



Australia's Health Workforce Series Physiotherapists in Focus

March 2014



An Australian Government Initiative

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Introduction

About HWA

Health Workforce Australia (HWA) is a Commonwealth statutory authority established to build a sustainable health workforce that meets Australia's healthcare needs. HWA leads the implementation of national and large scale reform, working in collaboration with health and higher education sectors to address the critical priorities of planning, training and reforming Australia's health workforce.

Australia's health system is facing significant challenges, including an ageing population and an ageing health workforce; changing burden of disease, in particular a growing level of chronic disease; and increased demand for health services with higher numbers of people requiring complex and long-term care. To achieve HWA's goal of building a sustainable health workforce that meets Australia's healthcare needs, health workforce planning is essential – and in health workforce planning, understanding the number and characteristics of the existing health workforce is the essential first step.

Australia's Health Workforce Series describes particular professions, settings and issues of interest to aid workforce planning. This issue of Australia's Health Workforce Series examines physiotherapists, bringing together available information to describe the physiotherapist workforce, including number and characteristics, potential data sources to measure workforce activity, and an analysis based on information presented.

This publication is divided into four main parts:

1. **What is a physiotherapist** – a brief overview of the physiotherapist role and training pathway, and descriptions of the key regulatory bodies and peak associations.
2. **What is known about the physiotherapist workforce** – presentation of data from different sources, describing the number and characteristics of the workforce, student and migration inflows into the workforce, and potential data sources that could be used to measure workforce activity.
3. **What issues are expected to impact supply and/or demand for physiotherapists** – a summary of issues obtained through stakeholder consultation.
4. **HWA's assessment of the workforce** – including an assessment of existing workforce position (whether workforce supply matches demand for services or not); presentation of a set of workforce dynamics indicators, used to highlight aspects of the current workforce that may be of concern into the future; and a comparison of the physiotherapy workforce's key characteristics with other health workforces.

What is a physiotherapist?

A physiotherapist provides treatment for people with physical problems caused by injury, illness, diseases and ageing. Physiotherapists use treatments including mobilisation and manipulation of joints, massage, therapeutic exercise, electrotherapy and hydrotherapy to reduce pain and restore function.

Physiotherapists' tasks can include:

- Using techniques to strengthen and stretch muscles and joints to improve patient mobility.
- Performing spinal and peripheral joint mobilisation and manipulation.
- Using equipment such as heat or ice packs, exercise equipment, ultrasound and electrotherapy to ease pain, reduce swelling and improve movement.
- Re-training patients to walk or to use walking frames, splints, crutches or wheelchairs.
- Educating patients, their families and the community to prevent injury and disability and to lead healthy lifestyles¹.

Physiotherapists work in settings including hospitals, community health centres, centres for physically disabled people, mental health services, rehabilitation centres, sports clinics and fitness centres, government departments and universities.

Physiotherapy is a registrable health profession under the National Registration and Accreditation Scheme (NRAS). Therefore a practitioner must be registered with the Physiotherapy Board of Australia to practise as a physiotherapist. Registered physiotherapists can gain an endorsement on their registration in acupuncture. The endorsement indicates that a practitioner has expertise in an advanced area of practice in addition to the level of training required for general registration in physiotherapy.

How are physiotherapists trained?

To become a physiotherapist, a person generally needs to complete an accredited program of study. This can be either a four-year full-time equivalent (FTE) program at Bachelor or Honours level, or a two-year FTE program at graduate-entry Masters level. All courses include a mandatory supervised practice component in a clinical setting².

Exceptions to this are overseas-trained physiotherapists who have been assessed as having skills and qualifications equivalent to an Australian-trained physiotherapist, and physiotherapists who completed their training prior to the implementation of the NRAS, and joined the register under transitional arrangements.

Associations

Australian Physiotherapy Association (APA)

The APA is the national peak body representing the interests of Australian physiotherapists and their patients. It provides members with advocacy, continuing professional education, professional and workplace support and resources.

¹ Queensland Health – Health Career Factsheet www.health.qld.gov.au/workfocus/careers/physio.pdf, Accessed 25 October 2012

² Australian Physiotherapy Council, The Australian Standards for Physiotherapy www.physiocouncil.com.au/standards. Accessed 25 October 2012.

Regulatory and Accreditation bodies

Physiotherapy Board of Australia

The Physiotherapy Board of Australia is responsible for registering physiotherapists and students; developing standards, codes and guidelines for the physiotherapy profession; handling notifications, complaints, investigations and disciplinary hearings; assessing overseas-trained practitioners who wish to practise in Australia; and approving accreditation standards and accredited courses of study.

