

## High variation in diagnostic procedures is unexplained in Belgium

According to a new OECD report, variation in rates of health care activity across geographic areas in countries is a cause for concern. Wide variation suggests that whether or not you will receive a particular health service depends to a very great extent on where you live within a country.

Belgium shows low variations for most procedures in the OECD study. However, variations such as those documented in Table 1 suggest that unnecessary care is being delivered in areas of high activity, in particular for diagnostic tests. This raises questions about the efficiency of health care services delivered in Belgium.

**Table 1. Summary of results on geographic variations for selected health care procedures by province, Belgium, 2009**

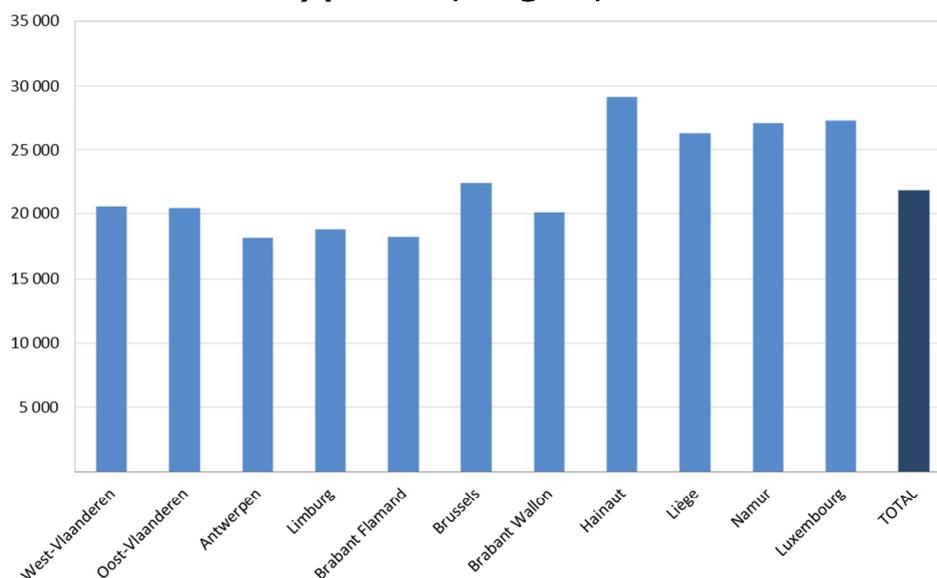
	Hospital medical admission	CABG	PTCA	Catheterisation	Surgery after hip fracture	Knee replacement	Knee arthroscopy	Caesarean section (per 1 000 deliveries)	Hysterectomy (per 100 000 female pop.)	MRI exams	CT exams
Unweighted average rate across provinces	10 305	93	283	831	93	206	460	194	317	6886	22582
Lowest rate	9 062	71	225	618	71	169	269	171	245	4 896	18 159
Highest rate	11 655	129	400	1 299	119	264	705	235	376	8 764	29 158
Coefficient of variation	0.07	0.17	0.18	0.24	0.16	0.14	0.36	0.09	0.12	0.18	0.18

*Note:* Unless otherwise specified, all rates are age/sex standardised per 100 000 population.

*Source:* Meeus and Haelterman (2014). Chapter 3 Belgium: Geographic variations in health care, in *Geographic Variations in Health Care: What do we know and what can be done to improve health system performance?* OECD Health Policy Studies, OECD Publishing.

Rates for MRI exams were nearly two times higher in certain provinces than in others in 2009, being generally higher in Flemish provinces. There were also substantial variations in the use of CT exams, which were around 25% higher in Walloon provinces than in Flemish provinces. The potential over-use of CT exams in Walloon provinces may be linked to more traditional physician practices, associated with a lack of appropriate substitutes in medical imaging procedures.

