#### **DOCTORS AND NURSES**

Access to high-quality health services critically depends on the size, skill-mix, competency, geographic distribution and productivity of the health workforce. Health workers, and in particular doctors and nurses, are the cornerstone of health systems.

The number of doctors per 1 000 population varies widely across Asia-Pacific countries and territories, but it is generally lower than the OECD average (Figure 5.1). Across lower-middle and low income Asia-Pacific countries, there is one doctor per 1 000 population, whereas a slightly higher number of doctors – 1.2 per 1 000 population – is reported in upper-middle income countries. Australia and DPR Korea have the highest number of doctors per capita, with 3.5 doctors per 1 000 population, slightly higher than the OECD average of 3.4. In contrast, Papua New Guinea, Cambodia, the Solomon Islands and Indonesia have the lowest number of physicians per 1 000 population at or below 0.2.

The specialisation-mix and distribution of doctors may be improved in countries in Asia-Pacific. In Mongolia, for example, general practitioners account for only 21.9% of all doctors in 2011, and postgraduate training needs to be reorganised to ensure an adequate mix of specialisations (WHO, 2014e). Furthermore, an uneven geographical distribution of health workers is a serious concern. The majority of health workers tend to be concentrated in urban areas, leaving a shortage of health workers in remote and rural areas that results in poor availability of health services particularly for vulnerable populations (Liu et al., 2018).

There is a large variation also in the number of nurses per 1 000 population across countries and territories in Asia-Pacific (Figure 5.2). The number of nurses is highest in high-income countries such as Japan, Australia and New Zealand, with over ten nurses per 1 000 population. The supply is much lower in a number of low-income countries, including Papua New Guinee, Pakistan and Bangladesh, where there are 0.5 nurses or less per 1 000 population. On average, two and three nurses per 1 000 population are available in lower-middle and low and upper-middle income Asia-Pacific countries respectively, much lower than the OECD average at nine nurses per 1 000 population. Nurses are not well distributed geographically within countries such as Indonesia and the Philippines (Mahendradhata et al., 2017; Dayrit et al., 2018), and several other countries in the region face the same issue.

In some countries, national human resources for health planning needs to take account of emigration trends in order to secure the necessary number of health professionals domestically. For example, India is the leading exporter of doctors and nurses to OECD countries, but their domestic density is half of the Asia-Pacific average for doctors and less than half for nurses. On the other hand, the Philippines is also the leading exporter of nurses and a major exporter of doctors (Dayrit et al., 2018), but the density of these health professionals is at about the Asia-Pacific average.

As seen in OECD countries, nurses outnumber doctors and there are 2.1 and 2.5 nurses per doctor in lower-middle and low, and upper-middle Asia-Pacific countries respectively (Figure 5.3). However, there are some exceptions. Due to very few numbers of doctors, Papua New Guinea and the Solomon Islands have more than nine nurses per doctor. On the other hand, doctors outnumber nurses in Bangladesh and Pakistan.

Countries in Asia-Pacific need to respond to the changing demand for health services and hence the health professional skill-mix in the context of rapidly ageing populations (see indicator "Ageing" in Chapter 5). The WHO global strategic directions (WHO, 2016c) provide the framework for strengthening health workforce services to help countries achieve universal health coverage. The health workforce underpins the Sustainable Development Goals target 3.C to "substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States".

OECD countries, already experiencing population ageing, have developed formal systems to care for people with limitations on activities of daily living, and long-term care workers, typically nurses and personal carers, provide care and/or assistance to these people at home or in institutions (Muir, 2017).

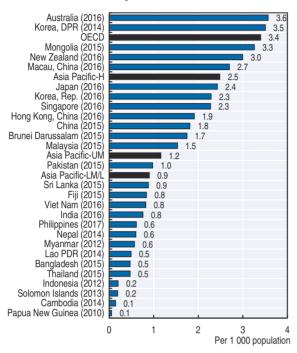
#### **Definition and comparability**

Doctors include Generalist medical doctors (including family and primary care doctors) and Specialist medical doctors.

For Asia-Pacific non-OECD countries and territories, "Nurses" refers to the number of nursing and midwifery personnel, including professional nurses, professional midwives, auxiliary nurses, auxiliary midwives, enrolled nurses, enrolled midwives and related occupations such as dental nurses and primary care nurses. For OECD countries, "Nurses" refers to practising nurses that provide services directly to patients. This number includes professional nurses, associate professional nurses and foreign nurses licensed to practice and actively practising in the country. It excludes students who have not yet graduated, nursing aids/assistants and personal care workers who do not have any recognised qualification/ certification in nursing, midwives (unless they work most of the time as nurses), nurses working in administration, management, research and in other posts that exclude direct contact with patients, unemployed nurses and retired nurses no longer practising and nurses working abroad.

Data are based on head counts.

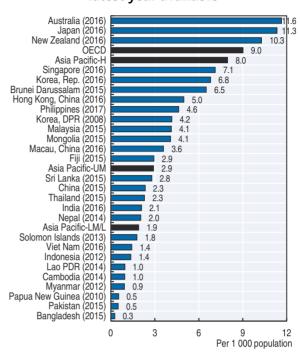
### 5.1. Doctors per 1 000 population, latest year available



Source: OECD Health Statistics 2018; WHO GHO, 2018; National Data Sources (see Annex A).

StatLink http://dx.doi.org/10.1787/888933868253

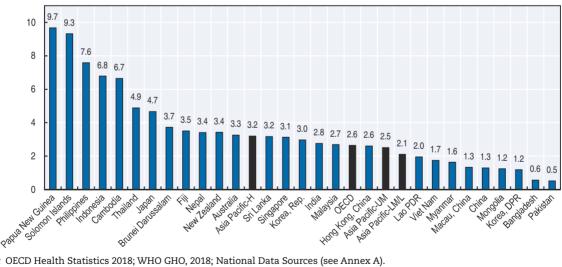
### 5.2. Nurses per 1 000 population, latest year available



Source: OECD Health Statistics 2018; WHO GHO, 2018; National Data Sources (see Annex A).

StatLink http://dx.doi.org/10.1787/888933868462

#### 5.3. Ratio of nurses to doctors, latest year available



Source: OECD Health Statistics 2018; WHO GHO, 2018; National Data Sources (see Annex A).

StatLink http://dx.doi.org/10.1787/888933868595



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