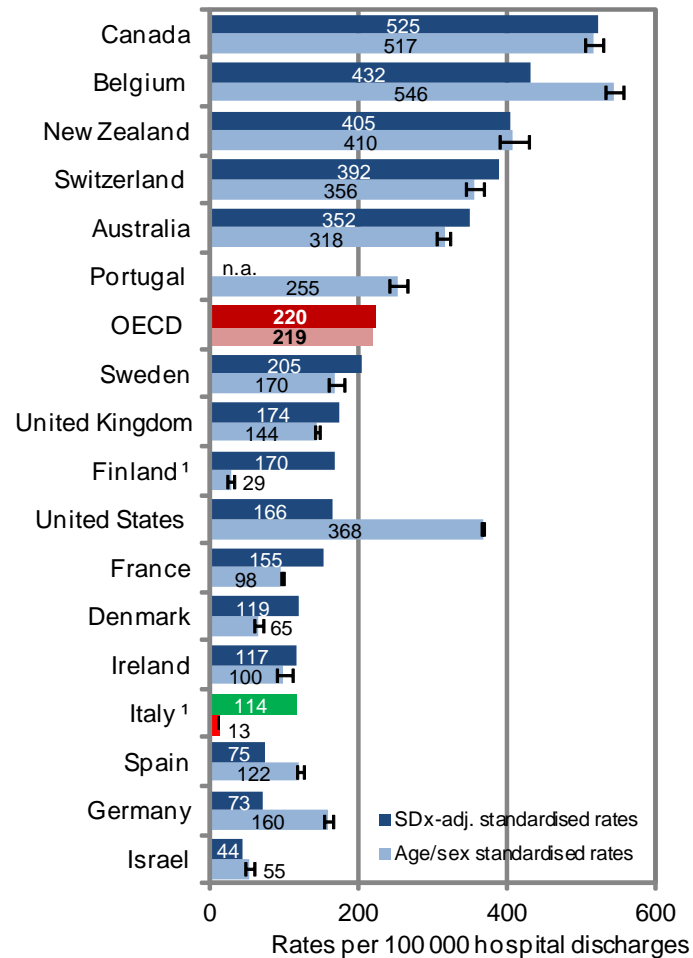
# 5. Patient safety

**Foreign body left in during procedure, 2009 (or nearest year)**



1. The average number of secondary diagnoses is < 1.5  
 Source: OECD Health Data 2011.

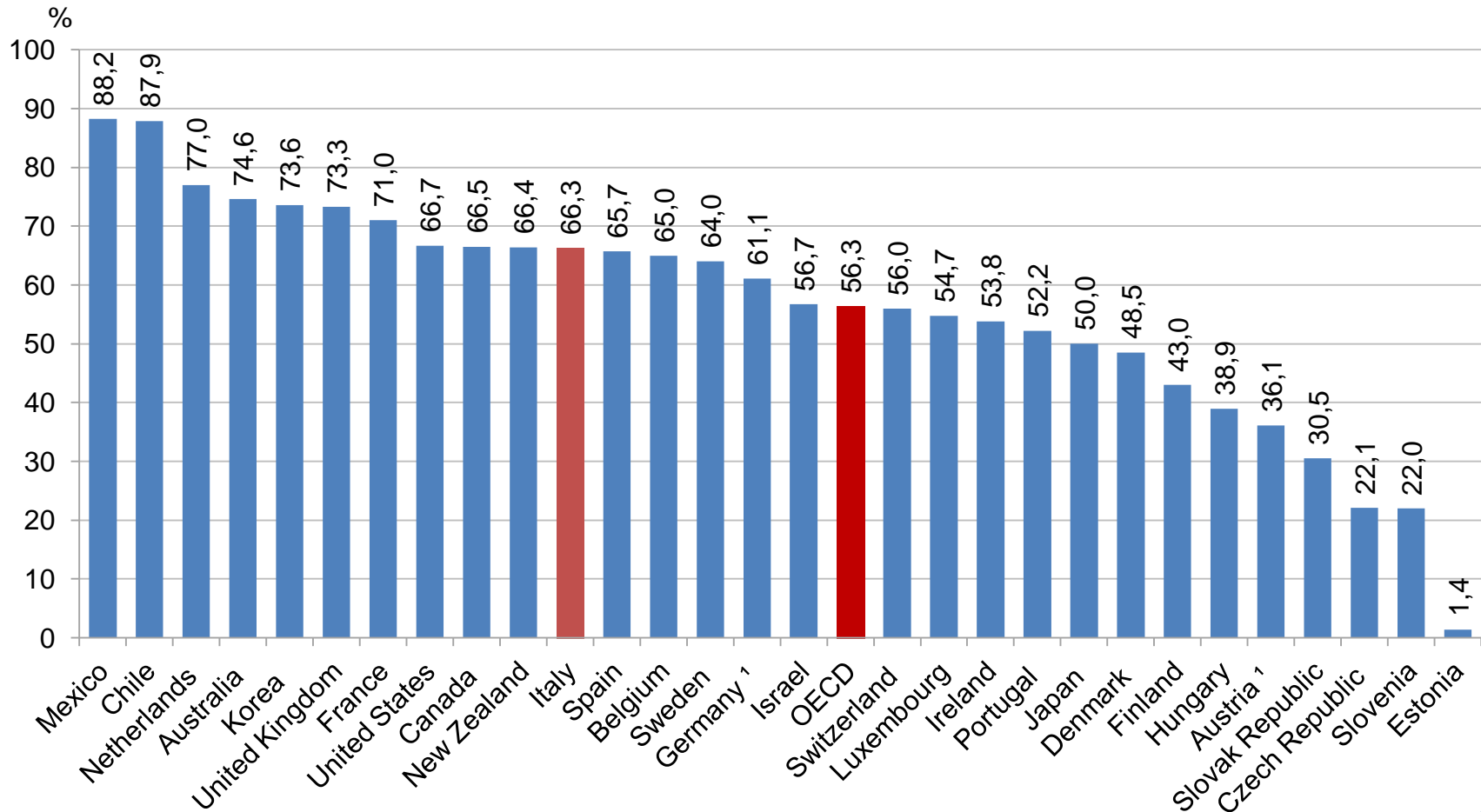
**Accidental puncture or laceration, 2009 (or nearest year)**



1. The average number of secondary diagnoses is < 1.5  
 Source: OECD Health Data 2011.



# 7. Elderly vaccination



1. Population aged 60 and over.

Source: OECD Health Data 2011.