Australian Physiotherapy Council (APC)

The APC is an independent national body responsible for the accreditation of physiotherapy education programs in Australian universities; and the assessment of the qualifications and skills of overseas-qualified physiotherapists for registration and migration purposes. The APC also provide advice to government agencies and the Physiotherapy Board on maintenance and review of the Australian standards for physiotherapy.

What is known about this workforce?

In workforce planning, the first key step is to understand the existing workforce. In this section, information is presented from a range of sources to describe the existing size and characteristics of the physiotherapist workforce.

Data sources and limitations

National Health Workforce Dataset (NHWDS)

The NHWDS combines data from the NRAS with physiotherapy workforce survey data collected at the time of annual registration renewal. The physiotherapy workforce survey is administered through the national registration body, the Australian Health Practitioner Regulation Agency (AHPRA), on behalf of Health Workforce Australia. The physiotherapy NHWDS was collected for the first time in 2011, with data for 2011 and 2012 presented in this report. The overall response rate to the physiotherapy workforce survey was 90.7 per cent in 2011 and 92.0 per cent in 2012. As it is a new collection, the NHWDS shows the current characteristics of the physiotherapy workforce.

Australian Bureau of Statistics (ABS) Census of Population and Housing

The census is a descriptive count of everyone who is in Australia on one night, and of their dwellings. Its objective is to accurately measure the number and key characteristics of people who are in Australia on census night, and of the dwellings in which they live. Information in the census is self-reported, meaning information is dependent on individuals' understanding and interpretation of the questions asked. For example, when reporting occupation, a person may self-report as working in a particular occupation, but not necessarily be appropriately qualified/meet registration standards (where a registrable profession). However the census is able to provide a picture of the changing size and characteristics of the reported physiotherapy workforce over time, which is not currently available through the NHWDS.

ABS Labour Force Survey (LFS)

The ABS LFS provides estimates of the civilian labour force derived from the LFS component of the monthly population survey. As a sample survey, limited detailed information is available to describe the characteristics of people in each occupation. The LFS is better used for determining broad trends over time.

Department of Education (DE)

The DE conducts the Higher Education Statistics Collection, which provides a range of information on the provision of higher education in all Australian universities. Information on higher education course commencements and completions by field of education is presented in this publication. Cautions to note with the DE data:

- Information may include courses allocated to the physiotherapy field of education that do not lead to registration as a physiotherapist. That is, it may include students in non-accredited courses.
- The accuracy of coding courses to field of education is the responsibility of each university, and is subject to the knowledge of those allocating the codes.
- Information includes combined courses where the course has been allocated to two fields of education. Combined courses are courses designed to lead to a single combined award or to meet the requirements of more than one award.

Department of Immigration and Border Protection (DIBP)

DIBP information is administrative by-product data, reporting the number of temporary and permanent visa applications granted to physiotherapists.

