



# GEOGRAPHIC VARIATIONS IN HEALTH CARE USE IN 13 OECD COUNTRIES

Divya Srivastava, OECD  
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# The OECD project on geographic variations in health care use

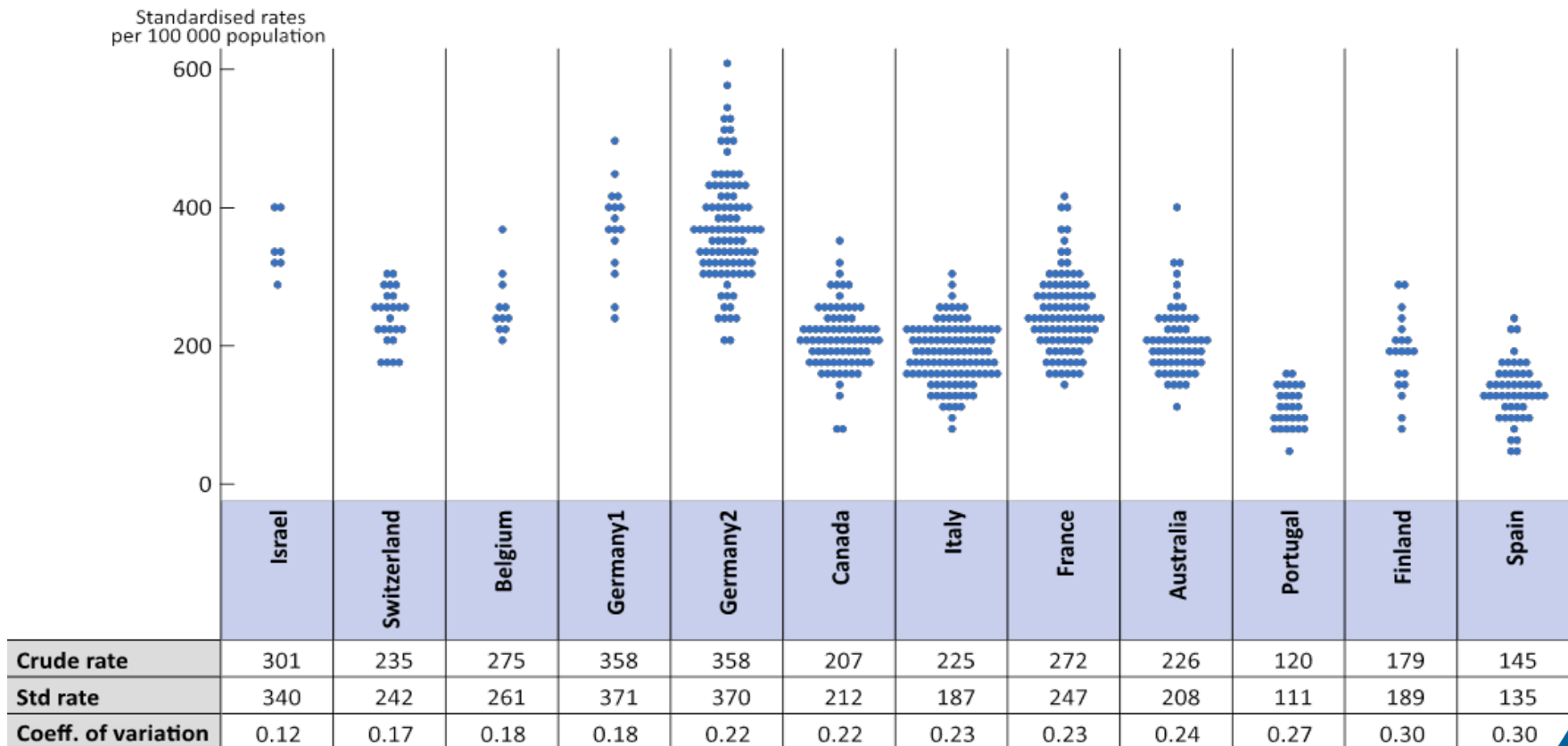
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- 13 OECD countries, providing available information for 7 to 150 geographic areas.
- 10 health care activities: hosp. medical admissions, cardiac bypass, angioplasty, angiography, hip and knee replacements, knee arthroscopy, C-section, hysterectomy, CT and MRI scan)
- Procedure rates standardised by age and sex to adjust for demographic differences and remove part of the differences in clinical need.



