

## For the first time, an OECD report finds wide health care variation in the Czech Republic

According to a new OECD report, variation in rates of health care activity across geographic areas within Czech Republic 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 the region where you live within a country.

Variations results such as those documented in Table 1 suggest that either too much care is being delivered in areas of high activity, or that there is unmet need in regions of low activity. In either case, this raises questions about the efficiency and equity of health care services which should be addressed.

**Table 1. Summary of results on geographic variation for selected health care procedures by region, Czech Republic, 2011**

	Hospital medical admissions	Hip replacement	Knee replacement	Caesarean section per 1 000 live births	Hysterectomy per 100 000 female population
Crude rate	16 418	121	97	237	152
Unweighted average standardised rate	20 057	124	99	232	173
Minimum	15 569	99	66	198	100
Maximum	23 262	156	119	274	342
Q10	18 383	105	79	204	110
Q90	22 588	142	112	266	242
Coefficient of variation	0.1	0.13	0.16	0.11	0.38

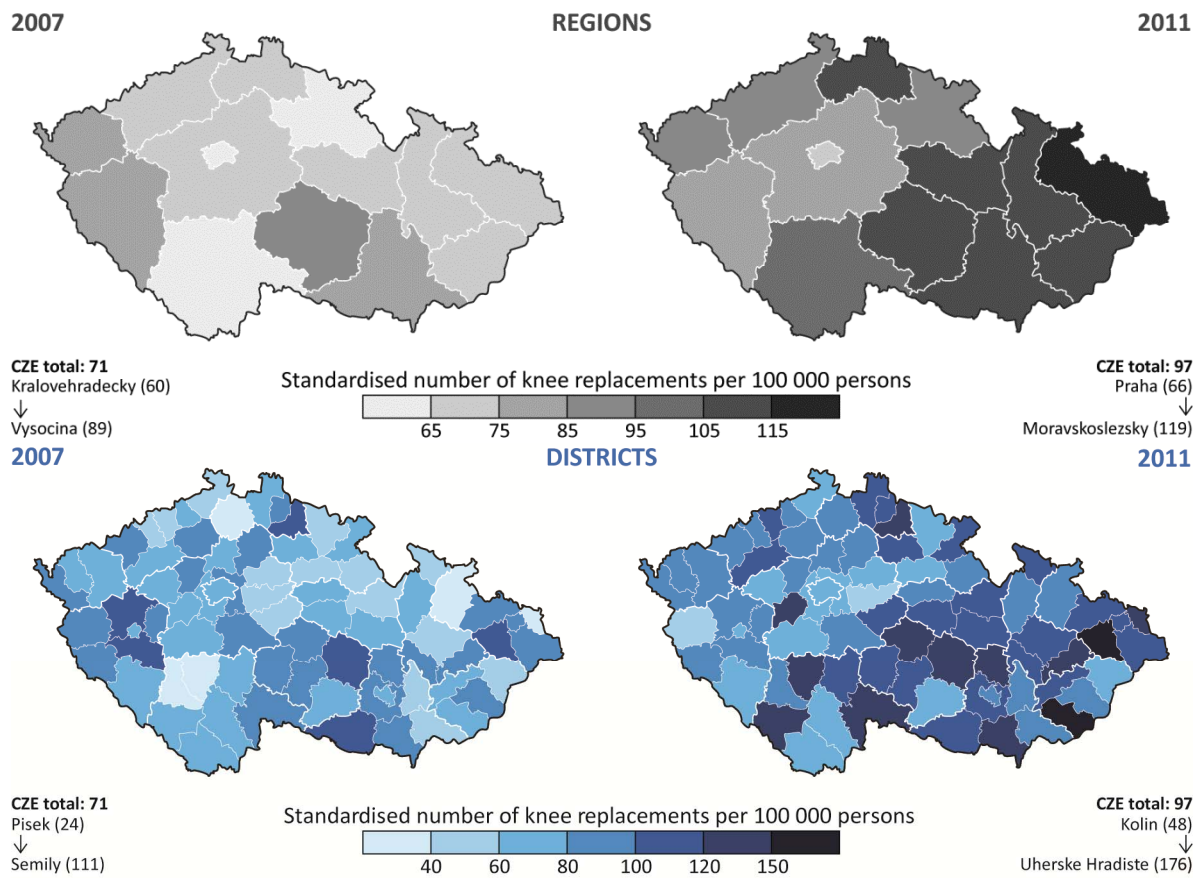
*Note:* Hospital medical admissions include deliveries. Unless otherwise specified, all rates are age/sex standardised per 100 000 population.

*Source:* Roubal and Sidlo et al. (2014). Chapter 5: Czech Republic 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.

While the legal eligibility to receive care is uniform for everyone, data on regional and provincial levels show high variance in the use of health services. Rates for knee and hip replacement in high intensity areas are about twice those in low intensity areas. Rates for hysterectomy are about 3 times higher in certain areas. There are smaller variations for caesarean sections.

