



HumanAbility

# Global healthcare labour markets: Australia in context

A Report for HumanAbility

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# 1. Introduction: Shortages and competition in global healthcare labour markets

## 1.1 Introduction

This report was prepared for HumanAbility as an expanded and updated version of a paper given at the first HumanAbility conference in Canberra in November 2023.

The aim of the report is to provide a global backdrop to healthcare workforce labour dynamics and profile in Australia, in order to give stakeholders in Australia some reference points to frame their own policy and analytical focus.

The report draws extensively from data, analysis and reporting by international organisations. One main source is the Organisation of Economic Co-operation and Development (OECD) which represents 38 mainly high income countries, including Australia, and which provides regular reports and analysis on health system factors, including workforce (some of its analysis extends beyond its own members to include additional countries). Another main source is the World Health Organisation,

which also conducts health workforce analysis, using standardised methods, across its 194 Member States in six regions (Australia is located in the WHO Western Pacific Region).

## 1.2 Global health labour markets: Shortages and Competition

Any global analysis of the current healthcare workforce is shaped by two salient features. One is overall shortage, exacerbated by huge country and regional distributional differences. The second is the variable impact and recovery of country healthcare labour markets from the impact of the Covid-19 pandemic, which was at its most marked from 2020-2022.

### Global healthcare workforce shortages

There is no universally accepted definition of “shortage” as it applies to the health care workforce. Two global estimates, using different definitions of “demand” do illustrate the scale

of the world-wide healthcare workforce shortfall, as well as highlighting how different definitions of “demand” can lead to very different identified levels of supply gap.

The first source is WHO, which has undertaken projections on the global supply of health professionals to 2030, using a 2020 baseline<sup>1</sup>. Their estimate is that in 2020, the global workforce stock was 29.1 million nurses, 12.7 million medical doctors, 3.7 million pharmacists, 2.5 million dentists, 2.2 million midwives and 14.9 million additional occupations, in total amounting to 65.1 million health workers.

The WHO projected overall global health workforce shortage in 2020 was 15 million health workers<sup>2</sup>, and available workforce was not equitably distributed with a 6.5-fold difference in workforce: population density between high-income and low-income countries.

An alternate analysis on global health workforce supply, projects much higher shortages. This was conducted for the Global Burden of Disease (GBD) study<sup>3</sup>. It used a baseline of 2019 and estimated that in that year the world had 104.0 million health workers, including 12.8 million physicians, 29.8 million nurses and midwives, 4.6 million dentistry personnel, and 5.2 million pharmaceutical personnel. To reach 80 out of 100 on the UHC effective coverage index (a higher definition of “demand” than that used by WHO) the study estimated that, per 10 000 population, at least 20.7 physicians, 70.6 nurses and midwives, 8.2 dentistry personnel, and 9.4 pharmaceutical personnel would be needed. In total, their 2019 estimate of national health workforces fell short of these minimum thresholds by 6.4 million physicians, 30.6 million nurses and midwives, 3.3 million dentistry personnel, and 2.9 million pharmaceutical personnel- a “shortage” of more than 43 million in total- almost three times the WHO estimate.

Whilst these two studies reinforce that the use of different definitions of “workforce” and different estimates of demand and/ or supply will lead to different determinations of supply-demand gaps (“shortages”), the scale of the global healthcare workforce deficit in either study is measured in the millions, with the gap being much more pronounced in low income countries and regions.

### **The role of technology**

The pandemic accelerated the use of technology as a support to health care delivery, including remote/rural support<sup>4</sup>, and also became more prominent feature in the training and education of the healthcare workforce. This report will not examine this aspect of system effectiveness and efficiency in any detail, but does acknowledge the scope to harness tech in all its forms to support and develop the healthcare workforce.

The key issue for policy makers is to ensure that the healthcare workforce, and the population, is equipped and enabled to use the tech<sup>567</sup>. This means adopting a systems approach rather than a tech led approach. As OECD has noted “Successful digital transformation in the health sector is not a simple matter of technical change but requires a complex adaptive change in human attitudes and skills as well as in the organisation of work and the related legal and financial frameworks. Digital technologies only provide the tools and cannot transform the health sector on its own but need to be put to productive use by the health workers and patients.”<sup>8</sup>

### **The impact of the Covid-19 pandemic on the global healthcare workforce**

The “shortage” analyses reported above essentially describes the pre-Covid world, and reinforce that global health was short of millions of healthcare workers when the pandemic hit in 2020. The Covid-19 pandemic has killed millions, infected many millions more, undermined the global economy and made a huge demand on health systems. Many health workers died during the pandemic and many more have fallen ill.

One world-wide estimate, acknowledged to be conservative, is that more than 100,000 health workers died<sup>9</sup>, whilst many more have experienced heavy and long-term work related stress and burnout. WHO highlighted that health workforce constraints were the single most commonly reported bottleneck to any effective scale up of pandemic responses across the world, and threatened to undermine service provision efforts<sup>10</sup>. Another global review, co-led by WHO, reported that burnout among groups of health and care workers in different countries during the pandemic ranged from 41 to 52 percent in pooled estimates<sup>11</sup>.

A 2022 OECD report on health system recovery as a foundation for economic growth identified that one of three “pillars” of investment must be to “Bolster health professionals working on the frontline”. It emphasised that a “reinforced workforce strengthens service delivery”. It pinpointed two major necessary areas of investment: (1) having an adequate number of health and long-term care professionals; and (2) improving the competitiveness of salaries of key groups of health and long-term care workers.

Further impetus to the urgent need for investment in the healthcare workforce is given by the findings of a recent econometric study which found that “a higher density of the health workforce, especially the aggregate density of skilled health workers and density of nursing and midwifery personnel, was significantly associated with better levels of several health outcomes, including maternal mortality ratio, under-five mortality rate, infant mortality rate, and neonatal mortality rate, and was significantly correlated with a lower level of COVID-19 excess deaths per 100 K people,

though not robust to weighting by population”. It concluded that “investment in health workforce should be an integral part of strategies to achieve health-related SDG's, and achieving non-health SDGs related to poverty alleviation and expansion of female education are complementary to achieving both sets of goals”.<sup>12</sup>

The toll the pandemic has exacted on the global economy has been significant, with the International Monetary Fund (IMF) reporting that median global GDP dropped by 3.9% from 2019 to 2020, making it the worst economic downturn since the Great Depression. In 2023 background analysis for the Davos World Economic Forum (WEF) highlighted that “Urgent and extreme action is needed now to improve recruitment and retention of the global healthcare workforce”<sup>13</sup>: another telling example of how the issue of health sector staff shortages has “mainstreamed” since the pandemic.

### Summary

Health systems and health workforces were variably impacted by the pandemic. Australia, as will be reported in

**Chapter 2**, has been relatively fortunate in the scale of impact. However all health systems and all countries must test and re-orientate their capacity and their healthcare workforce profile in order to best meet growing and changing demand. Global health needs are increasing as a result of the pandemic, a growing and ageing global population, and rises in non-communicable diseases.

Across the world, there tend to be three main areas of policy focus when countries are examining how to improve healthcare workforce availability and effectiveness:

1. **improve supply and retention of existing healthcare workers:** increase participation and/or hours worked, reduce turnover etc;
2. **investment in training to increase supply of new healthcare workers, focused in many countries on identifying priority skills as well as increasing numbers:** improve alignment and planning between education and employers; match curricula to population health priorities etc;

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<sup>1</sup> The United Nations Sustainable Development Goals.

3. **focus on longer term workforce sustainability and productivity by investment in the development and expansion of multi-disciplinary teams, advanced roles and career structures:** prioritise primary care, increase scope of practice, extension of prescribing authority, deliver relevant CPD – issues already being assessed in the Australian Government Scope of Practice review<sup>14</sup>.

This policy focus on healthcare workforce growth and sustainability often also has another strand- the policy led use of international recruitment and “managed” approaches to stimulate in-migration of relatively scarce health professionals. This is an increasingly common feature of policy response across a range of countries. This issue will also be given specific consideration in next chapter.

The long term care workforce, highlighted as core component of overall policy response is relatively under examined in international comparative analysis, but will be a critical element of improved care delivery. This is examined in **Chapter 3**.

In **Chapter 4**, the specific policy challenge of recruiting and retaining healthcare workers in rural and remote areas, a long term priority in Australia, will be examined through an international lens.

Finally, and critically, as emphasised above, the pandemic has been a sharp and painful reminder that health and economic growth are inseparable. The healthcare workforce investment contribution to broader societal and economic goals will be given consideration in **Chapter 5**.