# Coronary angioplasty rates vary by more than 3-fold across countries and by up to 5-fold within countries

Angioplasty rates across and within a selected set of countries (2011 or latest year)



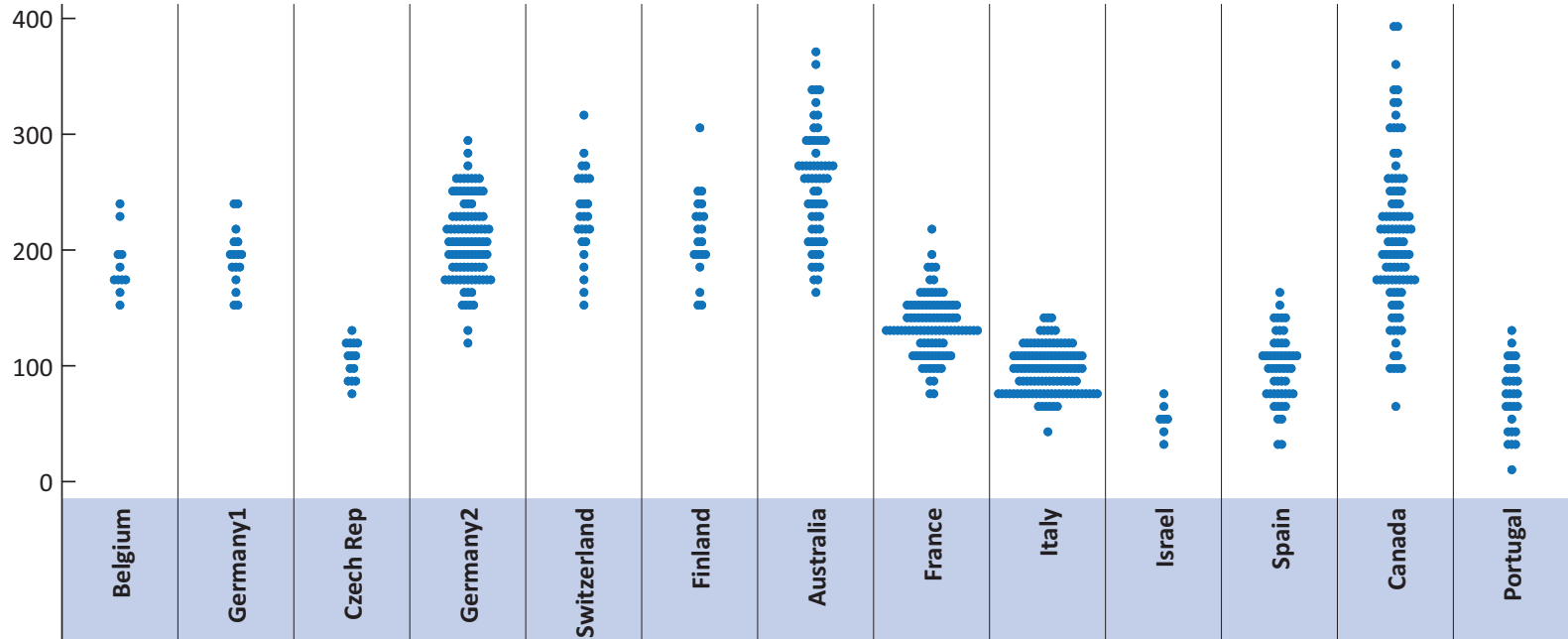
Source: OECD (2014), *Geographic variations in health care use in 13 OECD countries*



# Knee replacement rates vary by more than 4-fold across countries and by more to 5-fold within some countries

Knee replacement rates across and within a selected set of countries (2011 or latest year)

Standardised rates per 100 000 population



<b>Crude rate</b>	210	215	113	215	257	240	238	133	122	45	106	193	77
<b>Std rate</b>	186	194	105	209	230	213	257	135	96	56	98	213	74
<b>Coeff. of variation</b>	0.14	0.15	0.16	0.17	0.17	0.18	0.19	0.19	0.20	0.28	0.31	0.32	0.39

