Geographic distribution of doctors

Access to medical care requires an adequate number and proper distribution of doctors in all parts of the country. Any shortage of doctors in certain regions can increase travel times or waiting times for patients, and result in unmet care needs. The uneven distribution of doctors is an important policy issue in most OECD countries, especially in those countries with remote and sparsely populated areas, and those with deprived urban regions which may also be underserved.

The overall number of doctors per capita varies across OECD countries from lows of about two per 1 000 population in Chile, Turkey and Korea, to highs of five and more in Greece and Austria (see the indicator on "Doctors" in Chapter 5). Beyond these cross-country differences, the number of doctors per capita also often varies widely across regions within the same country (Figure 7.9). A common feature in many countries is that there tends to be a concentration of physicians in capital cities. For example, Austria, Belgium, the Czech Republic, Greece, Mexico, Portugal, the Slovak Republic and the United States have a much higher density of doctors in their national capital region.

The density of physicians is consistently greater in urban regions, reflecting the concentration of specialised services such as surgery and physicians' preferences to practice in urban settings. There are large differences in the density of doctors between predominantly urban and rural regions in France, Australia and Canada, although the definition of urban and rural regions varies across countries. The distribution of physicians between urban and rural regions is more equal in Japan and Korea, but there are generally fewer doctors in these two countries (Figure 7.10).

Doctors may be reluctant to practice in rural regions due to concerns about their professional life (including their income, working hours, opportunities for career development, isolation from peers) and social amenities (such as educational opportunities for their children and professional opportunities for their spouse).

A range of policy levers may influence the choice of practice location of physicians, including: 1) the provision of financial incentives for doctors to work in underserved areas; 2) increasing enrolments in medical education programmes of students coming from specific social or geographic background, or decentralising the location of medical schools; 3) regulating the choice of practice location of doctors (for new medical graduates or foreign-trained doctors); and 4) re-organising health service delivery to improve the working conditions of doctors in underserved areas and find innovative ways to improve access to care for the population.

Many OECD countries provide different types of financial incentives to attract and retain doctors in underserved areas, including one-time subsidies to help them set up their practice and recurrent payments such as income guarantees and bonus payments (Ono et al., 2014).

In France, the Ministry of Health launched at the end of 2012 a "Health Territory Pact" to promote the recruitment and retention of doctors and other health workers in underserved regions. This Pact includes a series of measures to facilitate the establishment of young doctors in underserved areas, to improve their working conditions (notably through the creation of new multi-disciplinary medical homes allowing physicians and other health professionals to work in the same location), to promote tele-medicine, and to accelerate the transfer of competences from doctors to other health care providers (Ministry of Health, 2015). The first results from this programme are promising, although it is still too early to reach any definitive conclusions on the cost-effectiveness of various measures.

In Germany, the number of practice permits for new ambulatory care physicians in each region is regulated, based on a national service delivery quota.

The effectiveness and cost of different policies to promote a better distribution of doctors can vary significantly, with the impact likely to depend on the characteristics of each health system, the geography of the country, physician behaviours, and the specific policy and programme design. Policies should be designed with a clear understanding of the interests of the target group in order to have any significant and lasting impact (Ono et al., 2014).

Definition and comparability

Regions are classified in two territorial levels. The higher level (Territorial Level 2) consists of large regions corresponding generally to national administrative regions. These broad regions may contain a mix of urban, intermediate and rural areas. The lower level is composed of smaller regions classified as predominantly urban, intermediate or rural regions, although there are variations across countries in the classification of these regions.

