

3. HEALTH WORKFORCE

3.5. Medical graduates

Maintaining or increasing the number of doctors requires either investment in training new doctors or recruiting trained physicians from abroad. As it takes about ten years to train a doctor, any current shortages can be met only by recruiting qualified doctors from abroad, unless there are unemployed doctors at home. Conversely, any surpluses or sudden fall in demand may mean that new graduates struggle to find vacant posts at home.

Virtually all OECD countries exercise some form of control over medical school intakes, often by limiting the number of available training places, for example in the form of a *numerus clausus*. Such control is motivated by different factors including: 1) confining medical entry to the most able applicants; 2) the desire to control the total number of doctors for cost-containment reasons (because greater supply induces greater demand); and 3) the cost of training itself (in all countries, including the United States, a significant part of medical education costs are publicly funded, so expansion of the number of medical students involves significant public expenditure).

Austria, Denmark and Ireland had the highest number of medical graduates per 100 000 population in 2011. Graduation rates were the lowest in Israel, Japan and France. The average across OECD countries was slightly more than ten new medical graduates per 100 000 population (Figure 3.5.1). Measured in proportion to the stock of physicians (i.e., a measure of the replacement rate), the number of new medical graduates in 2011 was highest in Mexico, Ireland, the Netherlands, and Denmark, and the lowest in Israel and France. The average across OECD countries was 34 medical graduates per 1 000 currently employed doctors (Figure 3.5.2). The persistently low number of medical graduates in Israel and France over the past two decades has led to a gradual ageing of the physician workforce, with these two countries having amongst the highest share of doctors above age 55 (Indicator 3.2).

In several countries (e.g., Australia, Canada, Denmark, the Netherlands and the United Kingdom), the number of medical graduates has risen strongly since 2000, reflecting past decisions to expand training capacities (Figure 3.5.3). In Australia, the number of medical graduates has increased by 2½ times between 1990 and 2010, with most of the growth occurring since 2000. In the United Kingdom, the number of medical graduates doubled between 1990 and 2011, with most of the growth also taking place in the past ten years. These increases reflect a deliberate policy in Australia and the United Kingdom to reduce their reliance on foreign-trained doctors to meet their own needs. In Canada also, following a reduction in the number of medical graduates in the 1990s, there has been a strong rise of over 50% over the past decade.

In the Netherlands, the number of medical graduates increased steadily over the past decade, following fluctuations in the 1990s. Since 1999, the Dutch Medical Manpower Planning Committee (ACMMP) makes recommendations every two to three years to the different stakeholders and the government concerning the *numerus clausus* (the quantitative limits to enrolments in medical education and training programmes). The recommendations from this Planning Committee have generally been accepted and have led to this steady growth over the past few years (ACMMP, 2010).

In the United States, the increase in the number of medical graduates over the past two decades has been more modest than in several other countries, although it has accelerated slightly in recent years (+6% between 1990 and 2000, and +14% between 2000 and 2011).

By contrast, in Japan, the number of medical graduates was slightly lower in 2011 compared with 1990, following reductions in the 1990s which were only partly offset by small increases since 2000. In Italy, there was a marked decline in the number of medical graduates in the first half of the 1990s (pursuing a trend that had begun in the mid-1980s), after which the number stabilised. The reduction in medical graduate numbers over the past two decades in Italy has led to a growing proportion of doctors aged 55 and over, as in France and Israel (Indicator 3.2). Even with an increase in the number of medical school admissions in recent years in these three countries, the number of doctors who may be leaving the profession is likely to exceed the number of new entrants in the coming years.

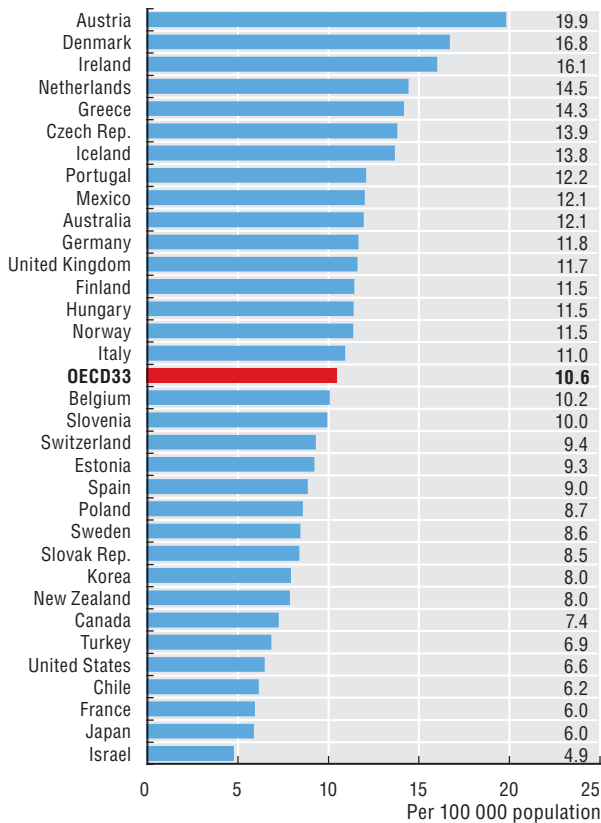
Definition and comparability

Medical graduates are defined as the number of students who have graduated from medical schools or similar institutions in a given year. Dental, public health and epidemiology graduates are excluded.

