Geographic distribution of doctors

Access to medical care requires a sufficient number and proper distribution of doctors in all parts of the country. A shortage of doctors in some regions can lead to inequalities in access to care and unmet needs. The difficulties in recruiting and retaining doctors in certain regions has been an important policy issue in many OECD countries for a long time, especially in countries with remote and sparsely populated areas, and those with deprived rural and urban regions.

The overall number of doctors per 1 000 population varies widely across OECD member countries, from less than 2.5 in Turkey, Colombia, Mexico and Poland, to over 5 in Portugal, Austria and Greece (see indicator "Doctors (overall number)"). Beyond these cross-country differences, the number of doctors per 1 000 population also varies widely across regions within each country. The density of doctors is generally greater in urban regions, reflecting the concentration of specialised services such as surgery, and physicians' preferences to practise in urban settings. Differences in the density of doctors between urban and rural regions were highest in Hungary, the Slovak Republic, Lithuania, Latvia and Canada in 2019. The distribution was more equal in Norway and Japan, although in Japan there were relatively few doctors in all regions (Figure 8.8).

In many countries, there is particularly high concentration of doctors in national capital regions (Figure 8.9). This was the case notably in Austria, the Czech Republic, Greece, Hungary, Portugal, the Slovak Republic and the United States in 2019.

Doctors may be reluctant to practise in rural regions due to concerns about their professional life (including their income, working hours, opportunities for career development and 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, including: 1) providing financial incentives for doctors to work in underserved areas; 2) increasing enrolments in medical education programmes of students coming from underserved areas or decentralising the location of medical schools; 3) regulating the choice of practice location of doctors (for new medical graduates or foreign-trained doctors arriving in the country); and 4) reorganising service delivery to improve the working conditions of doctors in underserved areas (OECD, 2016[8]). The development of telemedicine can also help overcome geographic barriers between patients and doctors (see indicator "Digital health" in Chapter 5).

In France, over the past 15 years the government has launched a series of measures to address concerns about "medical deserts", including offering financial support for doctors to set up their practices in underserved areas. It has also supported the creation of multidisciplinary medical homes to allow GPs and other health professionals to work in the same location, although most of the 1 600 medical homes that had been established by 2020 were not located in areas where access is most limited. Encouraging medical students to practise in underserved areas has been quite successful, notably through the use of "access contracts", whereby medical students and residents receive a monthly stipend during their education and training in exchange for a commitment to practise for an equivalent period after graduation in designated underserved areas (OECD/European Observatory on Health Systems and Policies, 2021[9]).

In Germany, where the number of doctors per 1 000 population is well above the OECD average, the geographic distribution of doctors varies across states, as well as between urban and rural areas. The number of doctors in rural areas is generally below average, whereas it is well above average in capital cities, such as Berlin and Hamburg. A number of measures have aimed to improve the number of doctors working in rural areas, including granting places to medical students who commit to practise as GPs in rural areas on graduation (Blümel et al., 2020[10]).

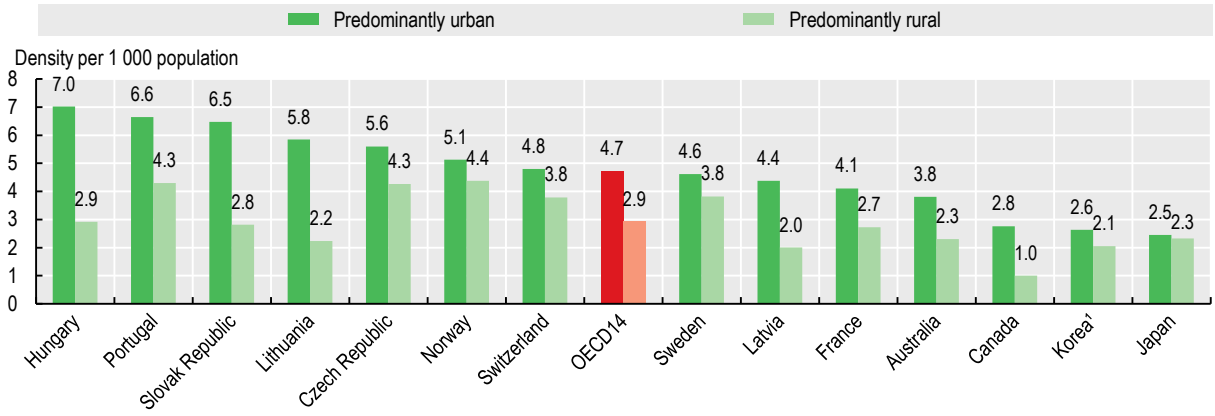
In the Czech Republic, the Ministry of Health announced a new support programme for GPs working in underserved areas in April 2020. The programme is open to all GPs who are planning or have recently started to provide services in a designated underserved area. It provides funding to GP practices to cover personnel and technical equipment costs up to a ceiling. Health insurance funds also pay more for GP services provided in some underserved areas (OECD/European Observatory on Health Systems and Policies, 2021[9]).