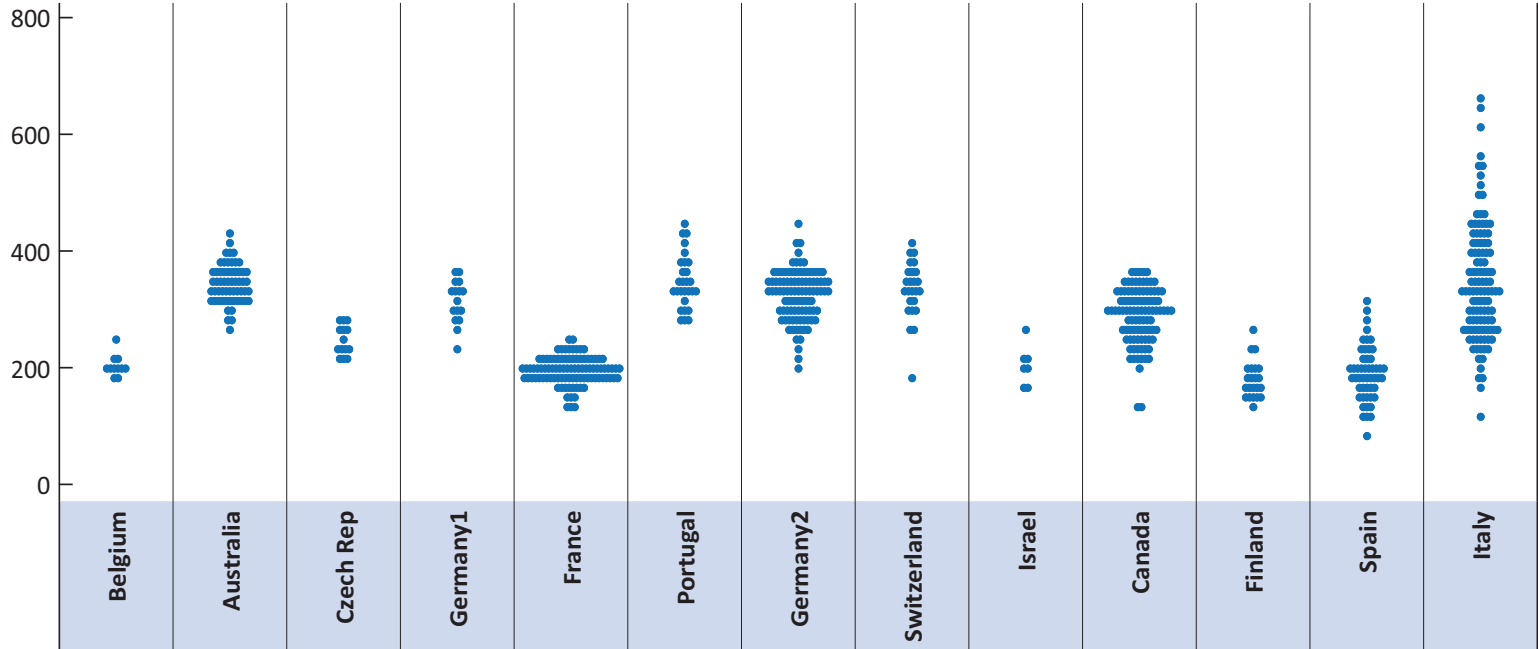
Source: OECD (2014), *Geographic variations in health care use in 13 OECD countries*



# C-sections are on the rise & display high variations across geographic areas in some countries

C-section rate across and within selected OECD countries (2011 or latest year)

