

## Geographic distribution of doctors

Access to medical care requires an adequate number and equitable distribution of doctors in all parts of the country. Concentration of doctors in one region and shortages in others can lead to inequities in access such as longer travel or waiting times. The uneven distribution of doctors and the difficulties in recruiting and retaining doctors in certain regions is an important policy issue in most OECD countries, especially in countries with remote and sparsely populated areas, and those with deprived rural and urban regions.

The overall number of doctors per capita varies widely across OECD countries from around two per 1 000 population in Turkey, Korea and Poland, to five or higher in Portugal, Austria and Greece (see indicator on “Doctors” in Chapter 8). Beyond these cross-country differences, the number of doctors per capita also varies widely across regions within the same country. 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. Differences in the density of doctors between urban regions and rural regions are highest in the Slovak Republic, Hungary and Portugal, notwithstanding differential definition of urban and rural regions across countries. The distribution of physicians between urban and rural regions was more equal in Japan and Korea, but there are generally fewer doctors in these two countries (Figure 5.14). Growing urbanisation will likely further widen existing geographic disparities in access to doctors.

Within predominantly urban areas, capital cities are typically capturing most of the physician supply (Figure 5.15). This is particularly evident in Austria, the Czech Republic, Greece, Portugal, the Slovak Republic and the United States. Differences between the capital region and the second region with highest density are largest in the United States and the Slovak Republic, with Washington D.C. and the Bratislava region having nearly twice as many physicians per capita as Massachusetts and East Slovakia (the second most dense), respectively. This usually results in higher dispersion between small regions for these countries, with the United States showing a nearly five-fold difference in physician density; and almost three-fold differences for the Slovak Republic and Greece. In contrast, Australia, Belgium and Korea show only around a 20% difference in physician densities between regions.

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 options for their children and professional opportunities for their spouse). A range of policy levers can be used to influence the choice of practice location of physicians. These include: 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 backgrounds 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 service delivery to improve the working conditions of doctors in underserved areas.

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. A number of countries have also introduced measures to encourage students from underserved regions to enrol in medical schools. The effectiveness and cost of different policies to promote a better distribution of doctors can vary significantly, with the impact depending 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, Schoenstein and Buchan, 2014[1]).

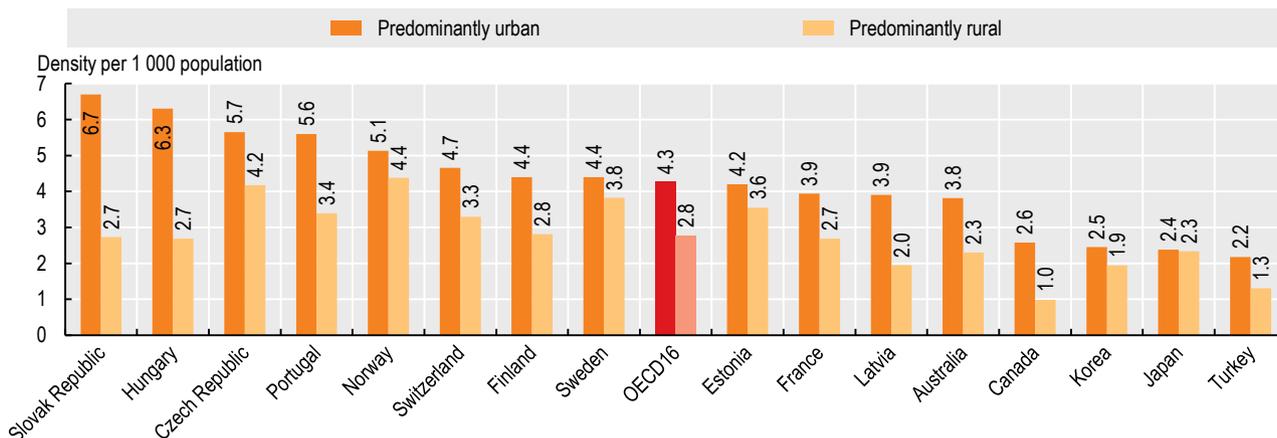
### Definition and comparability

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. Note that overseas territories are generally excluded from calculations. All data on geographic distributions come from the OECD Regional Database.

### References

- [2] OECD (2016), *Health Workforce Policies in OECD Countries: Right Jobs, Right Skills, Right Places*, OECD Health Policy Studies, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264239517-en>.
- [1] 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>.