In Australia, the government announced a new ten-year Stronger Rural Health Strategy in 2018 to meet Australia's current and future health workforce challenges in rural and remote areas. This Strategy comprises 13 initiatives that aim to address the issues of quality, distribution and planning of Australia's health workforce, particularly in regional, rural and remote communities (Department of Health, 2019[11]). A short-term evaluation of this Strategy is expected for 2022.

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. All data on geographic distributions come from the OECD Regional Database, which includes data from the Eurostat database for territorial level 2.

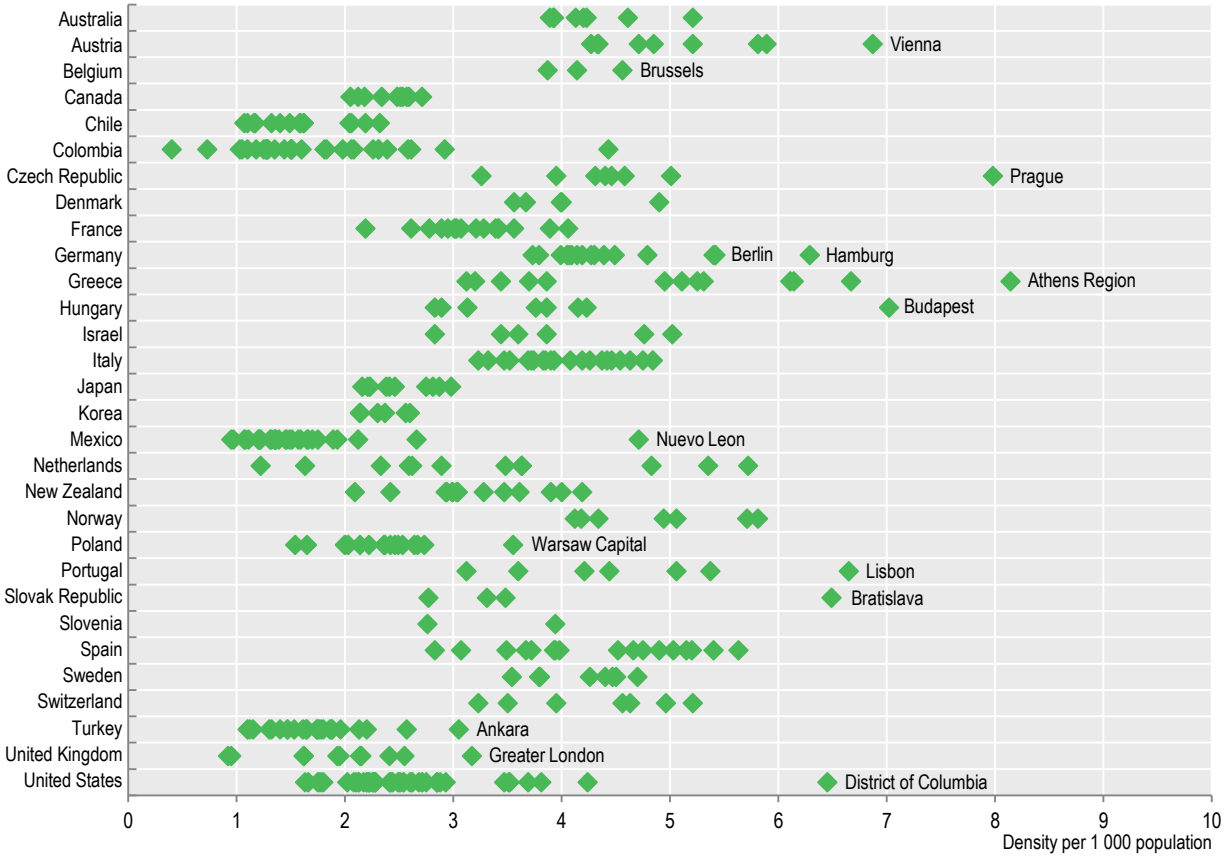
Figure 8.8. **Physician density, urban vs. rural areas, 2019 (or nearest year)**



1. In Korea, data for predominantly rural refer to intermediate regions (the share of the population living in rural areas is between 15-50%).
Source: OECD Regional Statistics Database 2021.

StatLink https://stat.link/qt6e5w

Figure 8.9. **Physician density across regions, by territorial level 2 regions, 2019 (or nearest year)**



Source: OECD Regional Statistics Database 2021.

StatLink https://stat.link/d691h8