**Chapter 6** provides brief concluding remarks.

## 2. The Australia healthcare workforce in context: international comparisons

### 2.1 Introduction: Global health needs, priorities and expenditure

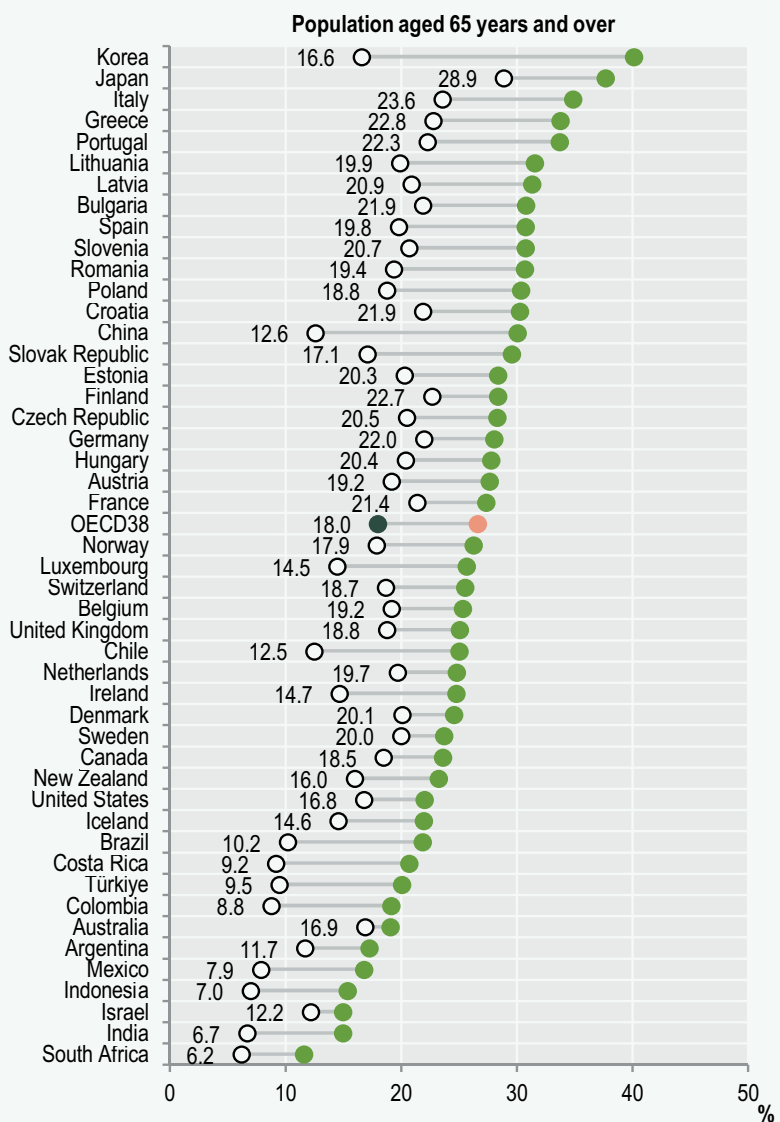
This report focuses on healthcare workforce profile and supply, using international data and analysis to place Australia in the broader context. It does not examine in any detail the “demand” side of healthcare workforce planning and policy, whilst acknowledging that this is always country context specific and plays a critical role in shaping effective workforce policy responses.

To provide a brief outline of the demand side, this section gives consideration to demography and also to health sector funding. The aim is to highlight points of similarity or difference between Australia and comparator countries, in order to put a more detailed examination of healthcare workforce in context.

#### Demographic profile

Fig 1 uses OECD standardised data to provide comparisons of the share of the population in each OECD country that was aged 65 or older, in 2021 and

**Fig 1. OECD + countries: Share of the population aged 65 and over, 2021 and 2050**



Sources: OECD Health Statistics 2023, OECD Historical Population Data and Projections (1950-2060) database. StatLink <https://stat.link/ctk9vs>

with a population projection to 2050 (some additional countries, such as India and Indonesia are also shown).

It is notable that Australia is at the lower end of the rank order for the % of the population that is 65+ in 2021, and also for the 2050 projection. It is reported that 16.9% of the population in Australia in 2021 was 65+, and with a slight increase to a projected 19.1% of the population in 2050. In comparison the OECD average across its 38 member countries was reported as 18% in 2021, slightly above Australia, but then growing much more rapidly, to reach 26.7% in 2050.

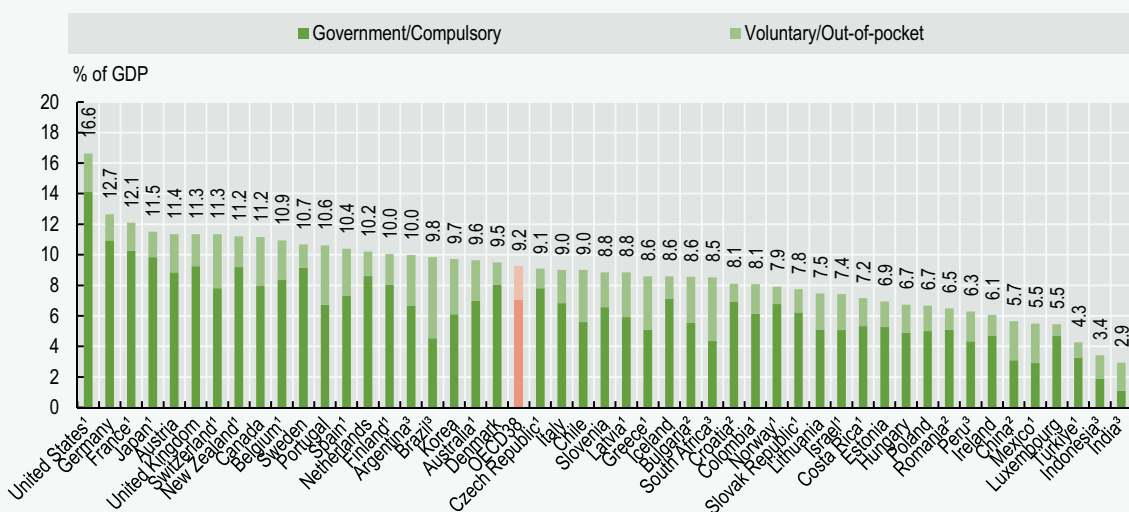
This is a % figure and does not give a sense of the numerical scale, but does suggest the older age profile driven increase in health care demand would be relatively more pronounced in some other OECD countries, notably those in north Asia (Japan and the Republic of Korea), and some of the countries of East and south Europe (Italy, Greece, Portugal, Lithuania etc) – these tend to be countries either experiencing net population decline and/ or not experiencing any marked in-migration of younger economically active migrants.

### Health funding/expenditure

Expenditure on health is another key metric which can give a

comparative base to assess “how much” different countries spend on health care. Given the labour intensive nature of healthcare delivery, there is also a close correlation between level of expenditure and availability of healthcare workforce. Fig 2 shows that In 2019, prior to the pandemic, OECD countries were spending, on average, around 8.8% of their GDP on healthcare, a figure relatively unchanged since 2013. By 2021 at the height of the pandemic response, OECD this proportion had jumped to 9.2%. Australia was a little above the OECD average, at 9.6% of share of GDP in 2022<sup>15</sup>.

**Fig 2: Health expenditure as a share of GDP, 2022 (or nearest year)**



1. OECD estimate for 2022. 2. 2021 data. 3. 2020 data. Source: OECD Health Statistics 2023; WHO Global Health Expenditure Database. StatLink <https://stat.link/5tof4d>. OECD analysis also highlights that spending on primary healthcare services as a share of current health expenditure, 2021 (or nearest year) was on average 13% of total expenditure. In Australia the figure was 15%<sup>16</sup>.



## 2.2 Healthcare Workforce “availability”

In OECD countries, health and social care systems employ more workers now than at any other time in history. In 2021, more than one in every ten jobs (10.5%) was in health or social care, up from 9.5% in 2011 (Figure 3). In Australia the growth had been from 11.7% to 13.3%.

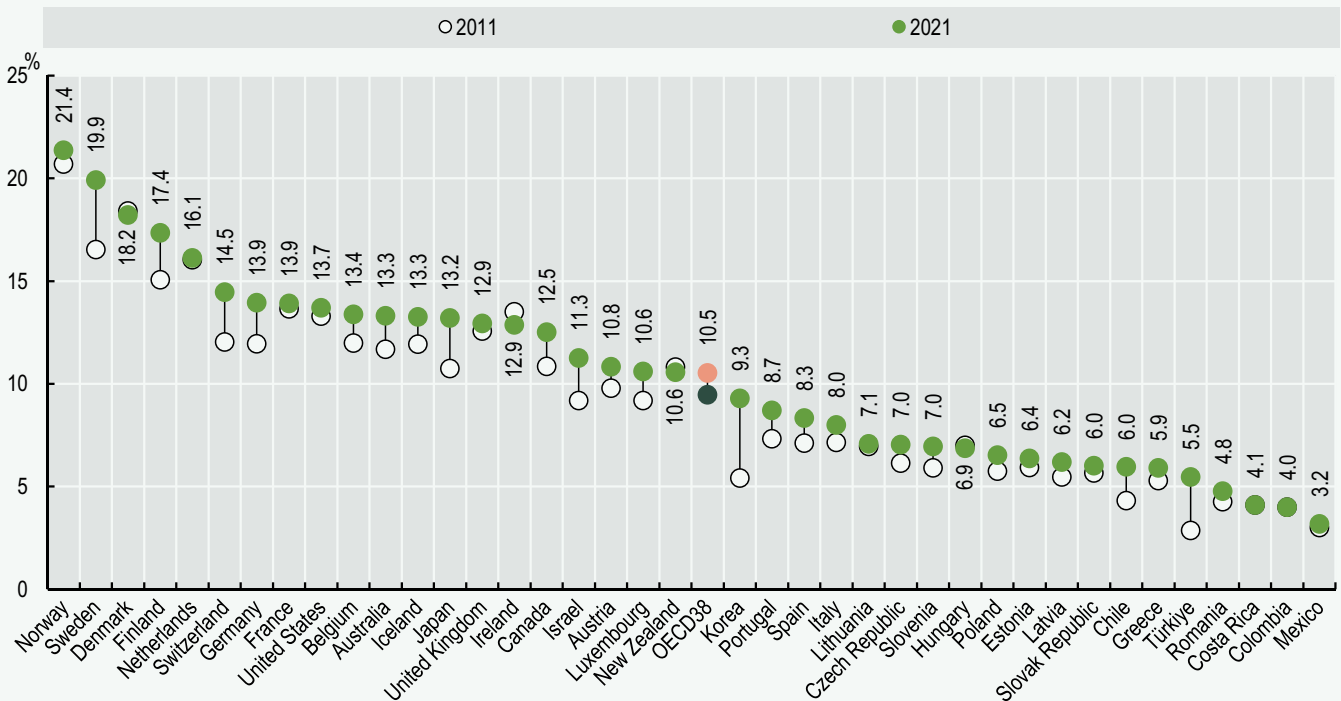
OECD highlight that job numbers in the health and social care sector increased much more rapidly than in other sectors over the past decade. On average across OECD countries, employment in health and social work increased by 24% between 2011 and 2021 – over twice the rate of overall employment growth. OECD expect

this growth to continue: “Population ageing, technological change and rising incomes are expected to continue to boost demand for health workers in the coming years and decades”<sup>17</sup>.