# Quality of care in Italy seems relatively good, but do we have the full picture?

	Position relative to average of selected OECD countries
Avoidable admission rates for respiratory diseases and diabetes	Better
In-hospital mortality following acute myocardial infarction and stroke	Better
Obstetric trauma	Better
Procedural or postoperative complications	Better
Hospital readmission for mental disorders	Better
Lung, colorectal cancer survival	Average
Measles vaccination rate	Worse
Older people vaccination for influenza	Better



# Strengthening national information infrastructures matters to quality

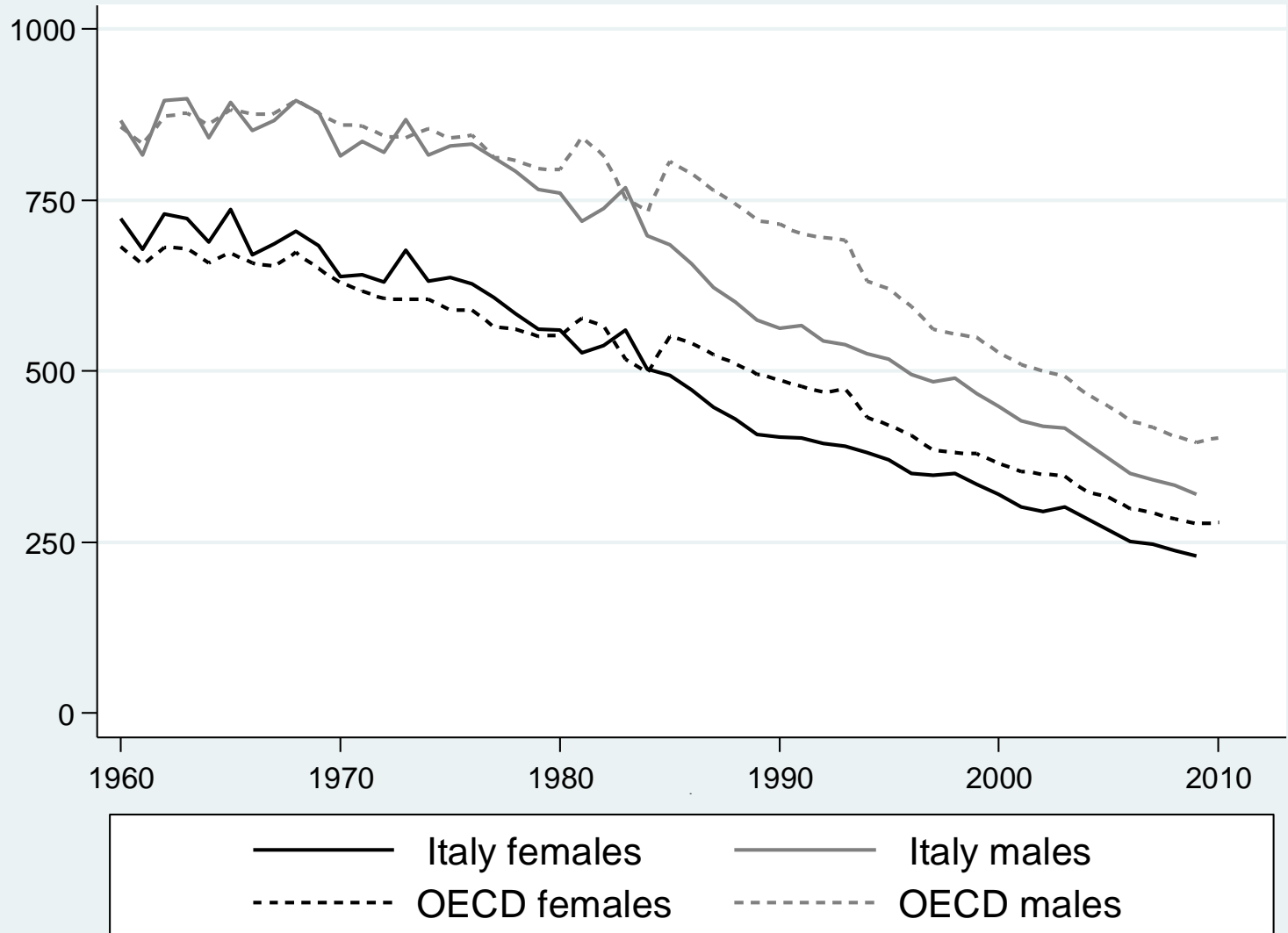
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- National information infrastructure is improving:
  - Data sources are varied (Death statistics, Registries (like cancer), Administrative Data-bases, Record keeping, Surveys)
  - National databases with individual-level records are available
- A difficult balance between patient protection and advancing quality/research
  - Half of OECD countries have regular data linkage studies
  - A few have the legal framework to allow linkage with historical population databases without patient consent
  - Need to reduce unnecessary barriers to data use
- Data sharing mechanisms essential where multiple data custodians/decentralised systems exist



