

OECD study sheds light for the first time on variation in health care use in Portugal

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 the region where you live within a country.

Variations such as those documented in Table 1 suggest that either unnecessary 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 and should be addressed.

Rates for cardiac procedures and knee interventions including diagnostic tests and hysterectomy are at least two times higher in high activity areas than low activity areas in Portugal when outliers are excluded. There are smaller variations for hospital medical admissions, and caesarean section. Geographic variations reduced during the study period, notably for cardiac catheterisation and coronary angioplasty (PTCA). The overall increase in PTCA rates combined with the reduction in geographic variations, reflects positive developments in the adoption and access to good clinical practice.

Table 1. Summary of geographic variations for a selected set of health care activities and procedures, Portugal, 2009

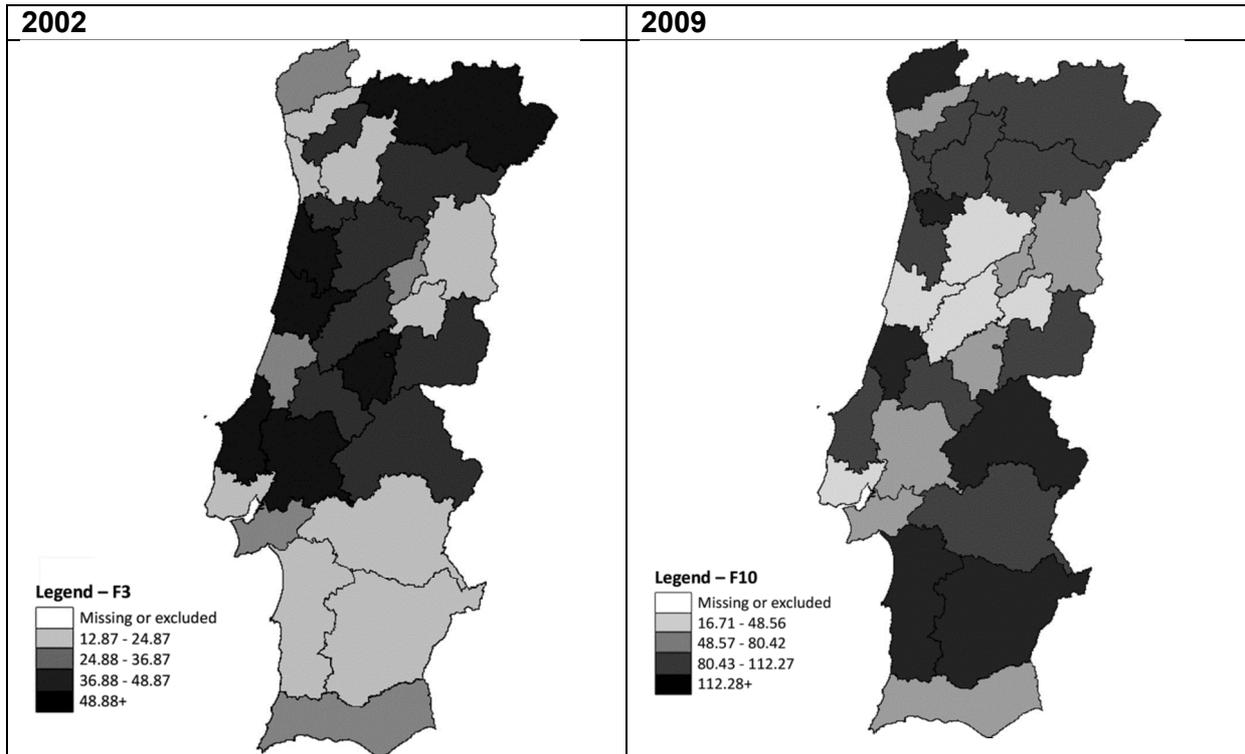
	Hospital medical admissions	CABG	PTCA	Catheterisation	Surgery after hip fracture	Knee replacement	Knee arthroscopy	Caesarean section (per 1 000 live births)	Hysterectomy
Crude rate (national)	4 483	24	96	239	102	65	58	329	175
Standardised unweighted average rate (across)	5 569	27	117	327	126	84	67	330	179
Q10 (lowest decile)	4 449	16	83	235	107	42	42	278	121
Q90 (highest decile)	6 462	41	154	472	147	123	106	397	238
Coefficient of variation	0.21	0.41	0.27	0.29	0.15	0.39	0.36	0.13	0.26
Systematic component of variation	5	13.6	6.4	10.3	2.3	18	11.3	1.3	7.5

Note: All rates are expressed per 100 000 population, except caesarean sections (per 1000 live births) and hysterectomy (per 100 000 women).

Source: Mateus et al. (2014). Chapter 11 Portugal: 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.