National Health Workforce Dataset: Physiotherapists

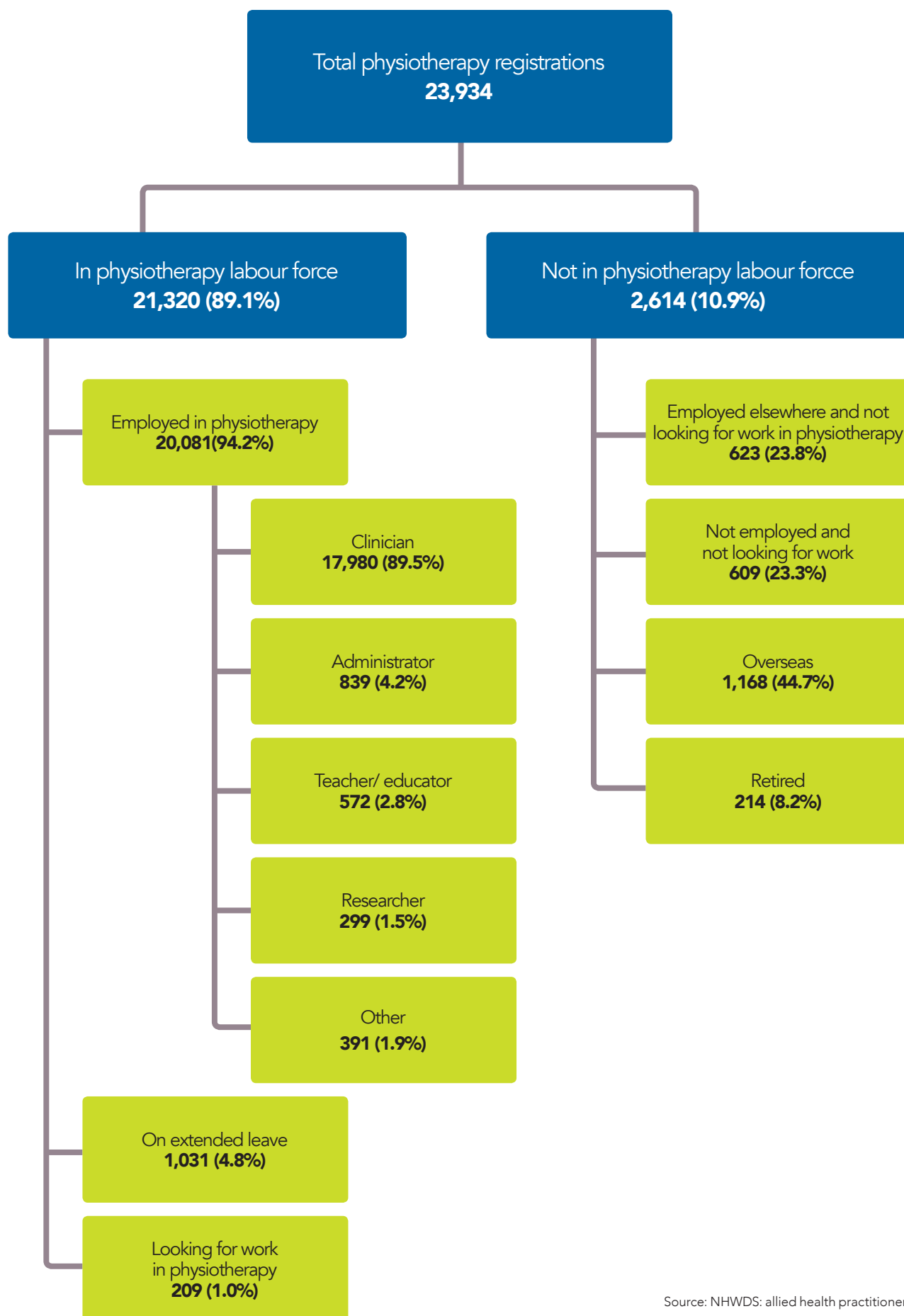
As noted, the NHWDS for physiotherapists was first collected in 2011. Information is collected from physiotherapists at the time of their annual registration renewal. In this section, information focuses on describing the number and characteristics of employed physiotherapists.

Please note, in the NHWDS, the term 'employed' means a practitioner who worked for a total of one hour or more in the week before the survey in a job or business (including own business) for pay, commission, payment in kind or profit; or usually worked but was on leave for less than three months, or on strike or locked out, or rostered off. Also, for physiotherapists, data on gender was unavailable for a significant percentage of the South Australian physiotherapy workforce. Where the percentage of females appears in tables, it was calculated excluding those where gender was unknown or not stated.

Labour force status

In 2012, there were 23,934 physiotherapists registered in Australia, with the majority (89 per cent or 21,320) in the physiotherapy labour force (either working, looking for work, or on extended leave). Of those in the physiotherapy labour force, most (94 per cent or 20,081 physiotherapists) were working at the time of the survey. Within this, approximately nine out of ten physiotherapists (17,980) were working as clinicians, that is, practitioners who spend the majority of their time undertaking activities related to the diagnosis, care, and treatment of patients or clients, including recommending preventative action (figure 1).

Figure 1: registered physiotherapists by labour force status, 2012



Source: NHWDS: allied health practitioners 2012

Age and gender

In 2012, there were 20,081 registered physiotherapists employed in physiotherapy in Australia, an increase of four per cent (or 812 physiotherapists) from 2011 (table 1). Females accounted for most of this growth, increasing by 607 from 2011 to 2012, more than double the increase in male physiotherapists (298) over the same period.

Table 1: number of employed physiotherapists by gender, 2011 and 2012

| | 2011 | 2012 | % increase |
|---------------------------------------|---------------|---------------|------------|
| Male | 5,601 | 5,899 | 5.3 |
| Female | 12,407 | 13,014 | 4.9 |
| Not stated/ inadequately described | 1,261 | 1,167 | -7.5 |
| Persons | 19,269 | 20,081 | 4.2 |
| % Female ^(a) | 68.9 | 68.8 | .. |

(a) Calculated excluding those where gender not stated or inadequately described

Source: NHWDS: allied health practitioners 2011 and 2012

The average age of employed physiotherapists was approximately 39 years in both 2011 and 2012. Female physiotherapists have an older average age and a higher percentage aged 55 and over than male physiotherapists. This is a point of difference between the physiotherapy workforce and many other allied health occupations, where males typically have an older age profile than females (indicating females have historically worked as physiotherapists).