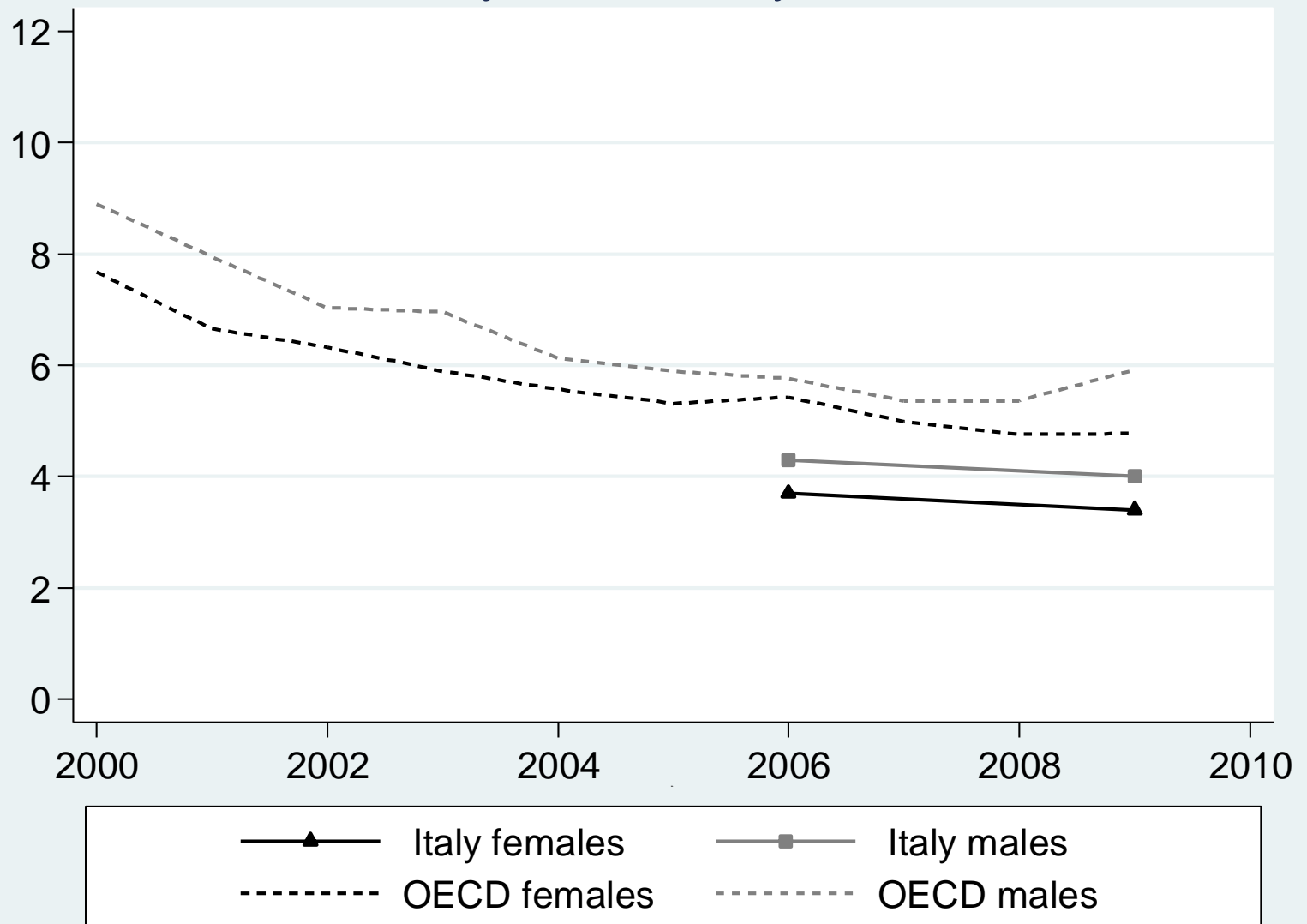
# STUDI ANALITICI: CVD AND CANCER

# Mortality rate - circulatory diseases



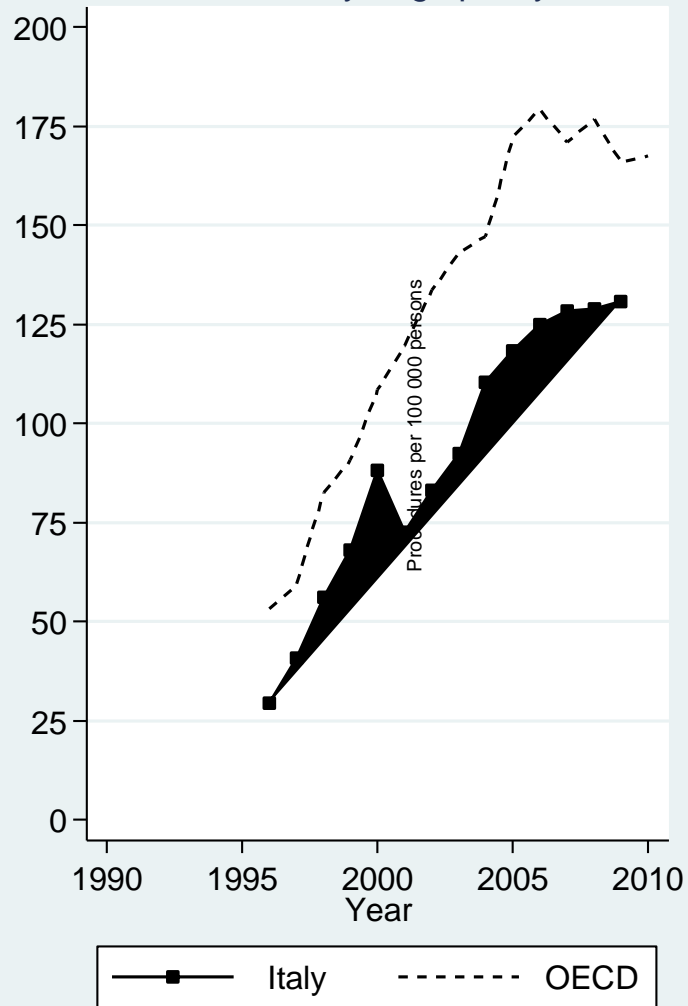


## 30-day case-fatality rate AMI

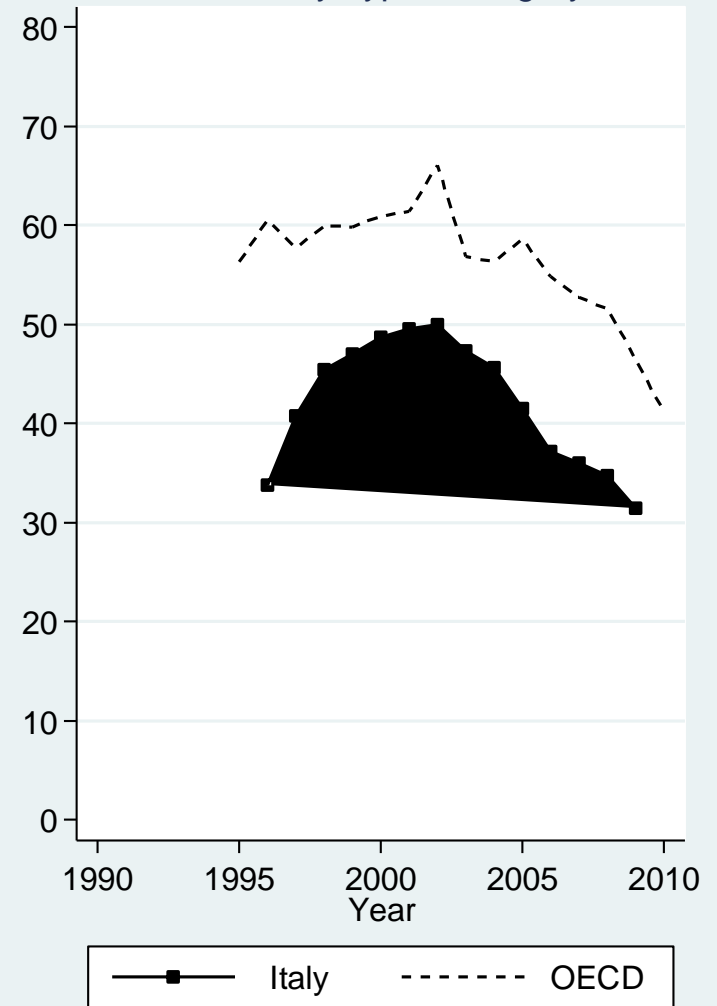


# Coronary procedures

## Coronary angioplasty



## Coronary bypass surgery





# OECD project cardiovascular disease and diabetes

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- Analysis on:
  - how countries compare in their ability to reduce the health burden from CVD and diabetes.
  - explain the role of the health system characteristics and resources in reducing CVD mortality
- Using:
  - longitudinal OECD Health Data
  - survey on health system characteristics
  - survey on CVD care access, quality initiatives and resources