The data for Austria and the United Kingdom exclude foreign graduates, while other countries include them (in the Czech Republic, foreign graduates account for about 30% of all medical graduates). In Denmark, the data refer to the number of new doctors receiving an authorisation to practice.

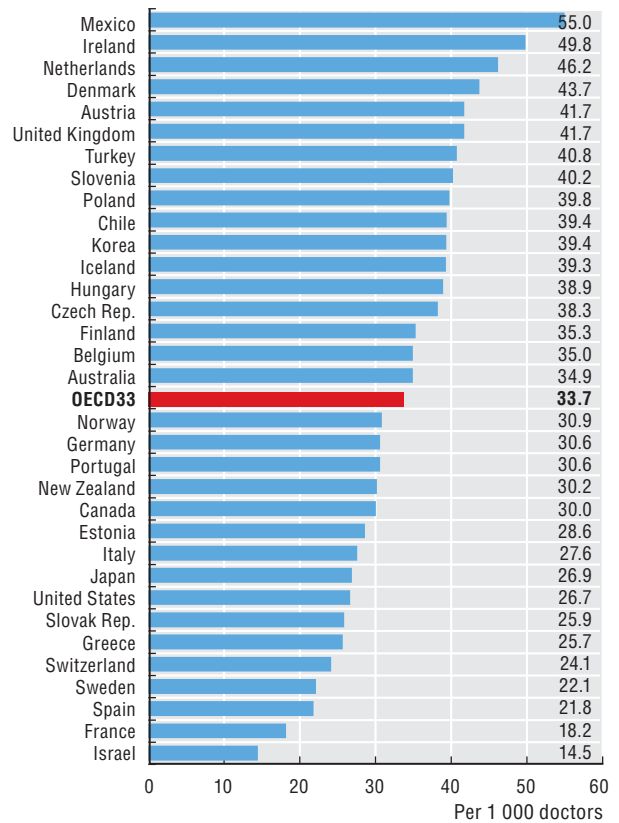
In Luxembourg, the university does not provide medical training, so all doctors are foreign-trained, mostly in Belgium, France and Germany.

3.5.1. Medical graduates per 100 000 population, 2011 (or nearest year)



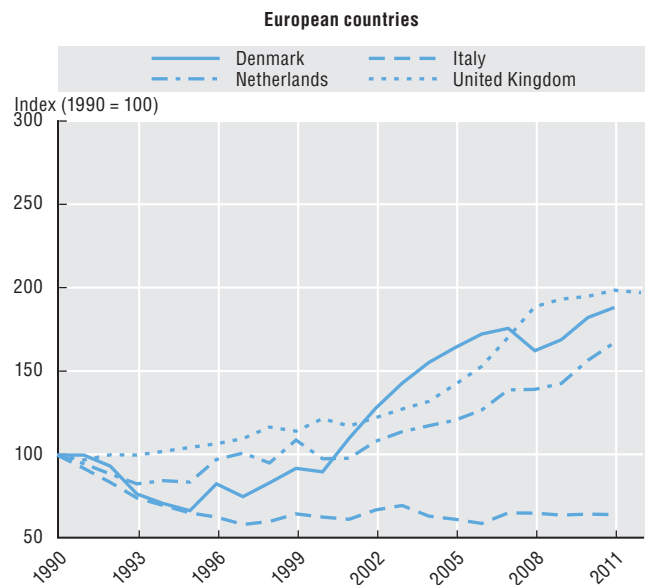
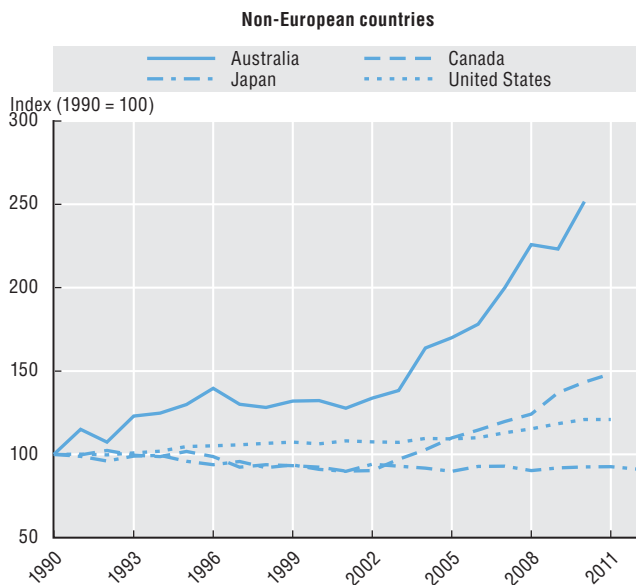
Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.
StatLink <http://dx.doi.org/10.1787/888932916971>

3.5.2. Medical graduates per 1 000 doctors, 2011 (or nearest year)



Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.
StatLink <http://dx.doi.org/10.1787/888932916990>

3.5.3. Evolution in the number of medical graduates, selected OECD countries, 2000 to 2012 (or nearest year)



Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.

StatLink <http://dx.doi.org/10.1787/888932917009>



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