

6. ACCESS TO CARE

6.4. Geographic distribution of doctors

Access to medical care requires an adequate number and proper distribution of physicians. Shortages of physicians in a geographic region can lead to increased travel times for patients and higher caseloads for doctors. The maldistribution of physicians is a challenge in a number of OECD countries, especially in territories with remote and sparsely populated areas, with long travelling times to the nearest urban region.

Measuring disparities in the “density” of physicians among regions within the same country gives some indication of the accessibility of doctor services. Regions, however, may have high physician density, but persons living in geographically remote areas may still face long travel times to receive medical care. Not only should the density of physicians match the regions’ population, but the services that physicians offer should also match need, whether these are for GPs or specialists. Medical needs may be higher in remote areas with an older than average population, for example.

OECD countries display very different levels in the number of practising physicians per 1 000 population, ranging from lows of less than two in Chile, Turkey and Korea, to highs of four and more in Norway, Austria and Greece (see Indicator 3.2 “Medical doctors”).

In many countries, there are a greater number of physicians per capita in capital cities (Figure 6.4.1). In the Czech Republic for example, Prague has a density of physicians almost twice the country average. Austria, Belgium, Greece, Portugal, the Slovak Republic and the United States also have physicians concentrated in capital cities. There are also disparities in specialists, with a greater concentration in capital cities in Mexico, the Slovak Republic and Turkey (OECD, 2009b). In Japan, an urban-biased distribution is reported for a variety of specialists (Matsumoto, 2010).

The density of physicians is greater in regions with a high urban population, due to the concentration of services such as surgery and specialised practitioners (Figure 6.4.2). In Canada, just under 16% of “family physicians” (mostly general practitioners) and only 2% of specialists were located in rural areas and small towns in 2006, whereas 24% of the population resided in these areas (Dumont *et al.*, 2008). Similarly, in the United States, 17% of the population lived in non-metropolitan areas in 2004, but only 9% of practising patient care physicians were located in these areas, and almost 50% of US counties had no obstetricians or gynaecologists providing direct patient care (NCHS, 2007). In France, 22% of general practitioners and 4% of specialists practised in towns of up to 10 000 population in 2010, whereas 36% of the population resided in these areas (DREES, 2010).

A number of factors affect the distribution of physicians. These include the population size and economic development of a region (which are related to market size and income potential), the regions’ professional climate (the possibility of interaction with colleagues, and access to hospitals and other medical facilities) and the extent of social amenities (Huber *et al.*, 2008).

Experience shows that a mix of policies are needed to address maldistribution issues (Simoens and Hurst, 2006; Dolea *et al.*, 2010). In Canada, foreign-trained doctors comprised an average of 30% of the labour force in rural and remote areas in 2006. Telehealth and nurse practitioners also assist in providing primary care. Incentives have been developed to train health professionals with rural background and exposure (Dumont *et al.*, 2008). In Turkey, new health staff have been assigned to areas with low physician density, although the challenge remains to match staff with areas of greatest need (OECD and World Bank, 2008). In July 2010, WHO issued a set of Global Policy Recommendations on different retention strategies for health workers in remote and rural areas (WHO, 2010).