Table 2: employed physiotherapists, age profile by gender, 2011 and 2012

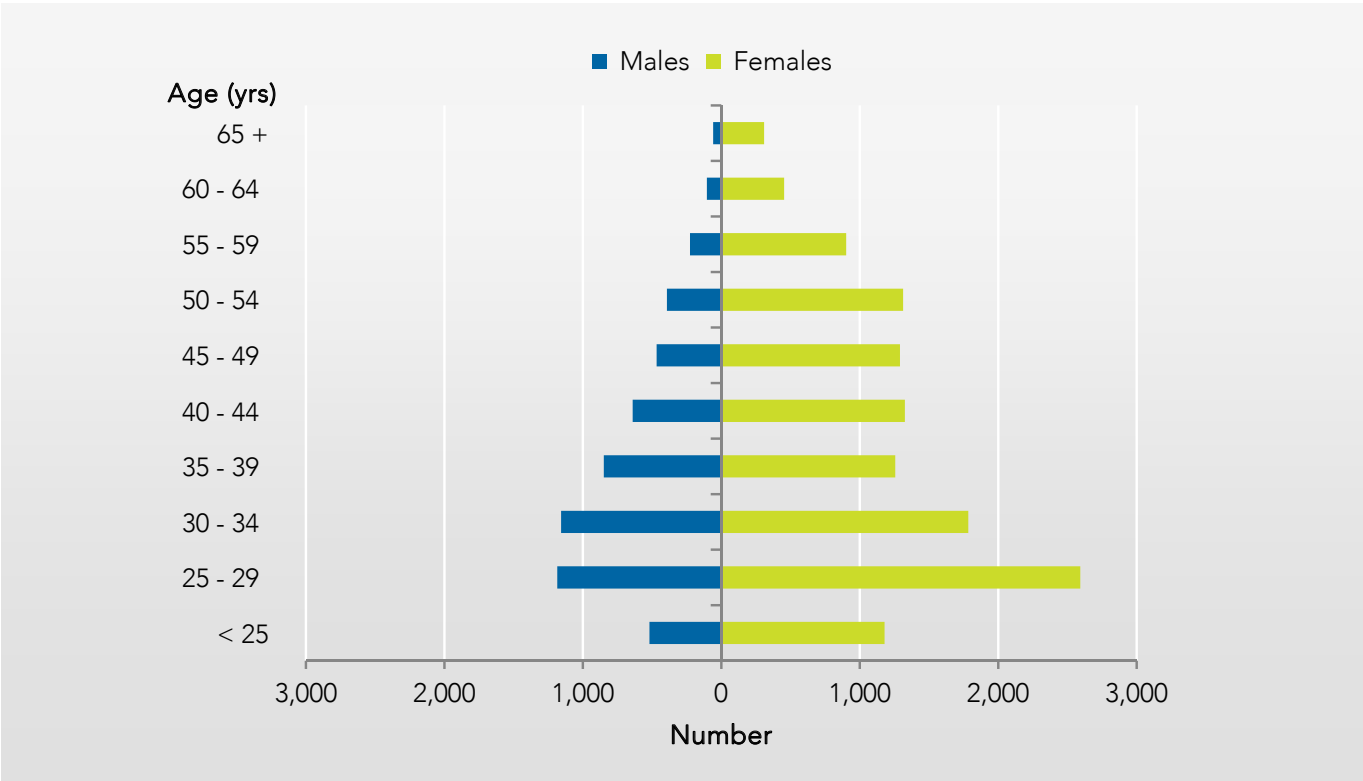
| | Average age (years) | | Percentage aged 55 and over | |
|----------------|---------------------|-------------|-----------------------------|-------------|
| | 2011 | 2012 | 2011 | 2012 |
| Male | 36.6 | 36.8 | 6.9 | 7.5 |
| Female | 39.2 | 39.2 | 13.4 | 14.3 |
| Persons | 38.5 | 38.6 | 11.6 | 12.4 |

Source: NHWDS: allied health practitioners 2011 and 2012

Figures 2 and 3 show the distribution of male and female physiotherapists across age cohorts in 2011 and 2012. The younger age profile of the male workforce can clearly be seen, with relatively large numbers in the 25-29 and 30-34 age cohorts.