In most OECD countries, in 2021 over 75% of workers in the health and social care sector were women; OECD note that “women’s jobs tend to be concentrated more in lower-skilled and lower-paid occupations”.

More in depth data on some health professions is available from OECD, which gives some sense of the varying levels of current availability of the healthcare workforce in different countries.

**Fig 3: Employment in health and social work as a share of total employment, 2011 and 2021 (or nearest year)**

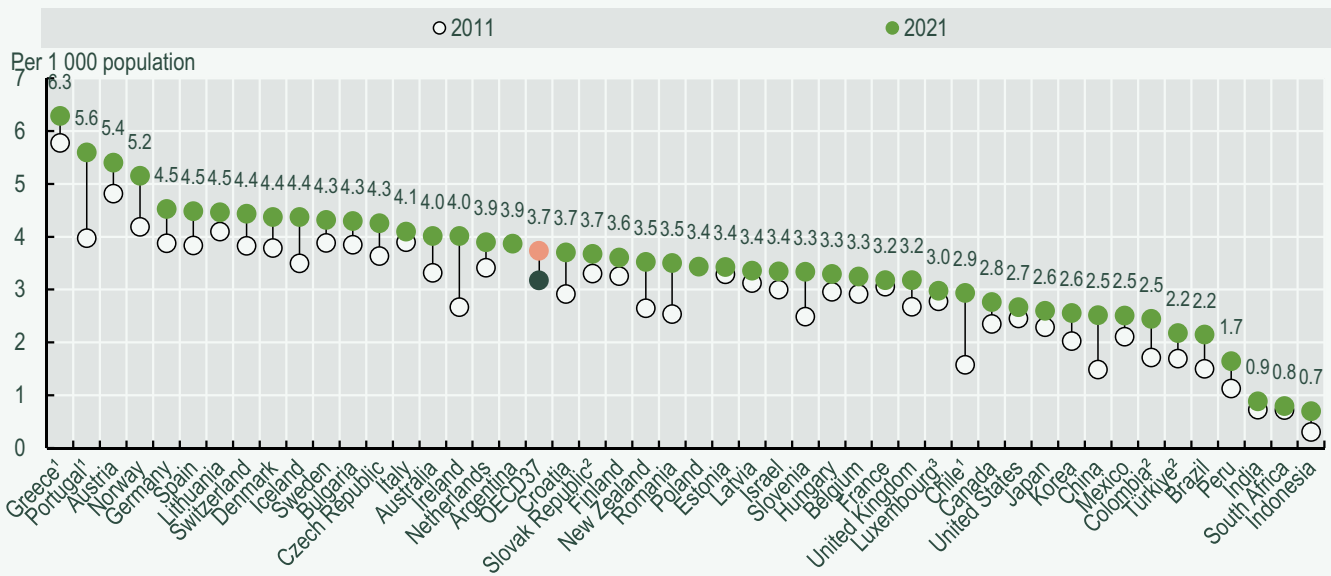


OECD National Accounts; OECD Annual Labour Force Statistics for Türkiye.  
StatLink <https://stat.link/6xwjmy>

## Doctors

The data on practising doctors per 1000 population is shown in Figure 4. This shows Australia at 4 doctors per 1,000 population, having grown from 3.3 per 1000 in 2011. This is above the OECD average of 3.7 per 1000 in 2021, but below the rate in a range of European countries.

**Fig 4: Practising doctors per 1 000 population, 2011 and 2021 (or nearest year)**



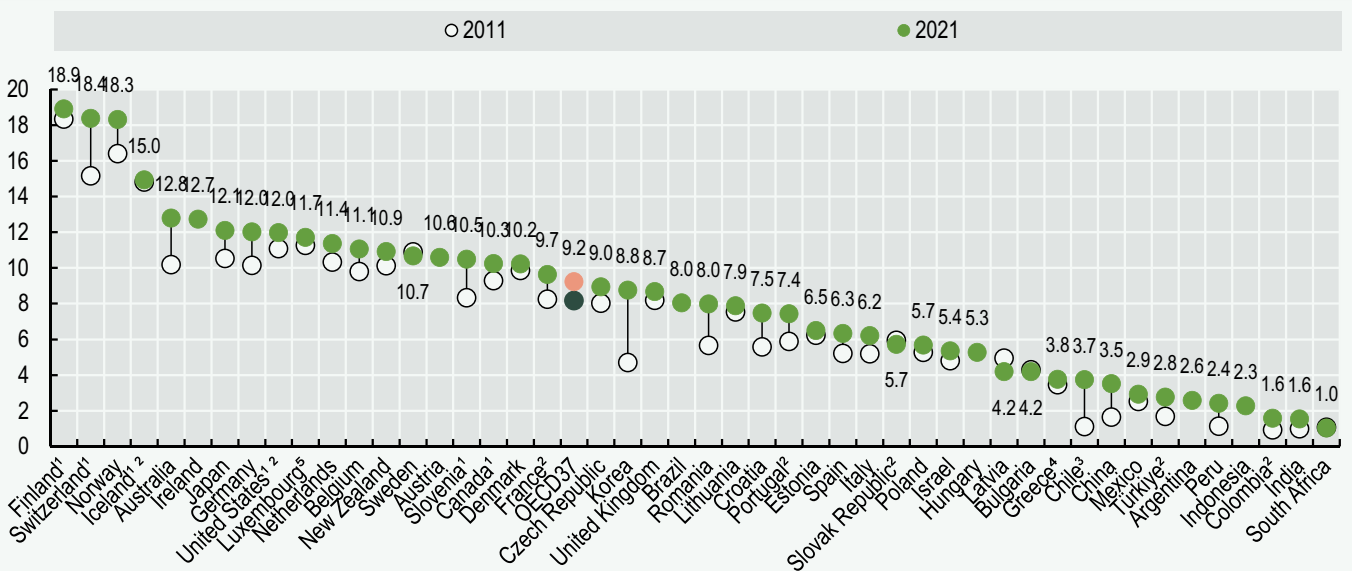
1. Refer to all doctors licensed to practise, resulting in a large overestimation of the number of practising doctors (e.g. around 30% in Portugal). 2. Includes not only doctors providing direct care to patients but also those working in the health sector as managers, educators, researchers, etc. (adding another 5-10% of doctors). 3. Latest available data 2017.

Source: OECD Health Statistics 2023. StatLink <https://stat.link/k4uhx3>

## Nurses

Data for nurses is shown in Fig 5. In 2021, there were 9.2 practicing nurses per 1 000 population on average across OECD member countries, up from 8.2 in 2011. Australia is above the OECD average, reporting 12.8 in 2021, up from 10.2 the decade before. The number of nurses per 1 000 population has grown in almost all OECD countries over the past decade.

**Fig 5: OECD + countries: Practising nurses per 1000 population, 2011 and 2021 (or nearest year)**



1. Associate professional nurses with a lower level of qualifications make up more than 50% of nurses in Slovenia, Croatia and Romania; between 33% and 50% in Greece, Iceland, Korea, Mexico and Switzerland; and between 15% and 30% in Australia, Canada, Finland, Japan, the United Kingdom and the United States. 2. Data include nurses working in the health sector as managers, educators, researchers and similar (e.g. for France, the number of practising nurses is overestimated by about 12%). 3. Data include all nurses licensed to practise. 4. Data only refer to nurses employed in hospitals. 5. Latest available data 2017. Source: OECD Health Statistics 2023. StatLink <https://stat.link/20d8bh>