Standardised rates  
per 1000 live births

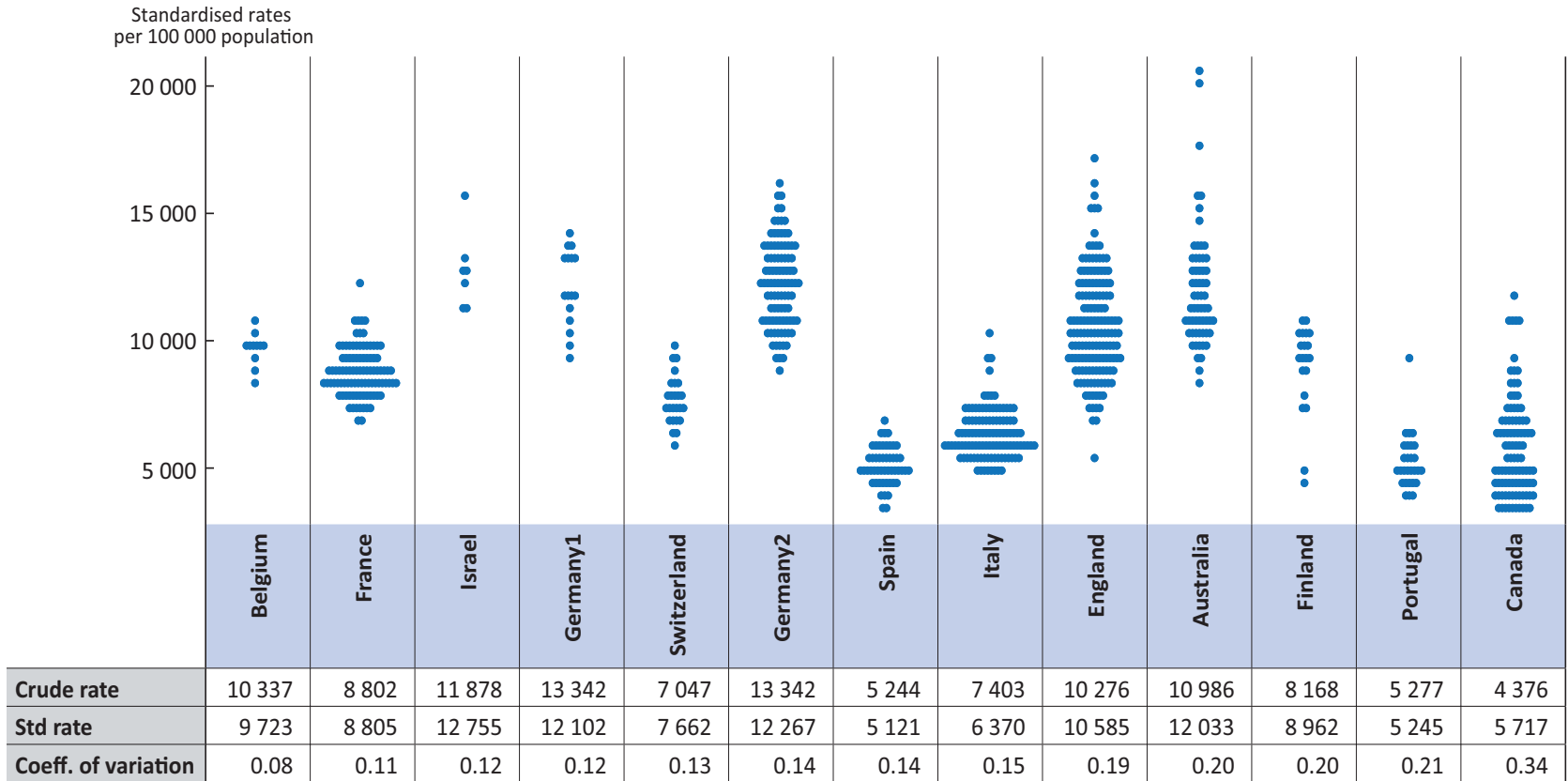


<b>Crude rate</b>	194	323	237	314	196	328	314	332	185	270	161	170	369
<b>Std rate</b>	206	343	243	311	194	349	324	332	207	292	181	189	346
<b>Coeff. of variation</b>	0.09	0.10	0.11	0.11	0.12	0.13	0.13	0.15	0.16	0.16	0.18	0.25	0.29



# Hospital medical admission rates vary by 2-fold or more across countries and within some countries

Hospital admission rates across and within selected OECD countries (2011 or latest year)



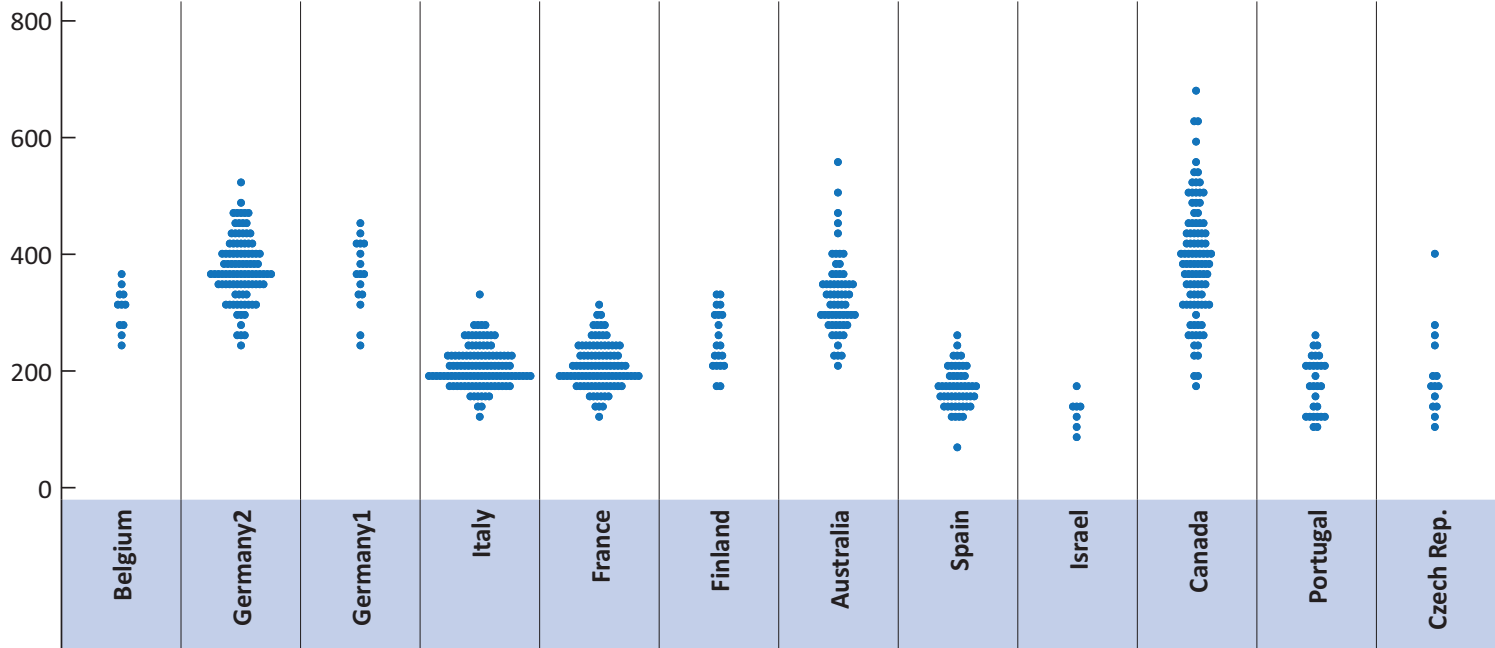
Source: OECD (2014), *Geographic variations in health care use in 13 OECD countries*