References

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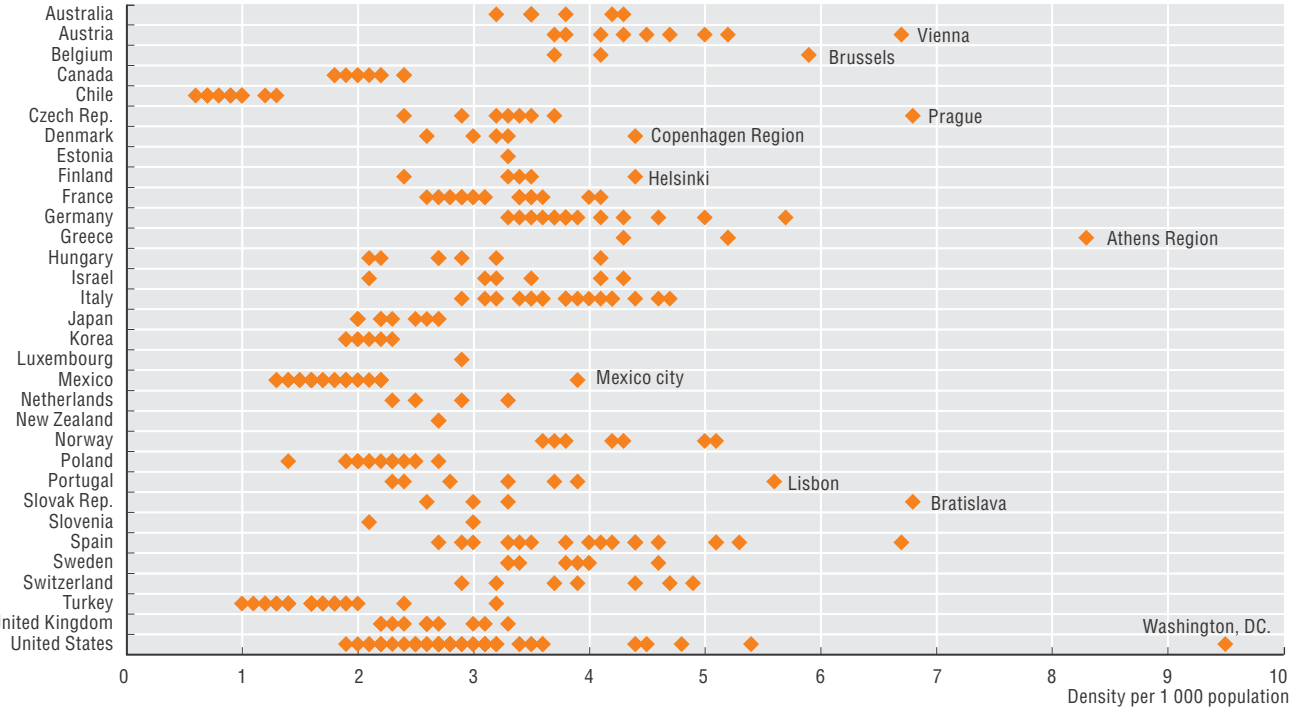
Ono, T., M. Schoenstein and J. Buchan (2014), "Geographic Imbalances in Doctor Supply and Policy Responses", *OECD Health Working Papers*, No. 69, OECD Publishing, Paris, *http://dx.doi.org/10.1787/5jz5sq5ls1wl-en*.

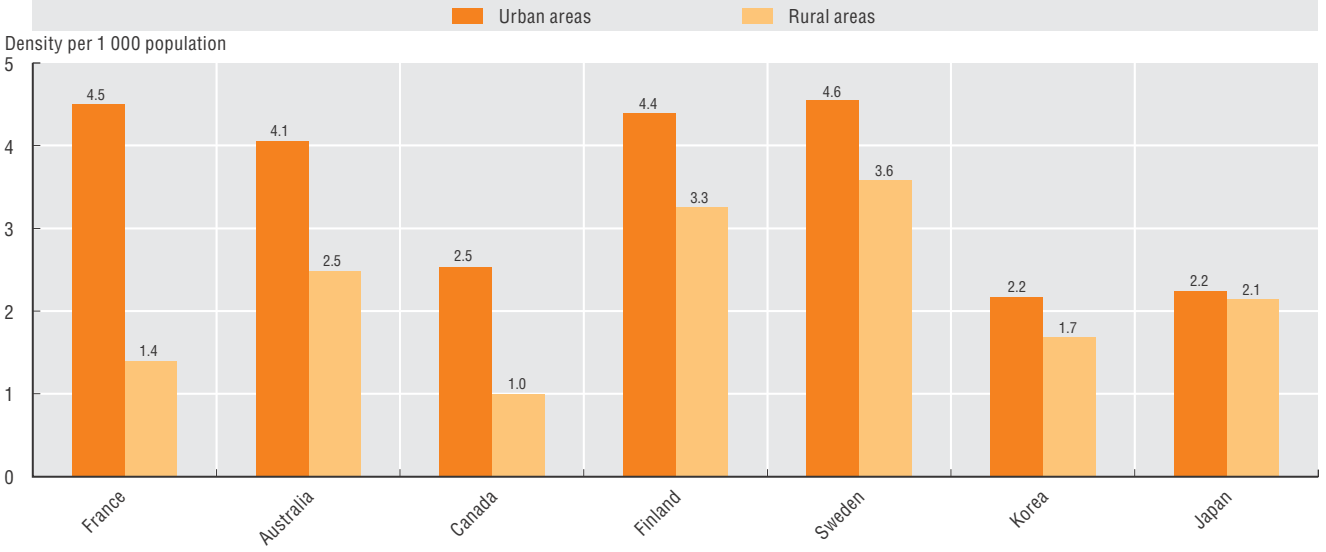
7.9. Physician density, by Territorial Level 2 regions, 2013 (or nearest year)



Source: *OECD Regions at a Glance 2015.*

StatLink http://dx.doi.org/10.1787/888933281083

7.10. Physicians density in predominantly urban and rural regions, selected countries, 2013 (or nearest year)



Note: The classification of urban and rural regions varies across countries.
Source: Australia: AIHW National Health Workforce Data Set (NHWDS) 2013; Canada: Scott's Medical Database, 2013, Canadian Institute for Health Information; France: RPPS médecins au 1er janvier 2015; Other: *OECD Regions at a Glance 2015.*

StatLink http://dx.doi.org/10.1787/888933281083

Information on data for Israel: *http://oe.cd/israel-disclaimer*