If you live in the Alto Alentejo region (around 140 per 100 000), you are about seven times more likely to have a knee replacement than Pinhal Interior Norte (less than 20 per 100 000). During the study period, there were large increases in the rate in regions with initially low knee replacement rates.

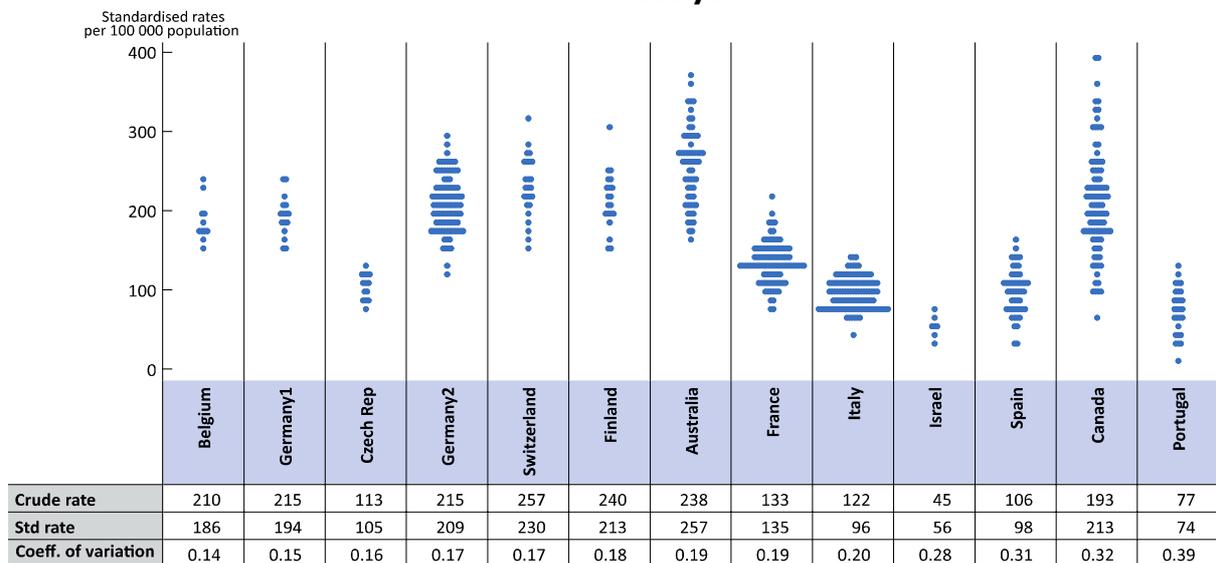
Figure 1. Maps of knee replacement standardised rate per 100 000 population, by geographic region, Portugal, 2002 and 2009



Source: Mateus et al. (2014). Chapter 11 Portugal: 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 Portugal is one of the lowest (74 per 100 000). Australia, Switzerland, Finland and Canada, and Germany have the highest rates (above 200 per 100 000 population over 15-years old). Like in Canada and Spain, knee replacement rates in some parts of Portugal can be up to five times higher than in other parts of the country. Within most countries, knee replacement rates vary by two-to three-fold.

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.

The report suggests that a number of factors can influence healthcare activity. For example socio-economic status and physician discretion have been found to influence knee replacement rates.

Portugal has made recent efforts address variations in caesarean section. This strategy includes a group of experts tasked with proposing recommendations (e.g. issue guidelines, audits, develop communication plan for the public, implement registries and new payment schemes for hospitals) to reduce the number of unnecessary c-sections. 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. 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 England, France 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 16th September in Berlin to discuss the report's findings among German stakeholders (www.faktencheck-gesundheit.de).

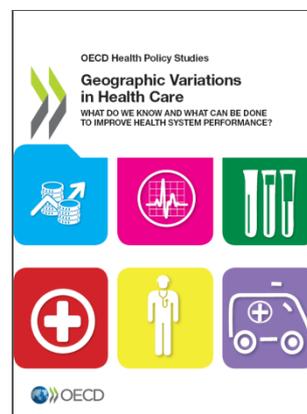
The report **Geographic Variations in Health Care: What do we know and what can be done to improve health system performance?** is available at <http://dx.doi.org/10.1787/9789264216594-en>.

More information on Portugal is available in the report in **Chapter 11, Portugal: Geographic variations in health care.**

OECD contacts: Divya Srivastava (divya.srivastava@oecd.org, tel. +33 1 45 24 16 35) or Valérie Paris (valerie.paris@oecd.org, tel. + 33 1 45 24 80 29) of the OECD's Health Division.

Contacts in Portugal:

Céu Mateus, Inês Joaquim and Carla Nunes, (National School of Public Health, Nova University of Lisbon), Paulo Boto, (National School of Public Health, Nova University of Lisbon, Ministry of Health), Luís Campos, (Centro Hospitalar Lisboa Ocidental, Lisbon, and Faculty of Medical Sciences, Nova University of Lisbon).



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