  - use econometric techniques to explain cross-country trends in cardiovascular/diabetes outcomes over time.
- Work has commenced and is due to be completed in 2014



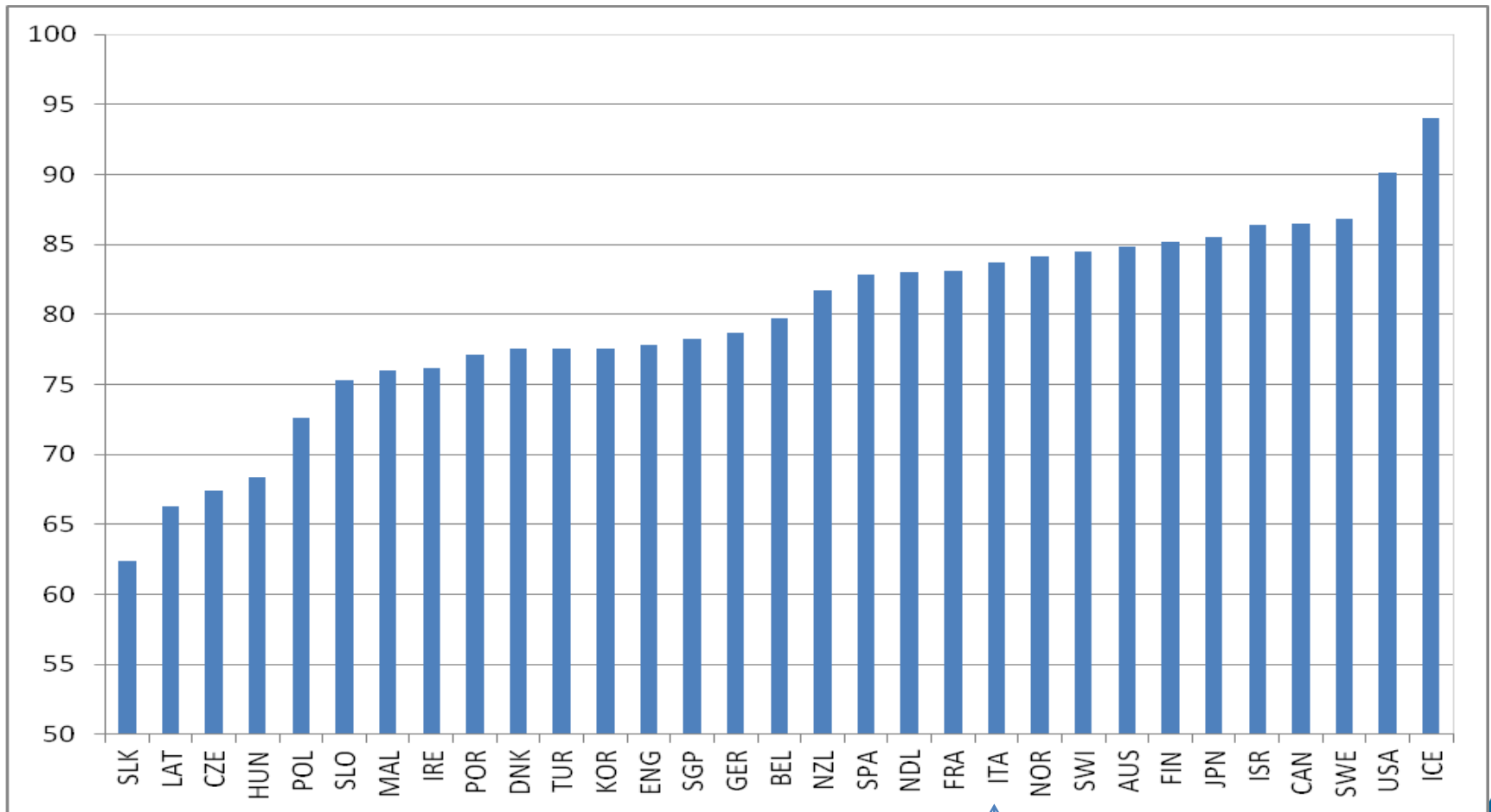
# Cancer

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- One of the major public health issues in OECD countries.
  - 5 million new cases per year in the OECD
  - ‘either the first or the second cause of death (after cardiovascular disease), accounting for more than a quarter of all deaths in many countries,
  - at least one-third of cancer can be prevented and
  - a further third can be either detected early or effectively treated.
  - 5% of total health spending
- Cancer survival varies across countries, and so do organisation of cancer care.