# Variations in hysterectomy rates are relatively high, in a context of declining use

Hysterectomy rates across and within a selected set of OECD countries (2011 or latest year)

Standardised rates  
per 100 000 females



<b>Crude rate</b>	324	330	330	228	170	227	310	162	106	341	162	177
<b>Std rate</b>	308	376	365	207	209	254	330	172	128	394	175	197
<b>Coeff. of variation</b>	0.13	0.14	0.16	0.17	0.18	0.20	0.20	0.21	0.23	0.27	0.27	0.39



## Variations in health care use do not always reflect patient needs or patient preferences

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- Revascularisation rates are not fully explained by clinical needs (Canada). With equal needs, people living in regions with low density, lower level of education and lower income (France) are less likely to receive revascularisation.
- Medical practice and socio-economic status of patients influence knee replacement rates.
- Hospital medical admissions rates are linked to bed density and to poor primary care access or quality.
- Physicians practice styles and delivery in private settings explain some of the variations in caesarean section rates.
- Hysterectomies are more frequent in women with low economic status, especially where physicians have greater discretion.

**Unwarranted variations in health care use question efficiency and equity of health systems and should be addressed.**

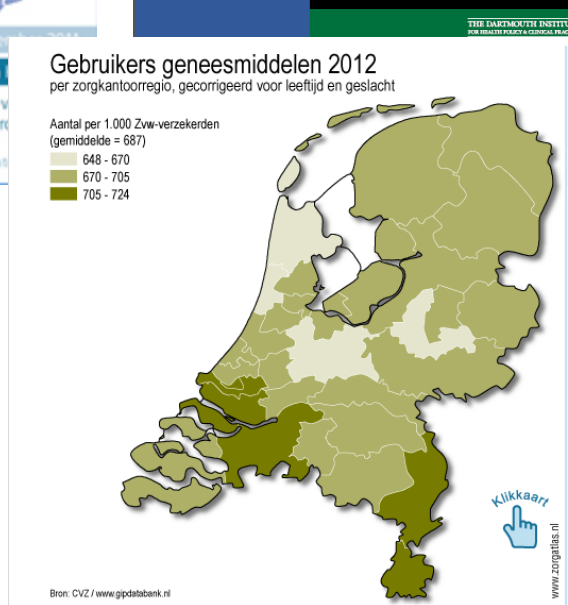




# WHAT CAN BE DONE TO IMPROVE PERFORMANCE OF HEALTH SYSTEMS



# Report on geographic variations in health care, stimulate debates





... but also

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- Set targets at the regional levels where appropriate;
- Provide feedback to providers on their practices;
- Try payment incentives;
- Measure and monitor patient outcomes;
- Provide adequate information to patients to help them express their preferences.



# For more information

Contacts:

[divya.srivastava@oecd.org](mailto:divya.srivastava@oecd.org)

OECD Health Policy Studies



## Geographic Variations in Health Care

WHAT DO WE KNOW AND WHAT CAN BE DONE  
TO IMPROVE HEALTH SYSTEM PERFORMANCE?



For more information on OECD  
activities on health:

[www.oecd.org/health](http://www.oecd.org/health)

<http://www.oecd.org/health/update>