Nurses greatly outnumber physicians in most EU countries, with a ratio of two to four nurses per doctor in many countries. Nurses play a critical role in providing healthcare not only in hospitals and long-term care institutions, but increasingly also in primary care and in home care settings.

There are concerns in many countries about possible future shortages of nurses, given that the demand for nurses is expected to rise in a context of population ageing and the retirement of the current “baby-boom” generation of nurses. These concerns have prompted actions in many countries to increase the training of new nurses, while some countries have addressed current shortages by recruiting nurses from other countries (OECD, 2016).

On average across EU countries, there were 8.4 nurses per 1 000 population in 2016, a rise from 6.7 in 2000 (Figure 7.13). The number of nurses per capita is highest in Denmark and Finland, although about one-third of nurses in these two countries are trained at a lower level than general nurses and perform lower tasks. This is also the case in Switzerland and Iceland. In other countries such as Italy and Spain, a large number of health care assistants (or nursing aids) provide assistance to nurses. Greece has the lowest number of nurses per capita among EU countries, but the data only include nurses working in hospital. Bulgaria, Latvia, Poland and Cyprus also have a relatively low number of nurses.

Since 2000, the number of nurses per capita has increased in most European countries, except in the Baltic countries (Estonia, Latvia and Lithuania) where the number of nurses per capita has remained stable (meaning that there has been a reduction in the absolute number of nurses given that the overall population has come down in these countries) and the Slovak Republic where the number of nurses has come down both in absolute number and on a per capita basis. Most of this reduction in the Slovak Republic has occurred between 2000 and 2010, with the number stabilising at a lower level since then.

The increase in the number of nurses per capita has been particularly large in Denmark, Finland, Germany, Luxembourg, France and Malta. Malta has taken a series of measures to train more nurses domestically and also to attract more nurses from other countries to address current shortages. The university degree to become a nurse in Malta is free of charge for students; and once students have graduated, they are also encouraged to take time off to pursue their training while continuing to receive at least part of their salary.

Most nurses in EU countries continue to work in hospital. Relative to the overall size of the population, the number of nurses working in hospital, when measured both in absolute numbers and full-time equivalents, has increased over the past decade in many countries (e.g. Austria, Belgium, Denmark, Germany and Malta). In France, the number of nurses working in hospital per population also increased slightly, but the number of full-time equivalents has remained relatively stable, meaning that the average number of working hours has decreased slightly (Figure 7.14). In many countries, the ratio of full-time equivalent nurses to the absolute number ranges from 0.80 to 0.95, and it has been fairly stable over time. However, this ratio is much lower in Belgium and Germany (0.70 to 0.75), indicating that nurses generally work fewer hours in these countries.

A growing number of nurses also work in primary care in many countries. In response to shortages of general practitioners, some countries have introduced or extended advanced roles for nurses to improve access to primary care. Evaluations of the experience with (advanced) nurse practitioners in countries like Finland and the United Kingdom indicate that these nurses can improve access to care and reduce waiting times, while providing the same quality of care as doctors for a range of patients (e.g. those with minor illnesses or requiring routine follow-up) (Maier et al., 2017).

### Definition and comparability

The number of nurses includes those providing services for patients (“practising”), but in some countries also those working as managers, educators or researchers (“professionally active”). In countries where there are different levels of nurses, the data include both “professional” nurses (including general and specialist nurses) and “associate professional” nurses who have a lower level of qualifications but are nonetheless recognised and registered as nurses in their country. Health care assistants (or nursing aids) who are not recognised as nurses are excluded.

Austria and Greece report only nurses working in hospitals (resulting in an underestimation).

Full-time equivalent employment is defined as the number of hours worked divided by the average number of hours worked in full-time jobs, which may vary across countries.

### References


7.13. Practising nurses per 1 000 population, 2000 and 2016 (or nearest year)

1. In Denmark, Finland, Iceland and Switzerland, about one-third of nurses are "associate professional" nurses with a lower level of qualifications. In Denmark and Switzerland, most of the growth in the number of nurses since 2000 has been in this category of associate professional nurses.
2. Data include not only nurses providing care for patients, but also those working as managers, educators, etc.
3. Austria and Greece report only nurses employed in hospital.


7.14. Nurses working in hospital, head count vs full time equivalent, 2006 and 2016 (or nearest year)

Note: Data include professional and associate professional nurses as well as midwives working in hospital.