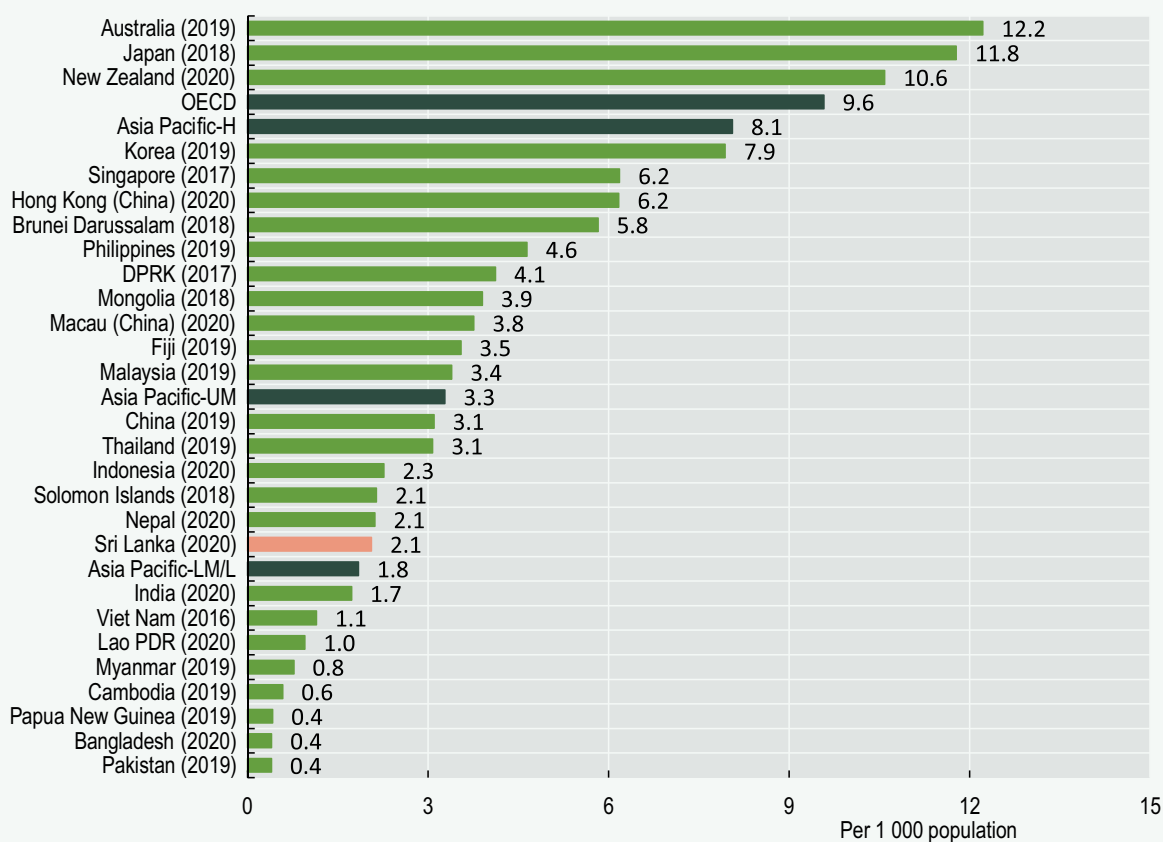
Another comparison is to look across countries which OECD highlights in its “Asia” reporting (Fig 6). This regional focus covers low, middle, and high income countries, and as such there is a more marked spread of nurse availability across these countries than is the case with Fig 5 which focuses primarily only on the higher income countries that are in membership of OECD [the data is also from a different year]

This Asia data highlights Australia at a high rate in comparison to Asia averages, but not dissimilar to other high income countries in the region: New Zealand, Japan and Korea. Low income countries report much lower levels of availability of nurses- as low as 0.4 in Bangladesh and Pakistan, and at a tenth of the level of high income countries in many other countries in South East Asia.

### 2.3 Levels of reliance on international workforce

The extent of reliance on migration and active international recruitment of health professionals varies widely across OECD member states. Some OECD countries, including Australia, Canada, Ireland, Israel, New Zealand, Switzerland, the United Kingdom and the United States, have traditionally relied on

**Fig 6: OECD [Asia] Nurses per 1 000 population, latest year available<sup>18</sup>**



Note: Denominator for Hong Kong (China) is based on mid-year population; for Macau (China) on end of year population.

Source: OECD Health Statistics 2022; WHO GHO, 2022; National Data Sources (see Annex A). StatLink <https://stat.link/c7vszw>

international recruitment of doctors and nurses, and for some, this reliance has increased following the Covid-19 pandemic<sup>19</sup>.

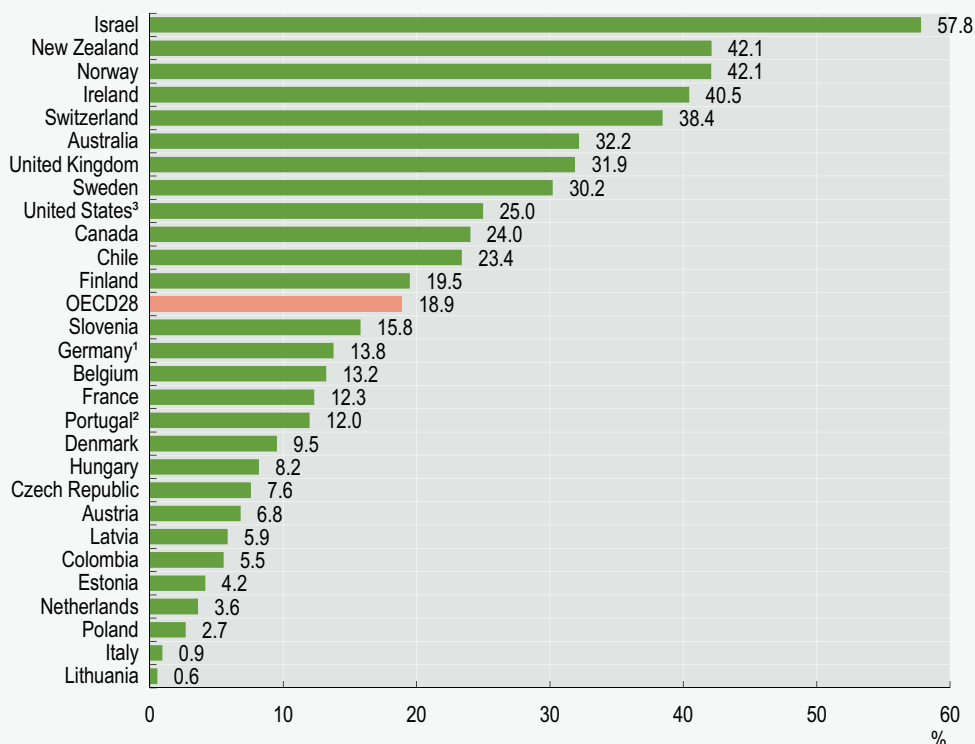
As noted in the introduction, there is a growing concern about overall global shortages of healthcare workers, with some countries in fundamental shortage, and many others reporting a gap between estimated demand and supply. In this context, active international recruitment is being used increasingly by countries with the resources to do so.

In 2021, nearly one-fifth (19%) of doctors on average across OECD countries had obtained at least their first medical degree in another country, up from 15% a decade earlier<sup>20</sup> (Figure 7). The share of foreign-trained doctors ranged from 3%

or less in Lithuania, Italy and Poland to around 40% in Switzerland, Ireland, Norway and New Zealand, and nearly 60% in Israel. (OECD note that data for Israel, Norway, Sweden and Finland include significant numbers of nationals of these countries who moved abroad for medical education and then returned home).

One in three (32.2%) of practising doctors in Australia were reported to be foreign trained, putting the country sixth highest in rank order across the OECD. This data only shows a point in time level of reliance on foreign trained professionals, it does not show patterns and trends over time, but does reinforce that Australia has a relatively high level of reliance on internationally educated and recruited doctors.

**Fig 7: OECD, Share of foreign-trained doctors, 2021 (or nearest year)**



1. Data based on nationality (not on place of training). 2. Latest available data 2017. 3. Latest available data 2016.  
Source: OECD Health Statistics 2023. StatLink <https://stat.link/gyo9r0>

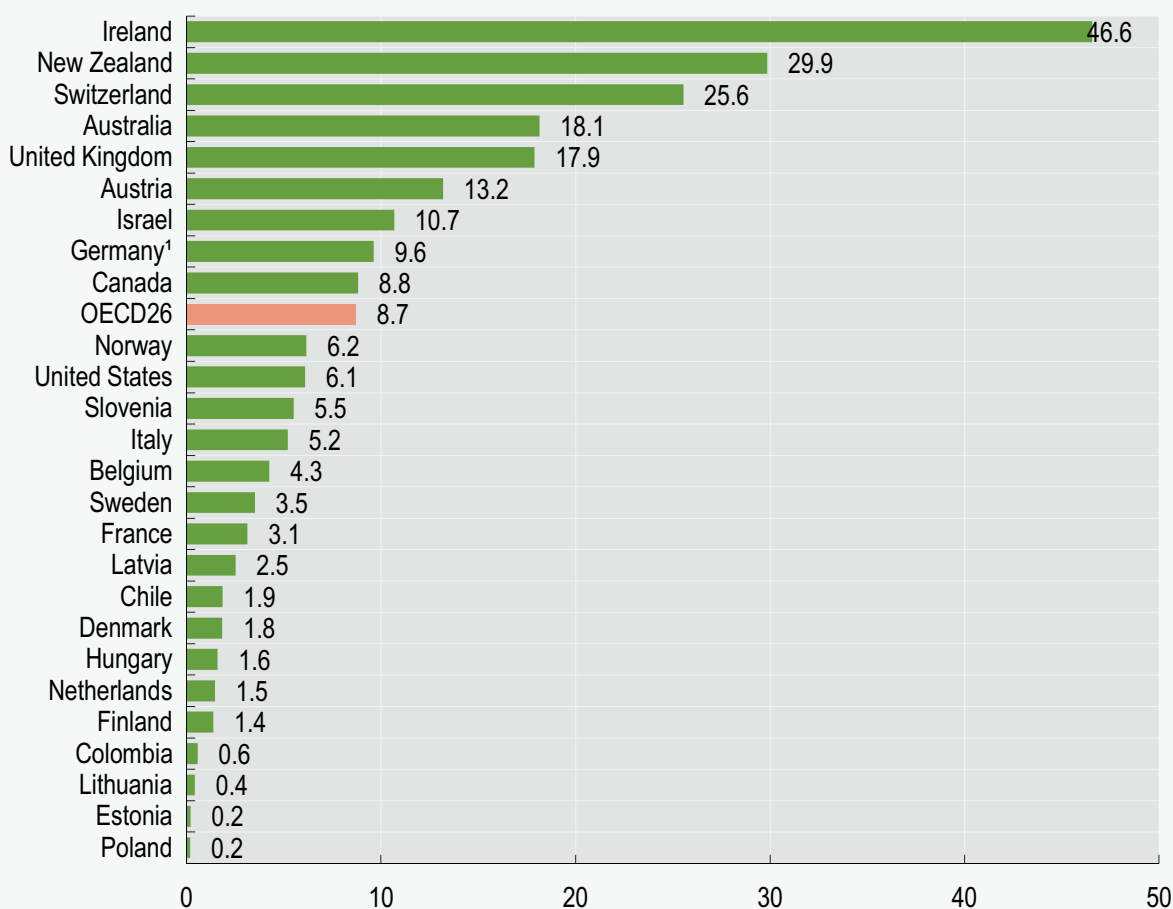
For nurses, OECD reports that in 2021 across its member countries, on average almost 9% had obtained their nursing training in another country (Figure 8), up from 5% a decade earlier. This is at a lower overall rate in comparison to doctors. There are some countries reporting much higher reliance than the OECD average. Nearly 50% of nurses in Ireland are foreign-trained, while the shares

are 25-30% in New Zealand and Switzerland, and about 18% in Australia and the United Kingdom. This places Australia fourth highest in the reported OECD countries in terms of rank order level of reliance on foreign trained nurses.