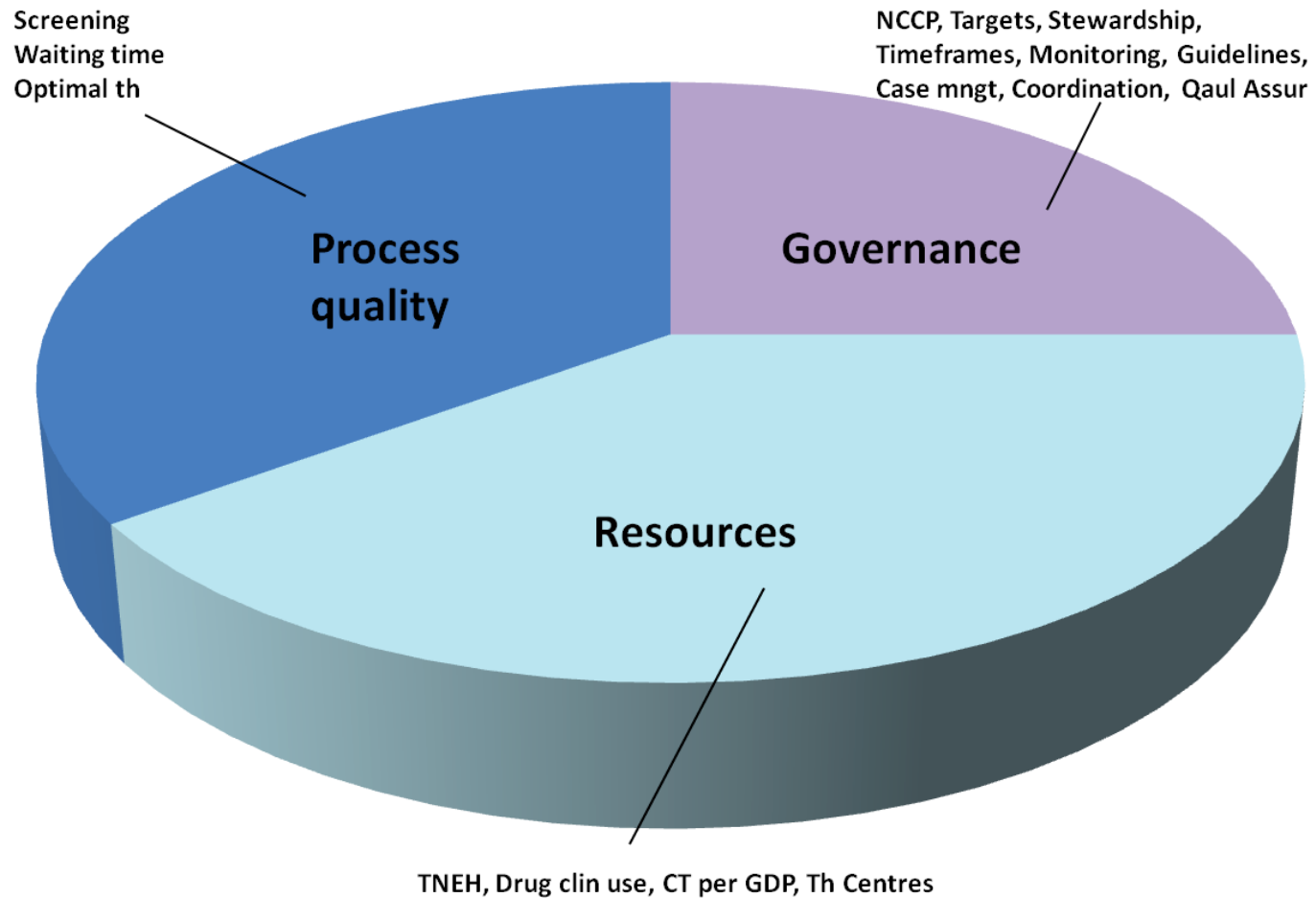


# Large variability in five-year relative survival of patients diagnosed with breast cancer (%) in 2000-2002





# Results





## Resources for cancer care

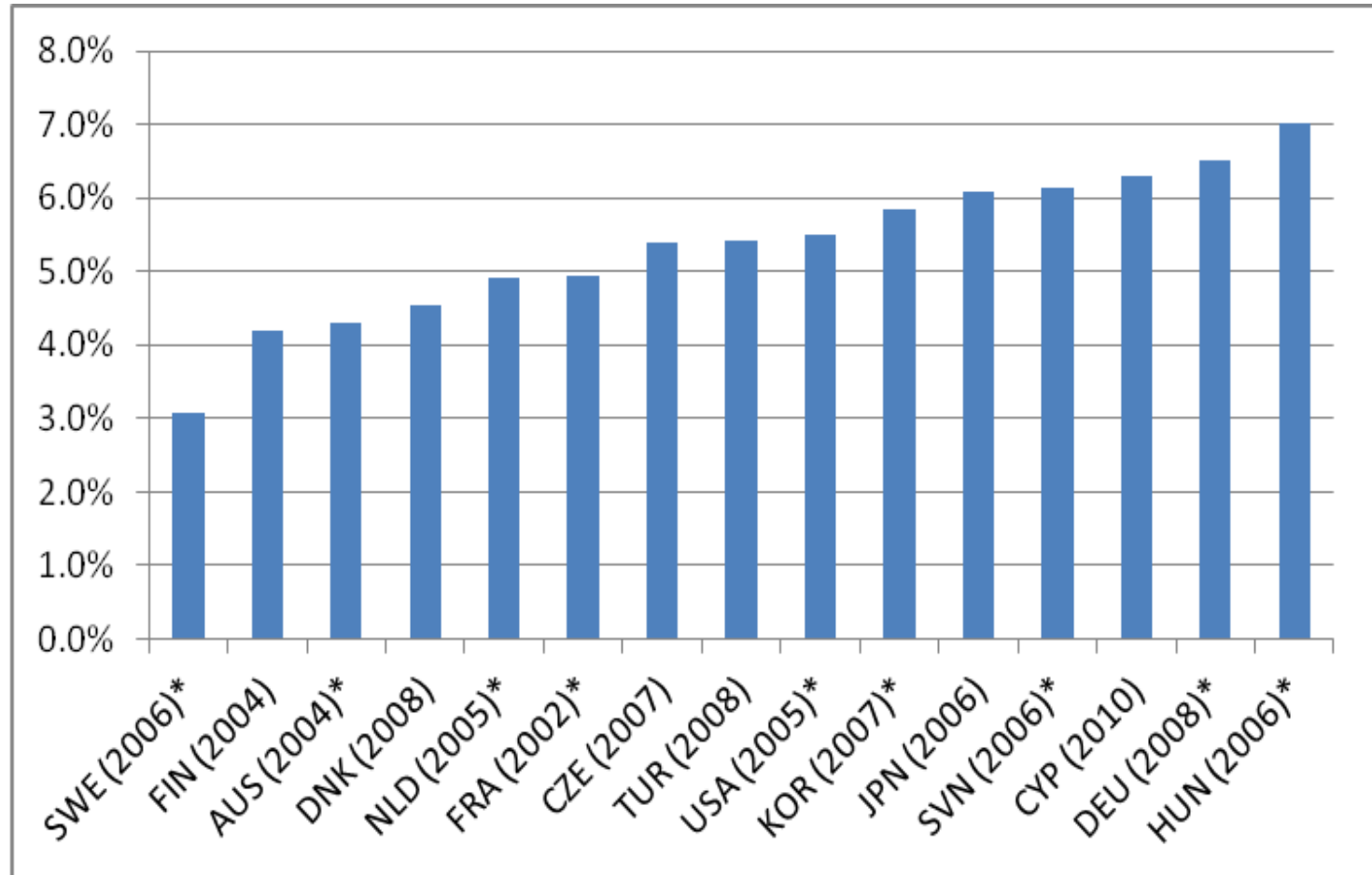
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- Almost a half of differences in cancer survival may be explained by the available resources.
- Key explanatory variables:
  - **financing** (total national expenditure on health),
  - investment in **new cancer drugs**, (clinical use of 10 selected drugs)
  - investment in **technology** (CT scanners/1M/GDP),
  - existing **infrastructure** resources (comprehensive cancer centres/1M).