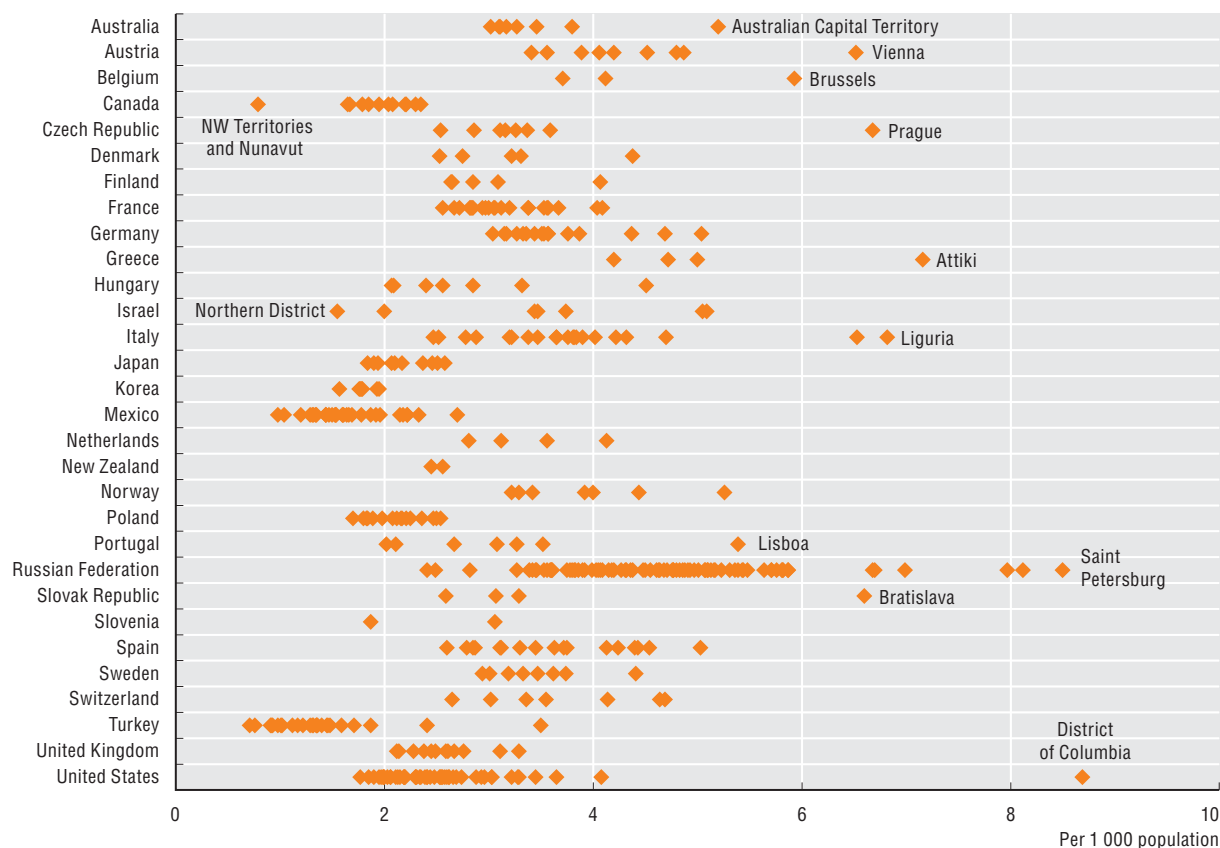
Definition and comparability

For more detail on practising physicians, see Indicator 3.2 “Medical doctors”. The geographic distribution of physicians can be examined by calculating rates of practising physicians per regional population.

Since countries use a variety of geographical classifications, the OECD has classified regions into two territorial Levels. The higher level (Territorial Level 2) consists of 362 large regions, which correspond closely to national administrative regions (OECD, 2011b). However, these regions may contain a mixture of urban, intermediate and rural populations. Further sub-regional analysis may be necessary to obtain a more complete picture of geographic distribution of physicians. A number of countries have developed schemes to classify populations into urban-rural categories, although these are not standard, making cross-national comparisons difficult.

Information on data for Israel: <http://dx.doi.org/10.1787/888932315602>.

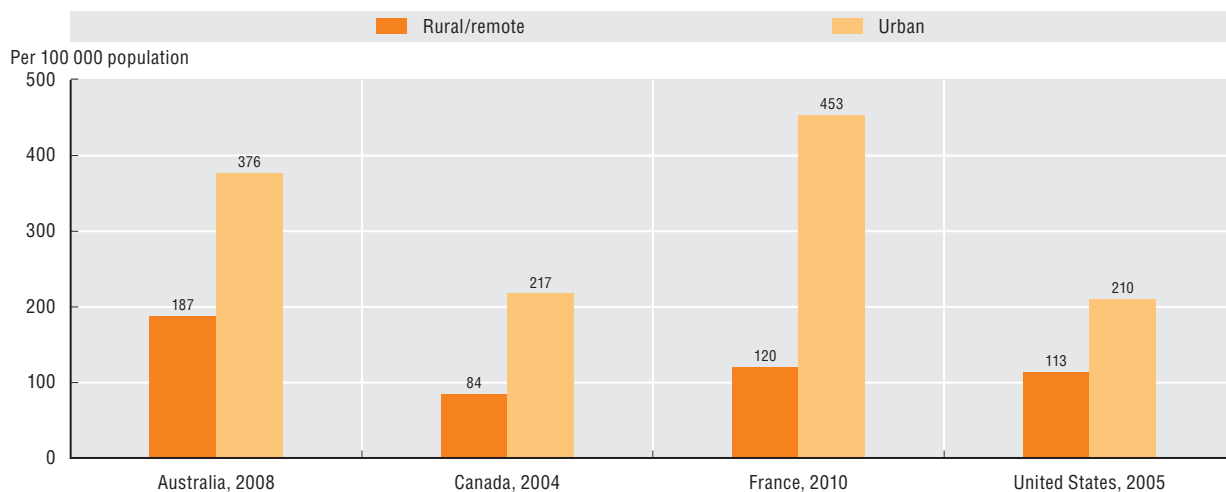
6.4.1 Physician density, by territorial level 2 regions, 2008 (or nearest year)



Source: OECD (2011b).

StatLink <http://dx.doi.org/10.1787/888932525780>

6.4.2 Physician density in rural and urban regions, four OECD countries, latest year available



Note: Classifications of rural and urban regions differ between countries.

Source: AIHW (2010b); CIHI (2005); DREES (2010); Fordyce et al. (2007).

StatLink <http://dx.doi.org/10.1787/888932525799>



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