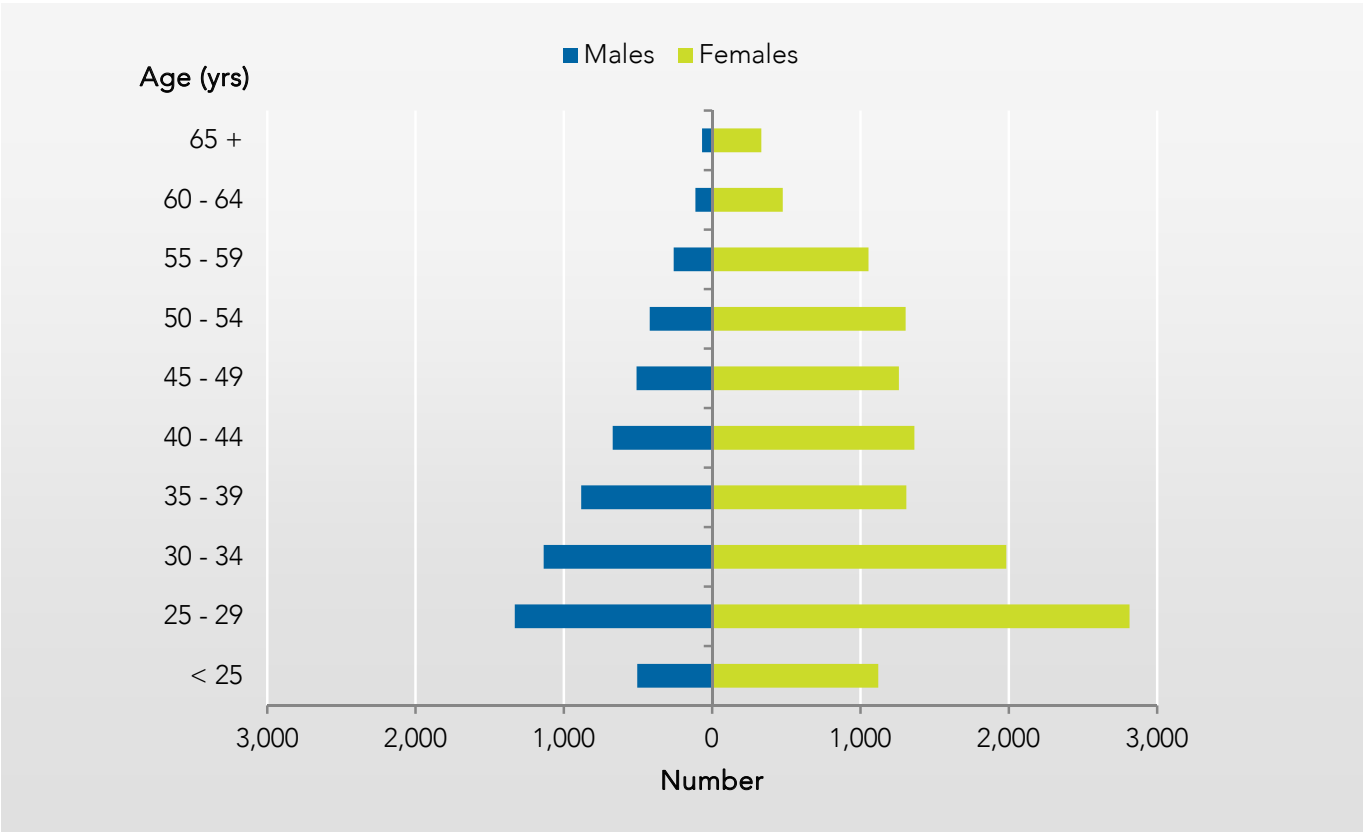
The highest numbers of female physiotherapists were also in the 25-29 and 30-34 year age cohorts. However, the relatively even spread, and substantial number, of female physiotherapists aged 35-59 years resulted in the older average age of female physiotherapists (shown in table 2).

Figure 2: number of employed physiotherapists by age cohort and gender, 2011



Source: NHWDS: allied health practitioners 2011

Figure 3: number of employed physiotherapists by age cohort and gender, 2012



Source: NHWDS: allied health practitioners 2012

Hours worked

Physiotherapists worked an average of approximately 34 hours per week in both 2011 and 2012. In both years male physiotherapists had substantially higher average weekly hours than female physiotherapists (by approximately nine hours). However, as females account for a much higher percentage of the workforce, the higher average hours worked by male physiotherapists had limited impact on total average weekly hours worked (table 3).