## Expenditure on cancer care - cont.

Spending on cancer care as the proportion of total health expenditure

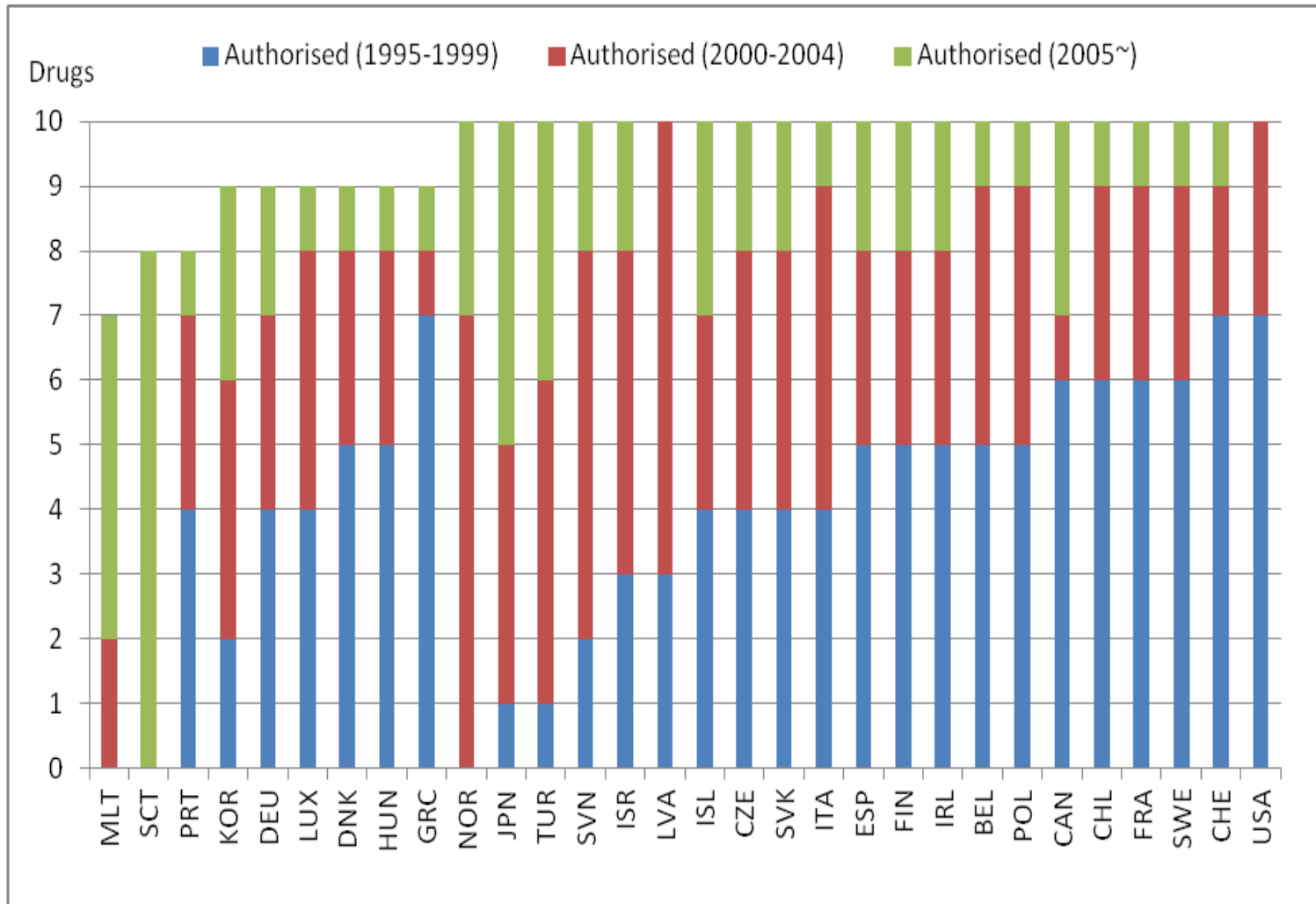






# Innovative cancer drugs

## Years of authorisation for 10 selected drugs





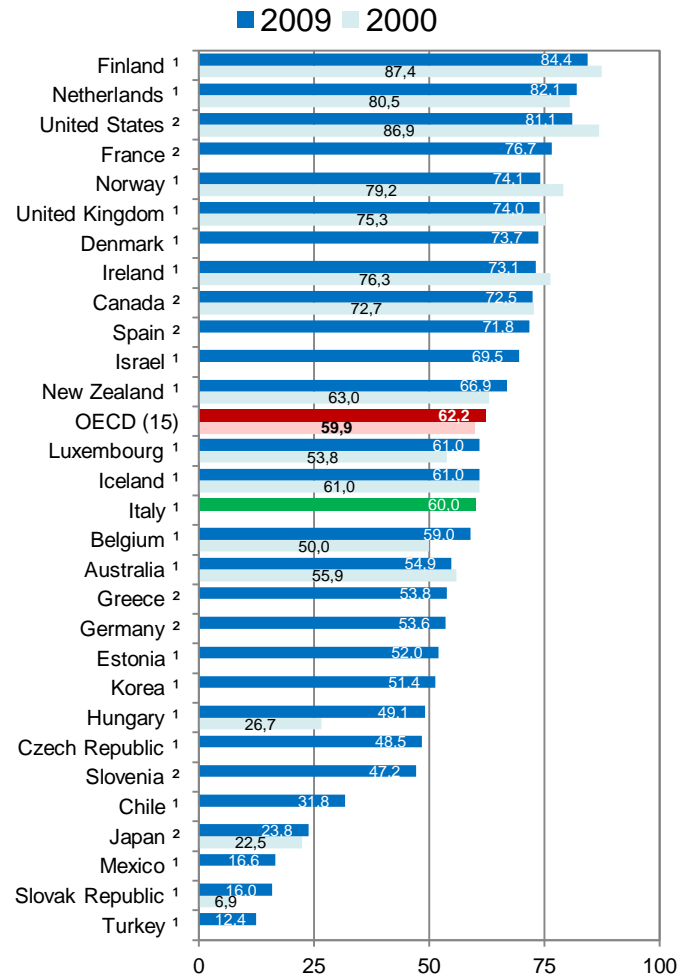
## Process quality of the delivery

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- Process quality of the delivery of cancer care may explain approximately one third of differences in cancer survival.
- The key explanatory variables:
  - **early detection** through a screening programme (**national rollout**, nationwide coverage, interval),
  - easy **access** to cancer services (waiting time from diagnosis to initial treatment),
  - provision of **optimal treatment** (combined surgery, radiotherapy, chemotherapy).