If you live in the eastern part of the country you are almost 2 times more likely to have a knee replacement than in other regions of the country (119 replacements versus 66 per 100 000 population).

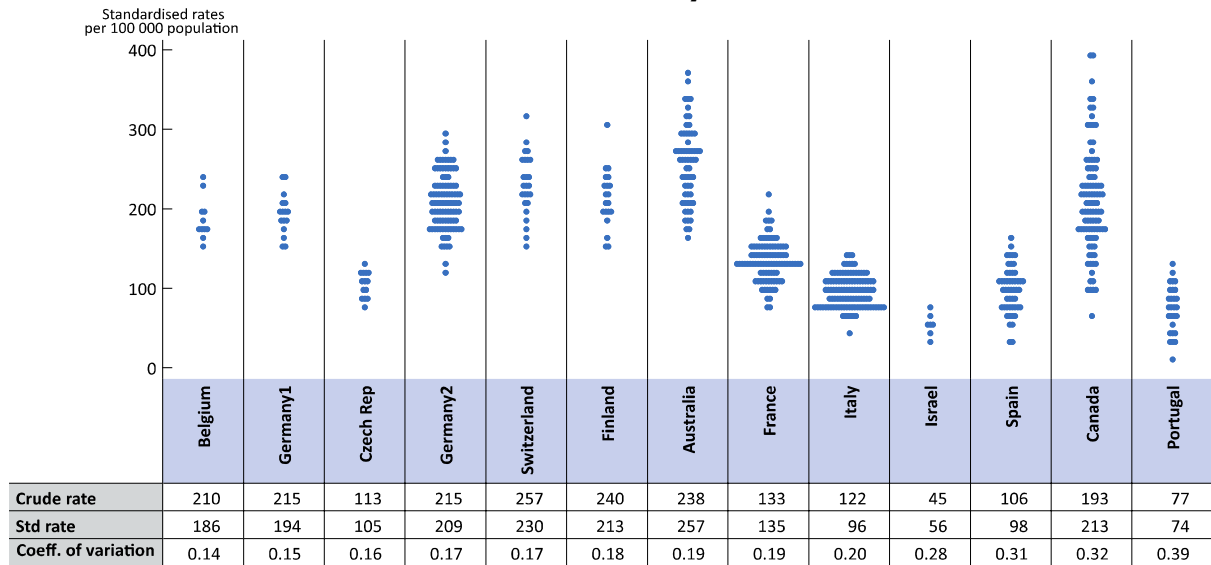
**Figure 1. Map of knee replacement standardised rate per 100 000 population by region and district, Czech Republic, 2007 and 2011**



Source: Roubal and Sidlo et al. (2014). Chapter 5: Czech Republic 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.

The rate of knee replacement in the Czech Republic is less frequent (105 per 100 000) than in Australia, Switzerland, Finland and Canada, and Germany (above 200 per 100 000 population over 15-years old). Across geographic areas within countries, knee replacement rates vary by two-to three-fold, but more than five-fold in Canada, Portugal and Spain.

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



*Note:* Each dot represents a territorial unit. Rates are standardised using OECD’s population over 15 years. Countries are ordered from the lowest to highest coefficient of variation within countries. Data for Portugal and Spain only include public hospitals. For Spain, the rates are reported based on the province where the hospital is located. 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.

During the study the rate of hysterectomy decreased (26%) but there were extreme values leading to rates varying by a factor of 4 (around 400 per 100 000 females in Karlovarsky Kraj). All countries in this study have seen a reduction in hysterectomy, but this reduction was not uniform within countries. For example, rates fell by 11% in France, and 40% in Finland.

The OECD study found that a number of factors can influence rates. For example, low socio-economic status and physician discretion influence knee replacement rates. But more information and research is needed to understand this regional variation.

This study is the first of its kind in the Czech Republic and is a welcome step. Further efforts could promote the delivery of more appropriate care. The Czech Republic could draw on other country experiences. More systematic public reporting of high-cost, high-volume procedures would help to raise awareness among providers and the public. There is scope to move towards policies that target providers through providing feedback to providers, setting targets for specific health care activities (e.g. as in Canada, Belgium and Italy) and financial incentives (e.g. as in France, England and Korea). 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.

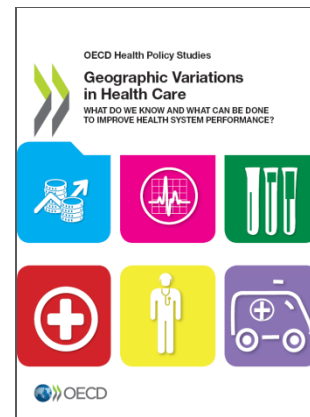
The OECD report will be released at a joint conference organised by the OECD and the Bertelsmann Foundation on 16<sup>th</sup> September in Berlin to discuss the report's findings among German stakeholders ([www.faktencheck-gesundheit.de](http://www.faktencheck-gesundheit.de)).

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 the Czech Republic is available in the report in **Chapter 5, Czech Republic: 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>.