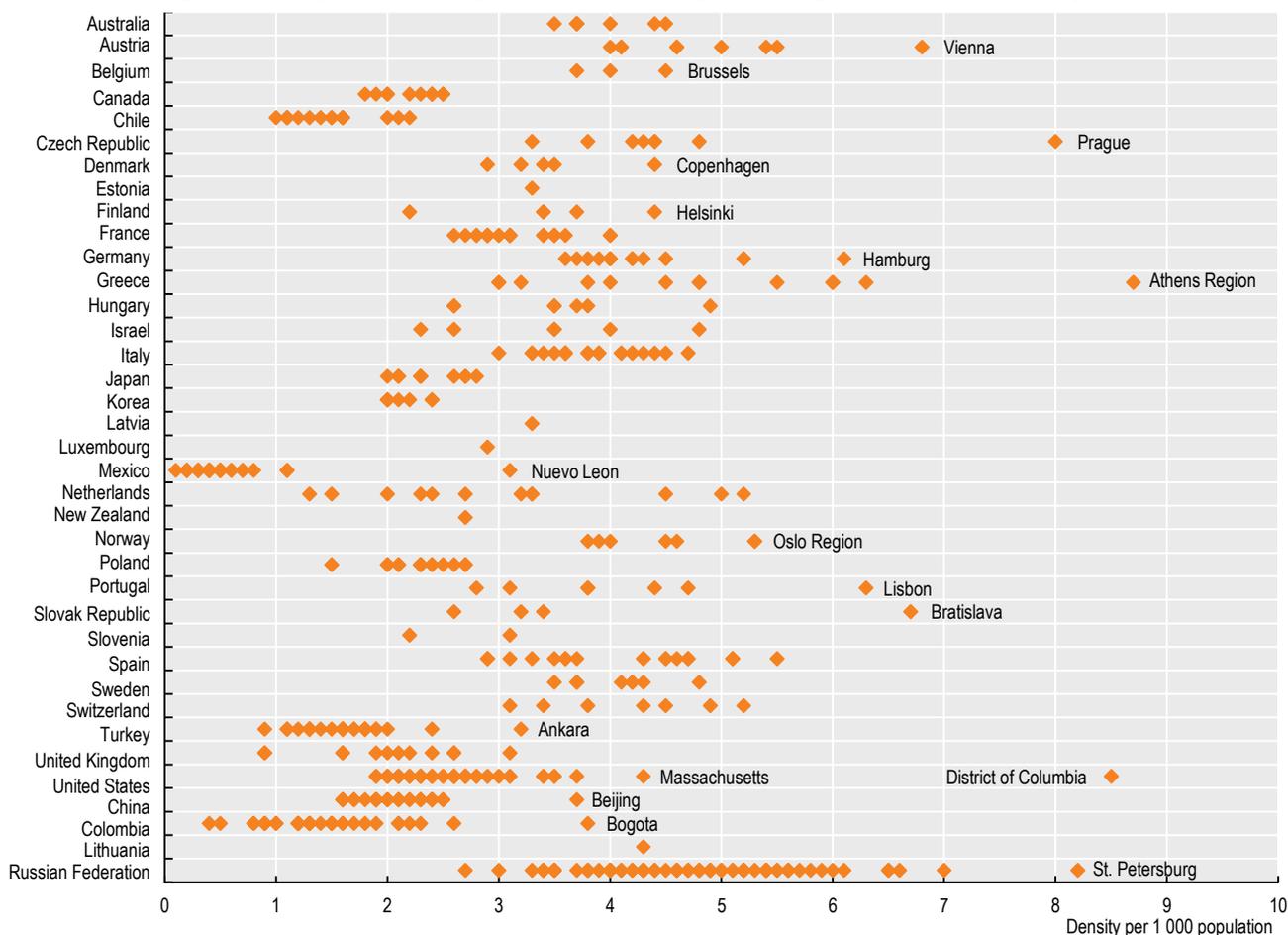
Figure 5.14. Physician density, rural vs urban areas, 2016 (or nearest year)



Source: OECD Regional Statistics Database 2019.

StatLink <https://doi.org/10.1787/888934015866>

Figure 5.15. Physician density across localities, by level 2 regions, 2016 (or nearest year)



Source: OECD Regional Statistics Database 2019.

StatLink <https://doi.org/10.1787/888934015885>



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