Australia is currently reporting the highest levels of overall net in-migration since the 1950's, reflecting economic growth and

an active migration management policy<sup>21</sup>. It is also focusing specific policy recommendations on making active international recruitment of health professionals and other occupations more effective and streamlined by fast-tracking regulatory processes<sup>22</sup>.

**Fig 8: OECD, Share of foreign-trained nurses, 2021 (or nearest year)**



1. Data based on nationality (not on place of training).  
 Source: OECD Health Statistics 2023. StatLink <https://stat.link/9n2y34>



Given global healthcare workforce shortages, and a more intensive focus by some countries on active international recruitment as a solution to domestic demand- supply gaps, international competition for relatively scarce skilled and experienced health professionals is likely to become more pronounced, with countries attempting to leverage any competitive advantages. Australia has been one of the most prominent destination countries for migrant healthcare workers in recent decades, and has relative advantages of economic and political stability, career opportunities and comparatively high incomes as major attractors.

In the context of the application of the WHO Global Code of Conduct on International Recruitment of Health Personnel, which all member states approved in 2010, WHO has now issued a specific list of countries vulnerable to international outflow of staff.

The Support and Safeguards list appended to the Code<sup>23</sup> currently comprises 55 countries. 8 of these 55 are in the same WHO Region as Australia (Western Pacific Region): Kiribati, Lao People's Democratic Republic, Micronesia (Federated States of), Papua New Guinea, Samoa, Solomon Islands, Tuvalu, Vanuatu.

## 3. Long term care workforce

### 3.1 Workforce profile

Most international comparative data on the healthcare workforce focuses on the main health professional occupations: doctors and nurses working in the healthcare sector. However there has been growing policy recognition, in Australia and elsewhere<sup>24</sup>, of the importance of the need to develop a better understanding of long term care and the salient and sometimes different characteristics of its workforce<sup>25</sup>.

The range of personal care and assistance services provided in long-term care vary in different countries, but for comparative purposes is defined by OECD as “the range of medical/ nursing care services, personal care services and assistance services that are consumed

with the primary goals of alleviating pain and suffering or reducing or managing the deterioration in health status in patients with a degree of long-term dependency”<sup>26</sup>. Events during and after the Covid-19 pandemic have sharpened the policy focus on safe and effective long term care.

Analysis for OECD reported that by 2021, 40 per cent of total COVID-19 deaths had been in long-term care<sup>27</sup>.

Given its significance and coverage by HumanAbility, this section of the report gives specific attention to the long term care workforce. Recent OECD projections forecast that growth in demand for long-term care workers over the next decade across OECD countries will be much higher than the

actual recorded increase over the past decade. It stresses that further efforts will be required to increase the attractiveness of the sector, and recruitment and retention of workers in the long-term care sector to avoid a sharp increase in unmet needs and workforce shortages<sup>28</sup>.

LTC workers are defined by OECD as “paid workers who provide care at home or in institutions (outside hospitals). They include qualified nurses and personal care workers providing assistance with ADL and other personal support”<sup>2</sup>. The numbers reported are expressed as headcounts, not full-time equivalents. Some LTC workers might hold multiple part-time positions.

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<sup>2</sup>Nurses include both professional and associate professional nurses; – International Standard Classification of Occupations 2008 (ISCO-08) classifications 2 221 and 3 221. Personal care workers (ISCO-08 classifications 5 321 and 5 322) include various categories of workers, who may be called different names in different countries. Because personal care workers may not be part of recognised occupations, it is more difficult to collect comparable data for this category of LTC workers across countries. Data from OECD Health Statistics 2023 also include family members or friends who are employed under a formal contract by the care recipient, an agency or public and private care service companies.

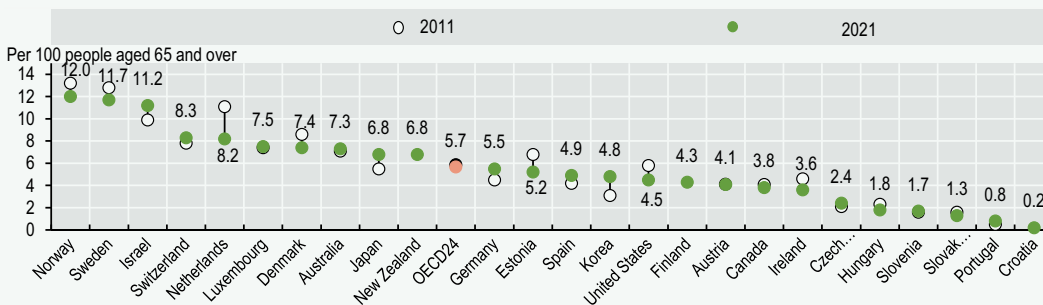


Fig 9 below reports OECD derived data on long term care workers per 100 people aged 65 or over in 2011 and in 2021- not all OECD countries report the data. Australia reports 7.3 workers per 100 +65 population in 2021, above the OECD average; the countries reporting the highest availability tend to be in Western Europe and Scandinavia.

One specific issue that OECD reports in relation to recruitment and retention and workforce sustainability in the LTC sector is the relatively

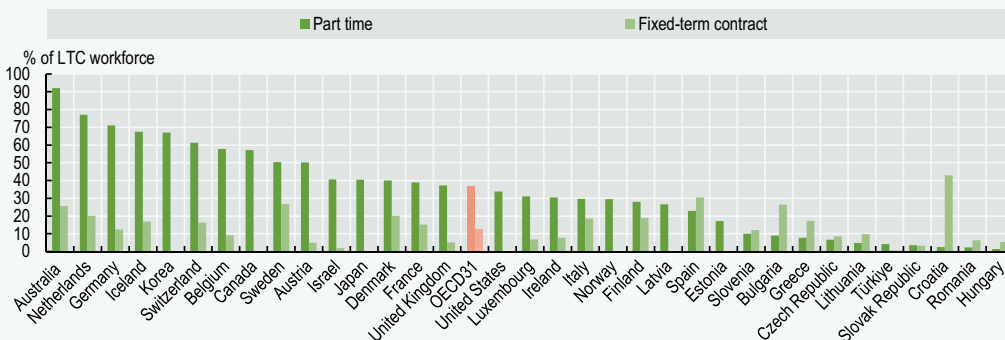
high level of part-time, fixed term or “casual” employment. Fig 10 below shows available data from 2021 and suggests that Australia reports the highest use of part-time workers, with 92% being part time. It also reports the second highest level of use of fixed terms contracts. Data is only available from a limited number of OECD countries.

**Fig 9: OECD, Long-term care workers per 100 people aged 65 and over, 2011 and 2021 (or nearest year)**



OECD Health Statistics 2023. StatLink: <https://stat.link/pnuacr>

**Fig 10: OECD, Share of long-term care workers who work part time or on fixed-term contracts, 2021 (or nearest year)**



Source: OECD Health Statistics 2023. StatLink: <https://stat.link/omb8lx>

Given the forecast of growth in demand for long-term care workers over the next decade across OECD countries, OECD stresses that “Further efforts will be required to increase the attractiveness of the profession and recruitment and retention of workers in the long-term care sector to avoid a sharp increase in unmet needs and workforce shortages<sup>29</sup>.”