Table 3: employed physiotherapists, average weekly hours worked by gender, 2011 and 2012

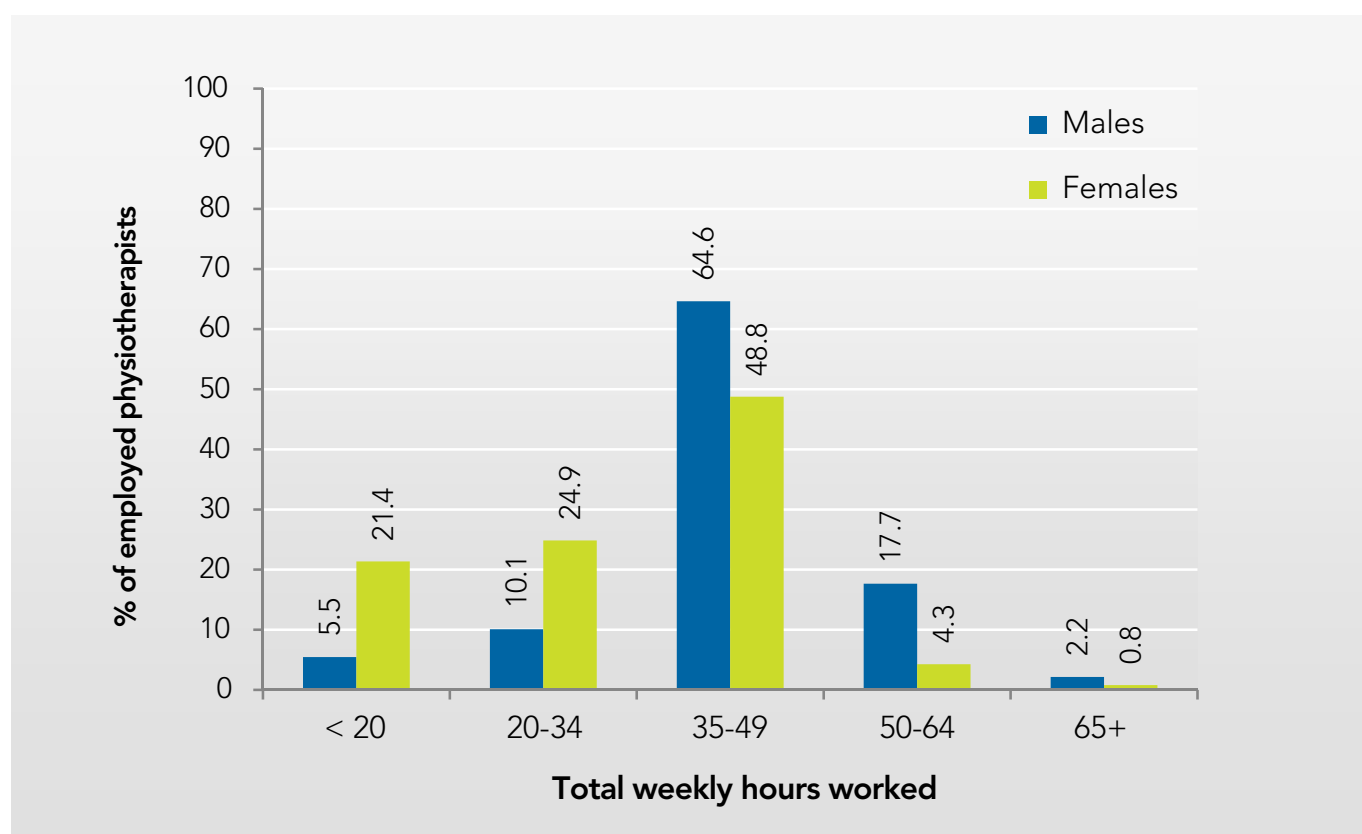
| | 2011 | | 2012 | |
|----------------|----------------------|-------------------------------------|----------------------|-------------------------------------|
| | Average weekly hours | Full-time equivalent ^(a) | Average weekly hours | Full-time equivalent ^(a) |
| Males | 41.0 | 6,041 | 40.7 | 6,315 |
| Females | 31.6 | 10,320 | 31.5 | 10,782 |
| Persons | 34.5 | 17,485 | 34.2 | 18,097 |

(a) FTE calculated on a 38 hour week

Source: NHWDS: allied health practitioners 2011 and 2012

Figure 4 shows the majority of both male and female physiotherapists worked between 35 – 49 hours per week. A higher percentage of females working part-time (less than 35 hours per week) and a higher percentage of males working more than 49 hours per week can clearly be seen (and is reflected in the average hours worked shown in table 3).