# Practive: Mammography screening, percentage of women aged 50- 69 screened, 2000 to 2009 (or nearest year)



1. Programme. 2. Survey.

Source: OECD Health Data 2011.



# Waiting time

Average waiting time between cancer diagnosis and initial treatment, latest year available

Country	Breast cancer	Cervical cancer	Colorectal cancer	Lung cancer	All cancers
Canada	30 days (Median)	20 days (Median)	21 days (Median)	29 days (Median)	25 days (Median)
Czech Republic*	weeks not months	weeks not months	weeks not months	weeks not months	weeks not months
France	26 days	-	-	20 days	-
Germany	7 days	7-14 days	7-14 days	7-14 days	7-14 days
Iceland*	1-4 days	1-4 days	1-4 days	1-4 days	1-4 days
Israel	Radiotherapy: 15-45 days	Radiotherapy: 15-45 days	Radiotherapy: 15-45 days	Radiotherapy: 15-45 days	Radiotherapy: 15-45 days
Japan*	same day-weeks	same day-weeks	same day-weeks	same day-weeks	same day-weeks
Korea	31.1 days	19.2 days	51.3 days	38.7 days	48.7 days
Luxembourg*	< 3 days	< 3 days	< 3 days	< 3 days	< 3 days
Latvia	30 days (Median)	30 days	30 days	30 days	30 days
Malta*	weeks not months	weeks not months	weeks not months	weeks not months	weeks not months
Netherlands	25 days	15 days	10-50 days (up to 1st treatment for rectum or colon cancers)	21 days	approx. 40 days
Norway*	2-4 weeks	-	-	-	-
Poland	3-12 weeks	3-6 weeks	4-8 weeks	4-6 weeks	4-6 weeks
Scotland	24 days	-	23 days	25 days	-
Slovak Republic	7-21 days	7-21 days	7-21 days	7-21 days	7-21 days
Slovenia*	3-6 months	3-6 months	2 months	2 months	-
Sweden	19 days	weeks not months	weeks not months	weeks not months	weeks not months



## Governance

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- Approximately one quarter of differences in cancer survival may be explained by governance.
- Key explanatory variables:
  - **NCCP** fully implemented, or
  - **cancer specific targets,**
  - **stewardship,**
  - **timeframes,**
  - **monitoring,**
  - **guidelines,**
  - **case management,**
  - **coordination,**
  - **quality assurance.**

# National Cancer Control Plan

National Cancer Control Plans and national health policies with a focus on cancer care, introduction years

1996	AUS	KOR	ISR	AUS																
1997																				
1998	NOR																			
1999																				
2000	ENG	IRL	LUX	CHL	SVN															
2001	DNK	PRT	ISL	SVK																
2002																				
2003	FRA	KOR	ESP	HUN																
2004	CZE	JPN	NLD	PRT																
2005	DNK	HUN	POL	ISR																
2006	ITA	NOR	ESP																	
2007	CAN	DNK	ENG	EST	IRL	POL	PRT	ISL												
2008	BEL	DEU	SCT	LUX																
2009	LVA	ESP	SWE	TUR																
2010	MLT	SVN																		

National cancer control plans/strategies  
 Specific cancer policies  
 National



## Closing remarks

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- Higher performers focus mainly on good **governance** and **resource** input.
- “Underperformers” countries exhibit issues evenly in the areas of **governance** and **process quality**.
- Governance of cancer control is likely to be of relevance to all countries: **better-performers** have cancer policy priorities, implemented key elements of cancer control, introduced integrated care processes and actively worked on the delivery of cancer services.



# HEALTH CARE QUALITY REVIEWS





# Quality of care reviews

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- What works and does not work in improving quality.
- Key objectives :
  - Benchmarking country efforts on quality policies
  - Providing advice on reforms to improve quality of care
  - Highlighting best practice policies
- Review countries: South Korea, Israel, Denmark, Sweden, Turkey, Czech Republic, Italy, Australia (England under discussion)
- Plan to produce a final report of lessons learnt.



# All reviews have a chapter covering policies to monitor and improve quality

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- Legal frameworks on quality of care (professionals, technologies, patients)
- Inputs
  - Professional certification/licensing and re-certification
  - Accreditation and quality assessment for health care organisations
  - Quality and safety of devices and pharmaceuticals
- Monitoring and standardisation
  - National audit studies
  - (national) practice guidelines
  - (national) performance reports on quality of care
  - Quality Indicators
  - Systematic measurement of patient experiences
  - Public reporting of performance
- Improvement
  - Quality systems within organisations
  - Financial incentives for quality
  - Clinical pathways within and between services
  - National patient safety programmes
  - National quality improvement programme



# Quality Reviews: Key topics

	<b>Korea</b>	<b>Israel</b>
<b>Strengths and challenges</b>	<ul style="list-style-type: none"><li>• Fastest increase in health expenditure amongst OECD</li><li>• Acute-centric hospital system</li><li>• World leading health IT infrastructure</li></ul>	<ul style="list-style-type: none"><li>• Strong community care system</li><li>• Inequalities between regional and ethnic groups</li><li>• Quality shortfalls in the hospitals sector</li></ul>
<b>Topics of focus</b>	<ul style="list-style-type: none"><li>• Financing reform to deliver more appropriate hospital services</li><li>• Strengthening primary care</li><li>• The quality of cardiovascular care</li></ul>	<ul style="list-style-type: none"><li>• Primary and community care</li><li>• Tackling health inequalities</li><li>• The quality of care for diabetes and care coordination</li></ul>



# No country performs better on all measure of primary care quality

Indicators of quality of primary care:

	Asthma hospital admission rates	COPD hospital admission rates	Uncontrolled diabetes hospital admission rates	Diabetes long- term complications admission rates	Congestive heart failure admission rates
Denmark	36.5	276.8	65.4	61.3	157.4
Israel	68.4	233.5	7.0	68.6	240.1
Korea	101.5	221.9	127.5	209.1	106.2
<b>OECD average</b>	<b>51.8</b>	<b>198.4</b>	<b>50.3</b>	<b>106.6</b>	<b>227.7</b>