### 3.2 Reliance on “informal carers”

In addition to employed or “formal” LTC workers, informal carers are a major – and often

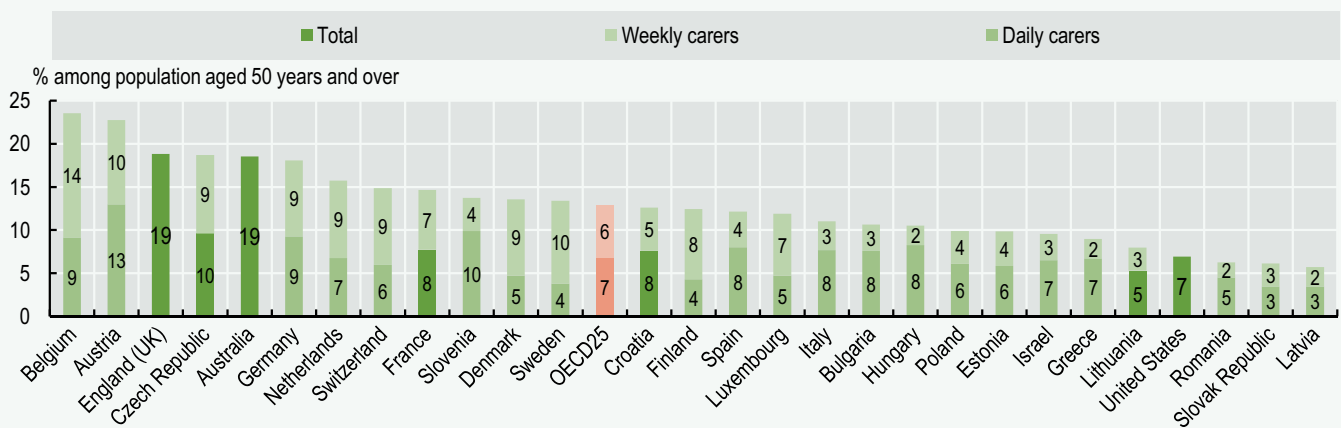
the only – source of care for people with LTC needs across OECD countries. OECD define informal carers as “people providing any help to older family members, friends and people in their social network, living inside or outside their household, who require help with everyday tasks”.<sup>30</sup> They note that due to the informal nature of care, comparable data across countries are difficult to obtain<sup>3</sup>.

OECD reported in 2022 that across 19 countries, about 60% of older people reported receiving only informal care.<sup>31</sup>

Fig 11 below show that, for the 25 OECD countries with comparable data, more than one in eight (13%) people aged 50 and over provided informal care, ranging from 6% in Latvia to more than 20% in Austria and Belgium. Australia was at the higher end of the spread- with 19% in total reporting that they had provided informal care.

Informal carers are predominantly women. A OECD analysis reporting on 2019 data highlighted that across 25 OECD countries, 60% of informal carers were women,

**Fig 11: OECD, Share of informal carers among the population aged 50 and over, 2019 (or nearest year)**



Note: The definition of informal carers differs between surveys (see the link below for full definitions).  
Source OECD StatLink: <https://stat.link/eovg59>

<sup>30</sup>OECD report that their data “stem from international and national surveys. There are differences in the definition of informal care across these surveys, which affects the comparability of the data”

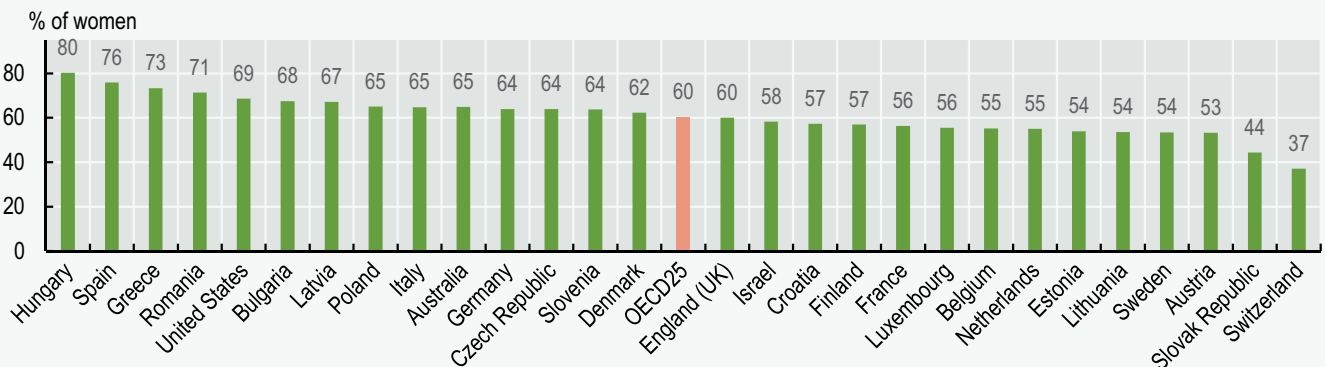
ranging from 37% in Switzerland to 80% in Hungary (Figure 12 below). Australia was above the OECD average, reporting that 65% of informal carers were women.

OECD highlight that “Intense provision of informal care is associated with negative effects on mental health and labour market attainment, such as a reduction of hours worked and earlier retirement”. Care responsibilities may constrain the ability of individuals to work in paid employment and can restrict career opportunities.<sup>32</sup> It reports that about two-thirds of OECD countries have introduced policies to support informal workers and to alleviate the burden of informal care – such as cash benefits paid to carers, those in need of care, or both. In addition, about half of OECD countries offer

some form of paid leave for informal carers, although this does not necessarily make up for forgone wages.<sup>33</sup>

Across its member countries, OECD highlight that “The degree to which countries can depend on informal care as a dominant provider of LTC is likely to decline in the future. Demand for LTC is going to increase due to population ageing ...At the same time, declines in family size, increases in geographical mobility and increasing female labour market participation are leading to reductions in the supply of informal carers”. As such, OECD concludes that countries will have to expand their formal LTC sector and workforce in order to meet unmet care needs.

**Fig 12: OECD, Share of women among informal daily carers (among the population aged 50 and over), 2019 (or nearest year)**



Note: The definition of informal carers differs between surveys (see the link below for full definitions).  
Source: OECD StatLink <https://stat.link/51iab7>

## 4. Distribution/rural and remote healthcare workforce

Australia has one of the most widely dispersed populations in the world, with large areas of very low population density combined with some large high density urban areas. An overlapping but critically significant policy issue is the concentration of First Nations people in rural and remote areas. This presents ongoing policy challenges of trying to enable equitable population access, and provision of healthcare services, across a huge and varied geography, whilst also ensuring that the care being provided to First Nations people is culturally safe and effective.<sup>34 35</sup>

The broader rural/ remote challenge is pronounced in the country, but not unique to Australia. Policies to improve recruitment, retention and distribution of healthcare workers working across systems<sup>36</sup>, or more specifically in remote and rural regions have been developed in a range of countries. However, given the scale of the challenge in Australia it is not surprising

that policy and research on the subject is particularly evident in the country, with a range of policy reviews being published.<sup>37</sup> The specific focus on full involvement of First Nations people is not well documented in other countries, but insights and policy commitments are emerging.<sup>38 39</sup>

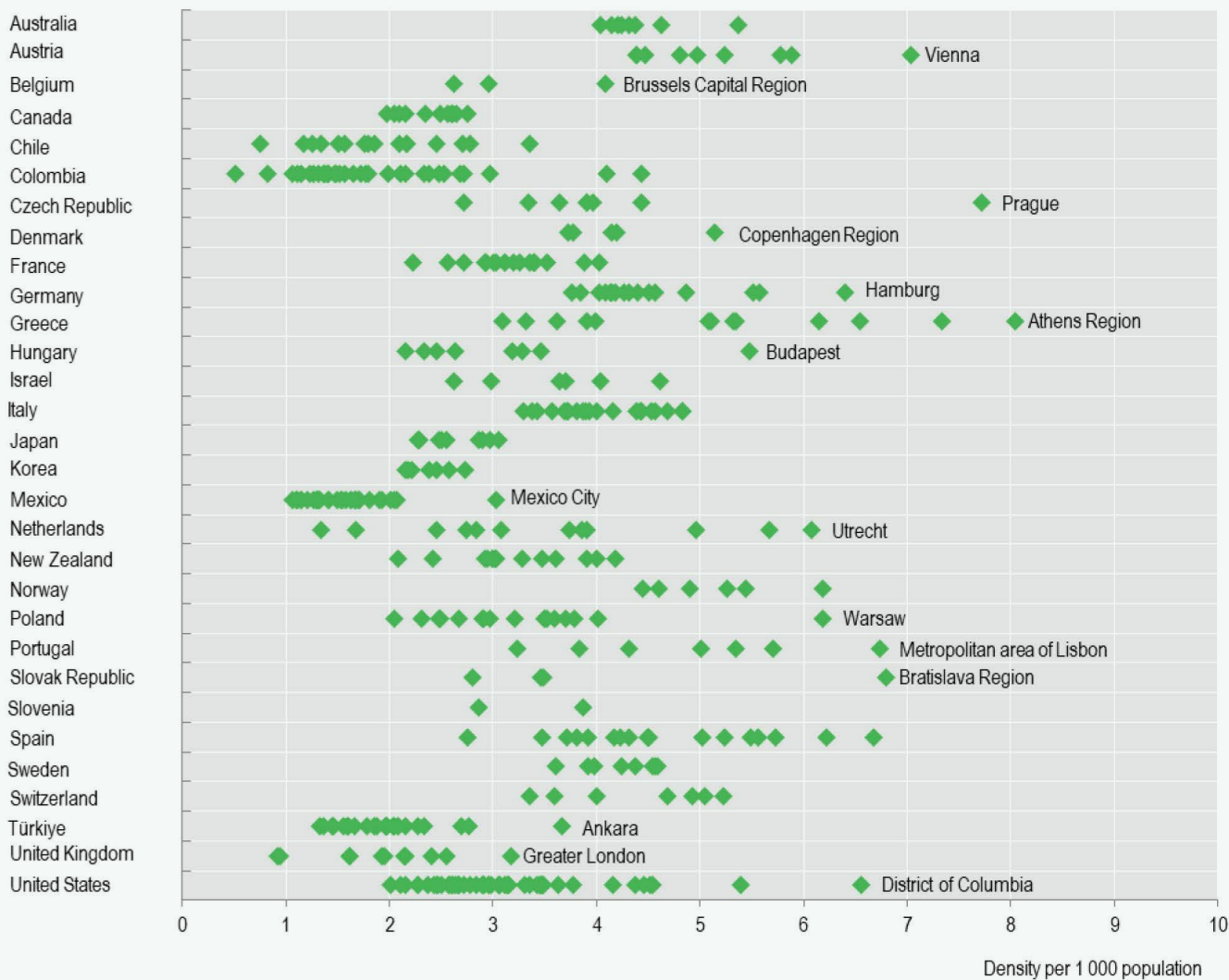
In terms of overall distribution, Fig 13 shows OECD data on doctor distribution across OECD member countries at “Territorial level 2 (TR2)” level, as measured by physician density per 1000 population. In most countries this equates to states, provinces or the second level of government/ administration. The data for Australia shows a relatively “tight” clustering at TR2 level, compared to many other countries. OECD also highlight that any high-end outlier TR2 tends to be the capital region of the country.

