Nurses play a critical role in providing health care not only in traditional settings such as hospitals and long-term care institutions, but increasingly in primary care (especially in offering care to the chronically ill) and in home care settings. However, there are concerns in many countries about shortages of nurses, and these concerns may well intensify in the future as the demand for nurses continues to increase and the ageing of the "baby-boom" generation precipitates a wave of retirements among nurses. These concerns have prompted many countries to increase the training of new nurses combined with efforts to increase retention rates in the profession, even as the economic crisis has squeezed health budgets.

This section presents data on the number of nurses, distinguishing where applicable "professional" (or "qualified") nurses from "associate professional" (or "qualified auxiliary") nurses (who are trained at a lower level and perform lower tasks). These data do not include nursing aids or health care assistants, who are not recognised as nurses, but may nonetheless provide a lot of assistance in patient care.

On average across EU countries, there were about eight nurses per 1 000 population in 2012. The number of nurses per capita was highest in Switzerland, Norway, Denmark, Finland, Ireland, Luxembourg and the Netherlands. In Switzerland and Denmark, around two-thirds of nurses are "professional" (or "qualified") nurses while the other one-third are "associate professional" (or "qualified auxiliary") nurses. In other countries such as Belgium, France, Italy and Spain, there are no "associate professional" nurses as such, but a large number of nursing aids (or health care assistants) provide assistance to nurses. Greece had the fewest number of nurses among EU countries (including both professional and associate professional), followed by Bulgaria and Cyprus.

Since 2000, the number of nurses per capita has increased in all European countries, except in Lithuania and the Slovak Republic. The increase was particularly large in Malta, Portugal and Spain. In Estonia, the absolute number of nurses and density per capita increased up to 2008, but decreased slightly after the economic crisis, from 6.4 nurses per 1 000 population in 2008 to 6.2 in 2011 and 2012, although it remained higher than in 2000 (5.8 per 1 000 population).

In 2012, the number of nurses per doctor ranged from four or more in Denmark, Finland, Luxembourg and Ireland, to less than one nurse per doctor in Greece (Figure 3.3.2). The average across EU member states was about two-anda-half nurses per doctor, with many countries reporting between two to four nurses per doctor. In Greece, there is evidence of an oversupply of doctors and undersupply of nurses, resulting in an inefficient allocation of resources.

Promoting a greater retention of nurses in the profession is an important issue in many European countries to reduce any current or future shortages. A 2009-10 survey of nurses working in hospitals in 12 European countries found large variations in rates of job dissatisfaction among nurses, ranging from 11% in the Netherlands up to 56% in Greece, and in their intention to

leave their positions, with rates varying from 19% in the Netherlands up to almost 50% in Finland and Greece. Nurses in Greece also reported a particularly high level of burnout, and nearly half described their hospital wards as providing poor or fair quality of care only. In all countries, higher nurse staffing levels and better work environments in hospital were significantly associated with better quality and safety of care for patients, and higher job satisfaction for nurses (Aiken et al., 2012).

In response to shortages of general practitioners, some countries have taken the initiative to develop more advanced roles for nurses to ensure proper access to primary care. Evaluations of the experience with (advanced) nurse practitioners in Finland and the United Kingdom, as well as in Canada and the United States, show that they can improve access to care and reduce waiting times, while providing the same quality of care as doctors for patients with minor illnesses or those requiring routine follow-up (Delamaire and Lafortune, 2010).

## **Definition and comparability**

The number of nurses includes those providing services directly to patients ("practising"), but in some countries it also includes those working as managers, educators or researchers ("professionally active"). In countries where there are different levels of nurses, the data include both "professional" (or "qualified") nurses who have a higher level of education and perform higher level tasks and "associate professional" (or "qualified auxiliary") nurses who have a lower level of education but are nonetheless recognised and registered as nurses. Nursing aids (or health care assistants) who are not recognised as nurses are excluded.

Midwives are also not included, except in some countries where they are considered specialist nurses.

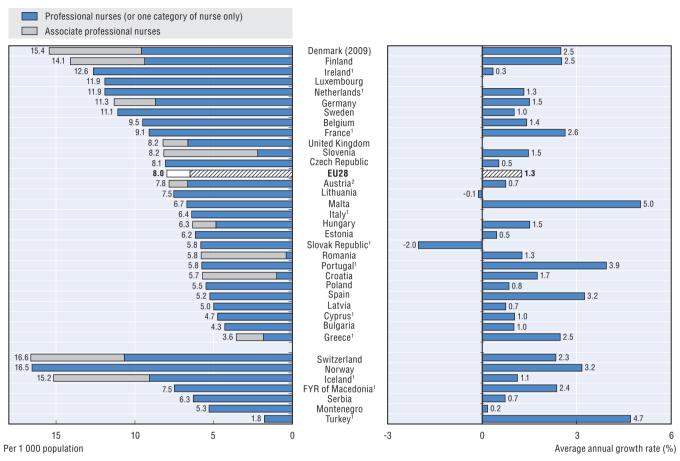
Austria reports only nurses working in hospitals (resulting in an underestimation). Data for Germany does not include about 277 500 nurses (representing an additional 30% of nurses) who have three years of education and are providing services for the elderly.

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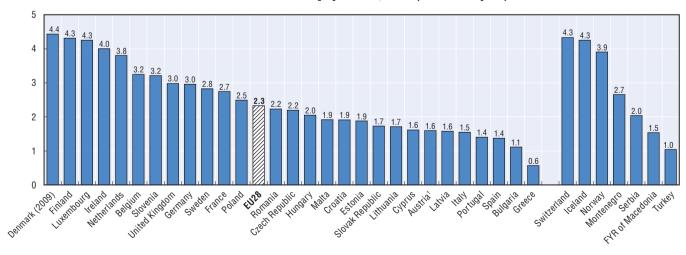
#### 3.3.1. Practising nurses per 1 000 population, 2012 and change between 2000 and 2012 (or nearest year)



- 1. Data include not only nurses providing direct care to patients, but also those working in the health sector as managers, educators, researchers, etc.
- 2. Austria reports only nurses employed in hospital.

Source: OECD Health Statistics 2014, http://dx.doi.org/10.1787/health-data-en; Eurostat Statistics Database; WHO Europe Health for All Database.

### 3.3.2. Ratio of nurses to physicians, 2012 (or nearest year)



Note: For those countries which have not provided data for practising nurses and/or practising physicians, the numbers relate to the same concept ("professionally active" or "licensed to practice") for both nurses and physicians, for the sake of consistency.

1. Austria reports only nurses employed in hospital.

Source: OECD Health Statistics 2014, http://dx.doi.org/10.1787/health-data-en; Eurostat Statistics Database; WHO Europe Health for All Database.

StatLink http://dx.doi.org/10.1787/888933155579



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