## Primary care arrangements differ

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- Israel primary care characterised by community based services organised into multi-doctor clinics
- Denmark has well-established primary care professionals
- Korea: no primary care ‘system’ as in many other countries, patients access acute services easily



## But share common challenges

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- Attracting primary care physicians
- Embracing a new organisational model to respond to demographic pressures
  - Based on larger organisational units
  - With up-to date skills
  - With comprehensive information systems in primary care
  - With well developed quality initiatives in primary care
  - Delivering prevention and coordination

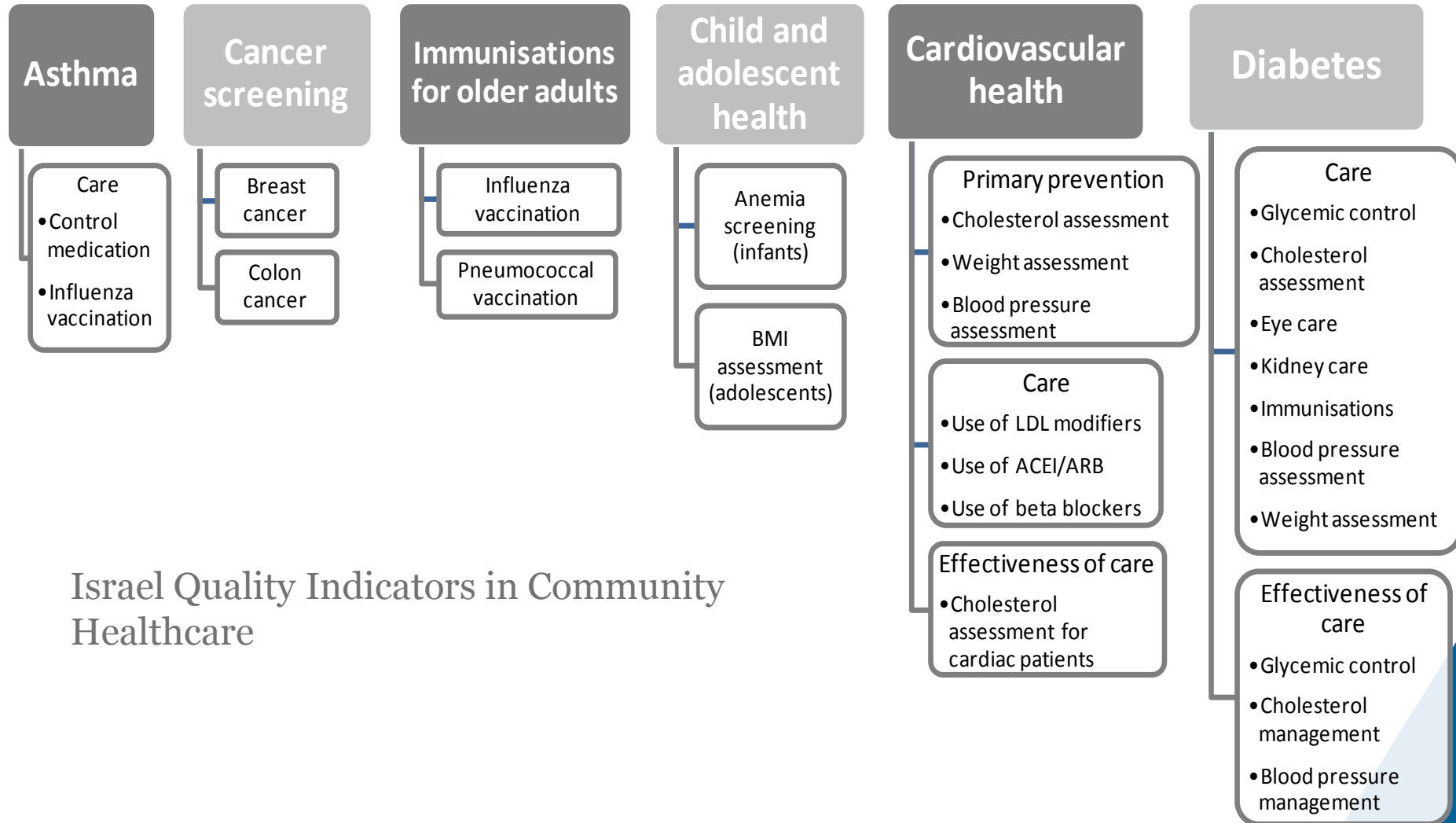


# Ready for this new practice model?

	<b>Denmark</b>	<b>Israel</b>	<b>Korea</b>
GP as a specialisation in doctors' training	YES, but supply of GPs below OECD average	YES, but a large share of GPs heading for retirement in Israel	YES but few doctors choose family medicine and financial incentives favour acute care
Size of practice	Mostly solo practice	3.4 general practitioners,	Mostly individually owned clinics,
Primary care doctor remuneration	FFS and capitation	Salary (Clalit), contracting and FFS health funds	Fee-for-Service
Out-of-office availability of doctors	Yes	Yes	Limited
Nurses in advance practice roles	No	Yes	Limited
Gatekeeping	Strong	Strong	Weak
Requirements for continuing medical education	No, but encouraged	No	Yes, not mandated



# Quality initiatives in primary care most developed in Israel



Israel Quality Indicators in Community Healthcare





## Few systematic initiatives around coordination across pathways of care

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- Separate budgets and FFS discourage collaboration and coordination
- Transfer of discharge summaries, diagnostic test and clinical observations still limited
- Few clinical guidelines for managing multiple chronic conditions and points of transitions
- Effectiveness of primary care coordinators roles to be evaluated
- Patient involvement in self-management could be improved



# Looking into the future: standardisation of practice and information

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- Korea could
  - expand IT infrastructure to primary care
  - monitor preventable admissions and readmission rates
- Israel could
  - Monitor other chronic conditions (e.g., mental health, COPD, heart failure) and co-morbidities
- Denmark could
  - Develop measures of effective and safe care around rehabilitation and LTC services delivered by municipalities
- All could develop clinical guidelines for primary care based on multi morbidities



To prepare health professionals for the future, the three countries could

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- Further encourage clinical training in PHC
- Denmark already encouraging multidisciplinary municipality health centres
- Formalise peer exchanges through quality circles or continuous medical education
- Extend competences of GPs and nurses to defined clinical area



THANK YOU!