This data suggests physician density does not vary much between states and territories at State level in Australia. The geographical variation occurs

within states and territories, and is shaped by the urban/ rural split, with the very low population density and long travel distances being a notable feature of Australian “remote” geographies.

The global evidence on recruiting, retaining and developing healthcare workers in rural/remote settings, to achieve a more equitable distribution and improve overall access has been synthesised by WHO. It has highlighted that “Securing equitable access to health services for rural and remote populations continues to be a challenge for governments and policy-makers around the world” and has responded by developing evidence based guidelines . Notably, this global review included 32 studies from Australia, which was the single largest grouping of studies from any single country across the world.

**Fig 13. OECD data: Physician density across regions, by territorial Level 2 regions, 2021 (or nearest year)**



Source: OECD Regional Database 2023.

StatLink <https://stat.link/t9h7ap>

The WHO guidelines on health workforce development, attraction, recruitment, and retention in rural and remote areas are based on this global review and provide a useful frame for policy consideration in any country, including

Australia. The framework presents 17 different evidence derived potential policy interventions, grouped in four main areas: education, regulation, incentives and support (Table 1).

**Table 1:** The WHO 2021<sup>40</sup> guidelines on health workforce development, attraction, recruitment and retention in rural and remote areas

### Education

- 1: WHO recommends using targeted admission policies to enrol students with a rural background in health worker education programmes

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- 2: WHO suggests locating health education facilities closer to rural areas

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- 3: WHO recommends exposing students of a wide array of health worker disciplines to rural and remote communities and rural clinical practices

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- 4: WHO recommends including rural health topics in health worker education

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- 5: WHO recommends designing and enabling access to continuing education and professional development programmes that meet the needs of rural health workers to support their retention in rural areas

### B. Regulation

- 6: WHO suggests introducing and regulating enhanced scopes of practice for health workers in rural and remote areas

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- 7: WHO suggests introducing different types of health workers for rural practice to meet the needs of communities based on people-centred service delivery models

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- 8: WHO acknowledges that many Member States have compulsory service agreements. When compulsory service in rural and remote areas exists, WHO suggests that it must respect the rights of health workers and be accompanied with fair, transparent and equitable management, support and incentives

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- 9: WHO suggests providing scholarships, bursaries or other education subsidies to health workers with agreements for return of service

### **C. Incentives**

10: WHO recommends employing a package of fiscally sustainable financial and nonfinancial incentives for health workers practising in rural and remote areas

### **D. Support**

11: WHO recommends investing in rural infrastructure and services to ensure decent living conditions for health workers and their families

12: WHO recommends ensuring a safe and secure working environment for health workers in rural and remote areas

13: WHO recommends providing decent work that respects the fundamental rights of health workers

14: WHO suggests identifying and implementing appropriate health workforce support networks for health workers in rural and remote areas

15: WHO recommends a policy of having career development and advancement programmes, and career pathways for health workers in rural and remote areas

16: WHO suggests supporting the development of networks, associations and journals for health workers in rural and remote areas

17: WHO recommends adopting social recognition measures at all levels for health workers in rural and remote areas

Source:<sup>41</sup>

WHO grades all the evidence identified and used in the development of the frame. The strongest evidence is in the “education” component of the overall frame. The “good practice statement” which accompanies the guideline emphasises that policy interventions should be interconnected, bundled and tailored to the local context.

Rural retention dynamics, and the scope to develop and implement improved policies, can only be understood when these are examined within the overall context of national (and international) labour markets, taking fully into account the broader national policy, funding modalities, and planning infrastructure. This includes differences between countries in how “rural” and “remote” may be defined for policy and analytical purposes<sup>42</sup>.

In addition, policies developed and implemented in isolation, focusing only on rural and remote issues without considering the connection to the rest of the labour market, and to any “knock on” effects or unintended consequences, will be much less likely to have a sustained impact. WHO highlights that “Improving access to health workers in rural and remote areas is grounded in

a commitment to health for all. It is important to focus on equity to ensure that the needs of rural and remote communities drive policy responses”.<sup>43</sup>

Another limitation of the international evidence is that many studies are based on one-off surveys of individual health workers from only profession or occupation, often doctors. More than half (52%) of the country studies identified world-wide by WHO focused only doctors. Whilst examining the profile, motivations and needs of individual workers is central to developing effective policy, there is also a critical requirement to take a broader perspective of the rural/remote workforce, which focuses on developing the most effective mix of skills and roles in teams to deliver care to defined populations in defined areas. Assessing population health priorities and determining the best mix of roles in a functioning and integrated primary health team has greater prospect of improving care, and is also more likely to enable retention.



## 5. The investment case: Healthcare workforce is wealth

### 5.1 Introduction

Health and social care in every system and in every country is labour intensive, and must be adequately staffed if it is to be effective. What is also important, and is now receiving increasing recognition is that there can be no viable national or global economy without effective investments in the health workforce. This issue has become more apparent as a result of the impact of the global Covid-19 pandemic which exposed any limitations in healthcare systems and also placed huge stress on the workers in these systems. As countries emerged from the worst phases of the pandemic it became clear that the policy direction in most countries required greater relative emphasis on primary care, and that the healthcare workforce required support.

### 5.2 National investment...

The impact of the Covid-19 pandemic has exposed the links between population health, well-being and economic

growth, and has also reinforced the need to take full account of the social determinants of health. This reflects the overall shift from health system delivery and healthcare employment being framed by a “cost - disease” model to one in which the contribution to economic and societal well-being is more fully recognised, and where primary care, and preventative health and health promotion is prioritised. In this more inclusive perspective, the definition of the “health care” workforce is broader, and the assessment of its contribution broadens out to include its impact both as leading source of employment, and as a socio-economic multiplier, with notable often has benefits for women. In short, this renewed perspective is that support for the healthcare workforce is an investment in health and prosperity, not a cost.

The establishment of the U.N. High-Level Commission on Health Employment and Economic Growth (HLC) in 2016 pre-dates the pandemic but was a critical milestone in

making the connections between population health, the healthcare workforce, social good and economic prosperity.<sup>44</sup> It highlighted that “The health sector is a key economic sector and a job generator. The aggregate size of the world’s health sector is over US\$ 5.8 trillion per year... Available estimates suggest that globally each worker trained in a health occupation is supported by one to two other workers... The returns on investment in health are estimated to be 9 to 1”.<sup>45</sup>

The HLC made 10 key recommendations.<sup>46</sup> Six recommendations related to “what needs to be changed in health employment, health education and health service delivery to maximize future returns on investments”.

These were:

1. **Job creation.** Stimulate investments in creating decent health sector jobs, particularly for women and youth, with the right skills, in the right numbers and in the right places.
2. **Gender and Womens Rights.** Maximize women's economic participation and foster their empowerment through institutionalizing their leadership, addressing gender biases and inequities in education and the health labour market, and tackling gender concerns in health reform processes.
3. **Education, Training and Skills.** Scale up transformative, high-quality education and lifelong learning so that all health workers have skills that match the health needs of populations and can work to their full potential.
4. **Health Service Delivery and Organisation.** Reform service models concentrated on hospital care and focus instead on prevention and on the efficient provision of high-quality, affordable, integrated, community-based, people-centred primary and ambulatory care, paying special attention to underserved areas.
5. **Technology.** Harness the power of cost-effective information and communication technologies to enhance health education, people-centred health services and health information systems.
6. **Crises and Humanitarian Settings.** Ensure investment in the International Health Regulations core capacities, including skills development of national and international health workers in humanitarian settings and public health emergencies, both acute and protracted. Ensure the protection and security of all health workers and health facilities in all settings.

In addition there were four “enabler” recommendations: Financing and fiscal space; partnership and co-operation; maximising the mutual benefits of any health worker migration; and better data, information and accountability.