Figure 4: employed physiotherapists by total weekly hours worked, 2012



Source: NHWDS: allied health practitioners 2012

Years worked

In 2012, physiotherapists had worked in physiotherapy in Australia for 13 years on average. Physiotherapists employed as administrators and teachers and educators had the highest number of years in the physiotherapy workforce, at 19 and 18 years worked respectively. This likely reflects career pathways – with more experienced physiotherapists moving into administration and education roles.

While the average years worked for administrators, educators, researchers, and other roles are much higher than average years worked by clinicians, the low number of physiotherapists employed in these roles meant they had limited effect on the total average years worked.

Table 4: employed physiotherapists, average years worked by principal role, 2011 and 2012

| Principal role | 2011 | 2012 |
|---------------------|-------------|-------------|
| Clinician | 12.4 | 12.7 |
| Administrator | 19.2 | 18.6 |
| Teacher or educator | 18.1 | 18.0 |
| Researcher | 16.9 | 17.1 |
| Other | 17.1 | 17.6 |
| Total | 13.1 | 13.2 |

Source: NHWDS: allied health practitioners 2011 and 2012

Aboriginal and Torres Strait Islander status

Physiotherapists of Aboriginal and Torres Strait Islander status accounted for less than one per cent of all employed physiotherapists (table 5).

Table 5: number of employed physiotherapists reporting Aboriginal and Torres Strait Islander status, 2011 and 2012

| | 2011 | 2012 |
|---|------------|------------|
| Male | 38 | 40 |
| Female | 44 | 40 |
| Not stated/inadequately described | 3 | 4 |
| Persons | 85 | 84 |
| % of all employed physiotherapists | 0.4 | 0.4 |

Source: NHWDS: allied health practitioners 2011 and 2012

Physiotherapists of Aboriginal and Torres Strait Islander status had an average age of approximately 35 years in 2012 (table 6). In both 2011 and 2012 the average age of Aboriginal and Torres Strait Islander physiotherapists was lower than the average of the total workforce (as shown in table 2, this was 39 years in both 2011 and 2012).

Average weekly hours worked for physiotherapists of Aboriginal and Torres Strait Islander status was similar to the overall workforce average (34.2 in 2012). The same as all employed physiotherapists, male Aboriginal and Torres Strait Islander physiotherapists' average hours were greater than females in both 2011 and 2012.

Table 6: employed physiotherapists reporting Aboriginal and Torres Strait Islander status, average age and average hours worked, 2011 and 2012

| | Average age (years) | | Average hours worked | |
|------------------------------|---------------------|-------------|----------------------|-------------|
| | 2011 | 2012 | 2011 | 2012 |
| Male | 36.8 | 37.2 | 37.0 | 38.6 |
| Female | 35.9 | 33.2 | 29.8 | 30.4 |
| Persons^(a) | 36.4 | 34.9 | 33.1 | 34.3 |

(a) Includes gender not stated or inadequately described

Source: NHWDS: allied health practitioners 2011 and 2012

Country of first qualification

In 2012, 85 per cent (17,075) of the physiotherapy workforce earned their first physiotherapy qualification in Australia.

The characteristics of overseas-trained physiotherapists differed to those of Australian-trained physiotherapists:

- New Zealand trained physiotherapists had a lower average age and substantially lower percentage aged over 55 than Australian-trained physiotherapists.
- Physiotherapists trained overseas in countries other than New Zealand had an older age profile than Australian-trained physiotherapists, and a substantially higher percentage of females.

Table 7: selected characteristics of employed physiotherapists by country of first qualification, 2012

| Country of initial qualification | Number | Average age | % aged 55+ | % female ^(a) | Average weekly hours worked | FTE ^(b) |
|---------------------------------------|---------------|-------------|-------------|-------------------------|-----------------------------|--------------------|
| Australia | 17,075 | 38.2 | 11.8 | 67.8 | 34.3 | 15,408 |
| New Zealand | 739 | 34.0 | 7.2 | 68.3 | 37.0 | 719 |
| Other country | 2,171 | 43.1 | 18.9 | 76.6 | 32.9 | 1878 |
| Not stated/ inadequately described | 96 | 36.5 | 10.9 | 73.2 | 35.8 | 91 |
| Total | 20,081 | 38.6 | 12.4 | 68.8 | 34.2 | 18,097 |

(a) Calculated excluding those where gender not stated or inadequately described

(b) FTE calculated on a 38 hour week

Source: NHWDS: allied health practitioners 2012

Sector and setting

Table 8 shows the number of physiotherapists undertaking clinical work in the public and private sectors in 2012. A higher number of physiotherapists worked in the private sector, which reflects the high percentage of the workforce employed in private practice (refer table 9).