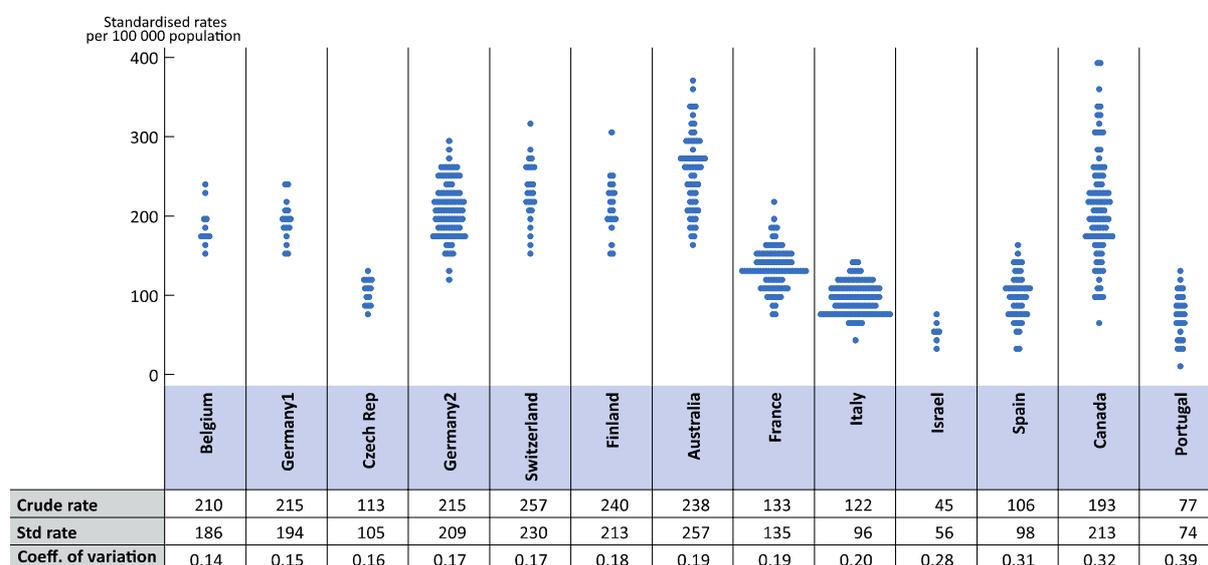
**Figure 1. CT exam standardised rate per 100 000 population, by province, Belgium, 2009**



*Source:* Meeus and Haelterman (2014). Chapter 3 Belgium: Geographic variations in health care, in *Geographic Variations in Health Care: What do we know and what can be done to improve health system performance?* OECD Health Policy Studies, OECD Publishing.

Belgium has the highest heart bypass rate but little within country variation compared to the other countries in the study. The rate of knee replacement (186 per 100 000 population) falls in the middle with small variation across provinces (Figure 2).

**Figure 2. Knee replacement rate across and within selected OECD countries, 2011 or latest year**



*Note:* Each dot represents a territorial unit. Countries are ordered from the lowest to highest coefficient of variation within countries. Data for Portugal and Spain only include public hospitals. Germany 1 and 2 refers respectively to Länder and Spatial Planning Regions.

*Source:* Srivastava et al. (2014). Chapter 1 Geographic variations in health care use in 13 countries: A synthesis of findings, in *Geographic Variations in Health Care: What do we know and what can be done to improve health system performance?* OECD Health Policy Studies, OECD Publishing.

Besides patient need or preferences, other factors play a significant role. For example, socio-economic status and physician discretion have been found to influence knee replacement rates.

Belgium developed with stakeholders a strategy to set targets by reducing exposure to ionising radiation from imaging tests by 25%. Hospitals received feedback on variations in C-section rates, which led to a convergence in rates among hospitals with both high and low rates. These efforts show promise and should continue. Further efforts could promote the delivery of more appropriate care. More systematic public reporting of high-cost, high-volume procedures would help to raise awareness among providers and the public. Patients would be better engaged through tools of shared decision-making and measurement of outcomes after surgical procedures. The latter is done for example for knee replacement in Sweden and the United Kingdom.

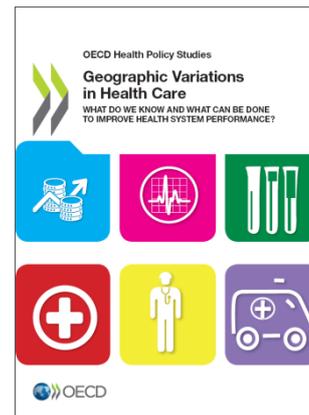
The OECD report will be released at a joint conference organised by the OECD and the Bertelsmann Foundation on 16<sup>th</sup> September in Berlin to discuss the report's findings among German stakeholders ([www.faktencheck-gesundheit.de](http://www.faktencheck-gesundheit.de)).

The report **Geographic Variations in Health Care: What do we know and what can be done to improve health system performance?** is available at <http://dx.doi.org/10.1787/9789264216594-en>.

More information on Belgium is available in the report in **Chapter 3, Belgium: Geographic variations in health care**.

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The OECD press release, country notes and further information are available at <http://www.oecd.org/health/health-systems/medical-practice-variations.htm>.