The analysis undertaken for the Commission<sup>47</sup> helped broaden out the assessment of healthcare workforce to include its impact as both a leading source of current and future employment and as a socio-economic multiplier. There is scope in any country to leverage improved employment opportunities across the whole continuum of healthcare. In part this will be about ensuring decent work; recognizing that some professions and occupations are highly gendered; addressing identified “market failures”, notably in current mismatches between education and employment, and by establishing new “non traditional” career entry points and routes which can have a pay-back both in terms of increased participation, and distributed growth.<sup>48</sup>

The post-pandemic focus on health system rebuild and strengthening has also had a workforce dimension. In a 2023 report OECD has recommended that “Boosting the resilience of health systems requires smart investments... This report recommends an annual targeted investment of 1.4% of GDP across OECD countries relative to expenditure in 2019. Bolstering the health and long-term care workforce on the front-line accounts for around half of this recommended investment. This would mean over three million additional workers across OECD countries”.<sup>49</sup>

The Commission recognized that support for the appropriate training and development of the healthcare workforce is one key element of achieving a more responsive and effective workforce. This must be shaped by alignment of

the healthcare (employment) and the education (training) sectors, through targeted funding and appropriate regulation. It must also be driven by the assessment of optimal primary care workforce profile and by a focus on expanding socially accountable technical and vocational education and training (TVET), and by continuous development of the workforce, particularly in underserved areas, rural/ remote areas.<sup>50</sup>

### 5.3 ...Local benefits

The local community development role that can be played by healthcare employing and education/ training institutions has been recognised but not always fully established across countries. There should be the potential to harness the employment opportunities and local economic and social impact of these institutions to provide benefits at local level. This should be particularly the case in rural/ remote areas and small towns where a single healthcare institution may be the major employer in the local economy.<sup>51</sup> This also has read across to developing local policies to support recruitment and retention in rural/remote areas.<sup>52</sup>

One multi-country example of policy attempts to harness this opportunity has been the development of “anchor institutions”. These are locally rooted organisations such as healthcare institutions and colleges that have a major presence and impact in a specific local area, because they employ a significant proportion of the local employment base, they spend on other local goods and services, own and manage land and assets, and deliver crucial public services. They tend to be relatively stable presences in local economies, and by deliberately adopting strategies that support their local community, including employment and training, they have the potential to further support the wellbeing economy and reduce inequalities caused by socioeconomic disadvantage.<sup>53 54 55</sup>

This means that “Anchors have a mission to advance the welfare of the populations they serve. They tend to receive (or are significant stewards of) public resources, and often have a responsibility to meet certain standards on impact or value”.<sup>56</sup> In terms of the employment role, anchors can provide “decent work”, by providing stable employment,

paying a living wage, and offering fair working conditions, work-life balance and career progression; they can also aim to help more local residents into quality employment, and in doing so, the health system can improve the welfare of its local communities, help to narrow inequalities and also build a workforce that is more representative of the local area, and can also better respond to patients’ needs.<sup>57</sup>

The scope for anchor institutions was first developed in the USA, where it has been estimated that two types of anchor institutions—hospitals and universities—in total employ 8 percent of the U.S. labour force and account for more than 7 percent of U.S. gross domestic product.<sup>58</sup>

In the UK, the Health Anchors Learning Network (HALN)<sup>59</sup> was established in 2021 to provide support to organisations in health and care that are aiming to embed anchor approaches in their roles. In the UK National Health Service (NHS) “Anchor workforce strategies involve thinking not only about how the NHS can grow local workforce supply and widen access to employment for local communities, but also how it can be a better employer and

place to build a career for more people”. This is framed in three high level objectives: 1. Widening workforce participation; 2. Building the future workforce; and 3. Being a good employer.<sup>60</sup>

## 5.4 Conclusion

This report was prepared for HumanAbility in order to provide a global backdrop for healthcare workforce labour dynamics in Australia. It gives stakeholders in Australia some reference points to frame their own policy and analytical focus.

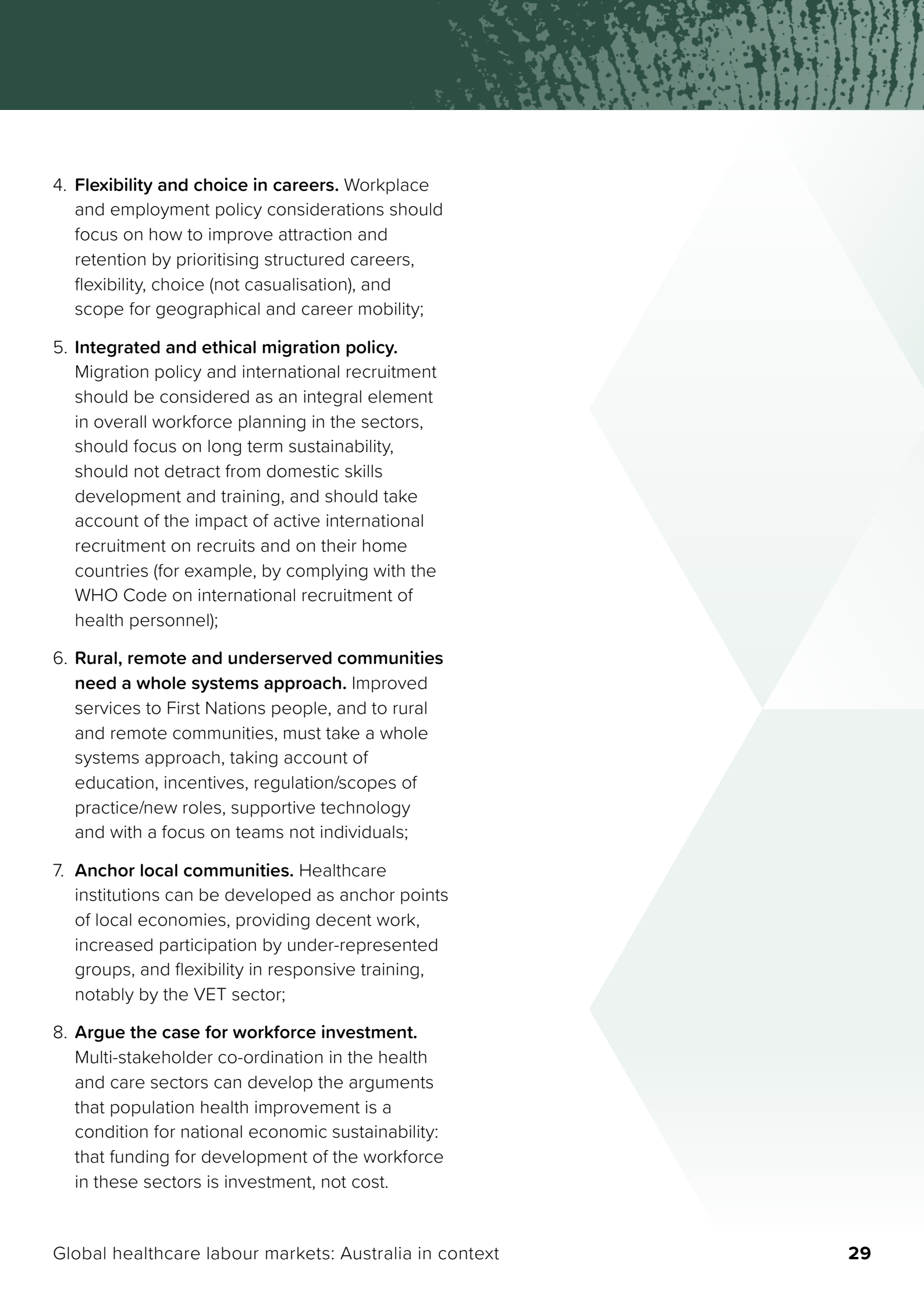
Several key points which emerge in this comparative analysis are:

- Expenditure on health in Australia, as measured by the % of GDP, is slightly above OECD average
- About one in seven (13.4%) of the workforce in Australia is employed in health and social care—above the OECD average of 10.5%
- Australia is above average OECD on most health workforce indicators, such as availability (as measured by doctor: and nurse: population ratios);
- The country has a relatively high reliance on international recruitment and immigration as a source of new workers, and whilst this is underpinned by well established migratory policies there is a likelihood of increased international competition for scarce skilled staff;
- In the long term care sector Australia reports an above average ratio of workers to population, but with the highest reported reliance on part-time and fixed term employment in a recent OECD report; it also has relatively high reported use of informal carers, notable women;

- Australia has a well recognised policy challenge of achieving more effective access and equity of service for First Nations people in particular and more broadly for those living in remote and rural areas. High level analysis of doctor distribution suggests that the key challenge is distribution variation within, not between States and Territories.

There are always data definition and analytical limitations in conducting cross country comparisons of this type, but several key points emerge, which are set out below for further consideration.

1. **Inclusive approach.** In setting out policies, and undertaking workforce planning in the health and care sectors, start with an inclusive definition of “workforce”, which gives appropriate consideration to all those who work formally or informally or who volunteer;
2. **Fund and plan for reduced inequalities.** Recognise current inequalities in access and service delivery, and aim to achieve greater balance across different sectors and sub sectors when targeting funding and conducting workforce planning;
3. **Adaptive and informed planning.** Workforce planning should be underpinned by reliable data framed by agreed minimum data sets, should focus on identifying and enabling key skills development, and should include stakeholder engagement in determining likely “futures” through the use of scenario modelling;

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4. **Flexibility and choice in careers.** Workplace and employment policy considerations should focus on how to improve attraction and retention by prioritising structured careers, flexibility, choice (not casualisation), and scope for geographical and career mobility;
  5. **Integrated and ethical migration policy.** Migration policy and international recruitment should be considered as an integral element in overall workforce planning in the sectors, should focus on long term sustainability, should not detract from domestic skills development and training, and should take account of the impact of active international recruitment on recruits and on their home countries (for example, by complying with the WHO Code on international recruitment of health personnel);
  6. **Rural, remote and underserved communities need a whole systems approach.** Improved services to First Nations people, and to rural and remote communities, must take a whole systems approach, taking account of education, incentives, regulation/scopes of practice/new roles, supportive technology and with a focus on teams not individuals;
  7. **Anchor local communities.** Healthcare institutions can be developed as anchor points of local economies, providing decent work, increased participation by under-represented groups, and flexibility in responsive training, notably by the VET sector;
  8. **Argue the case for workforce investment.** Multi-stakeholder co-ordination in the health and care sectors can develop the arguments that population health improvement is a condition for national economic sustainability: that funding for development of the workforce in these sectors is investment, not cost.

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