Physiotherapists may undertake clinical work in both the private and public sector. Full-time equivalent calculations account for hours worked in each sector, and show over half of physiotherapists' clinical work is in the private sector.

Table 8: employed physiotherapists undertaking clinical work by sector, 2012

| | Public | Private |
|-----------------------------|--------|---------|
| Number | 7,422 | 12,909 |
| Clinical FTE ^(a) | 5,171 | 9,665 |

(a) FTE calculated on a 38 hour week

Source: NHWDS: allied health practitioners 2012

Private practice was the setting most employed physiotherapists worked in – approximately one-quarter (26 per cent or 5,203 physiotherapists) worked in group private practice, and a further 13 per cent (2,547) worked in solo private practice. Hospitals were another common setting, with approximately one in five physiotherapists (21 per cent or 4,188) reporting this as their main job setting.

Table 9: number of employed physiotherapists by work setting of main job, 2011 and 2012

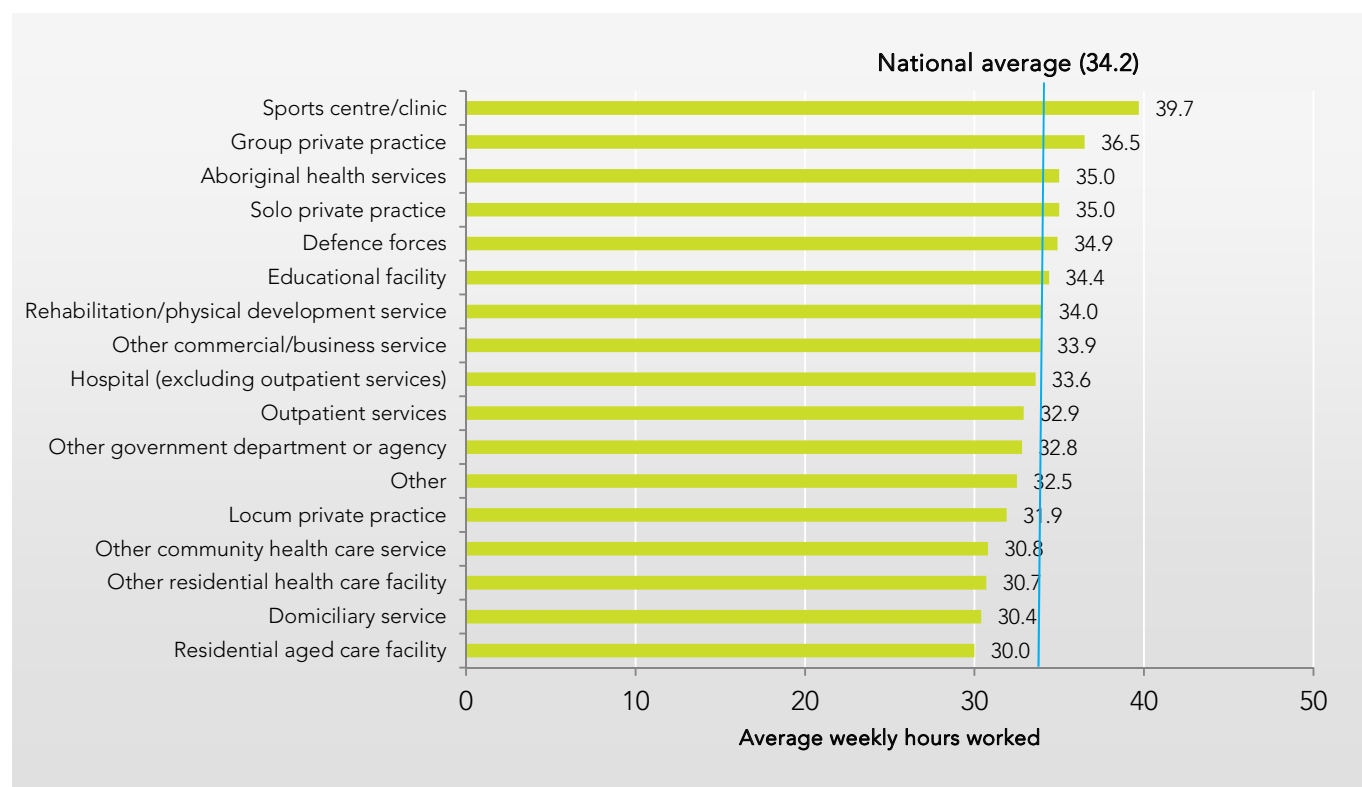
| Setting | 2011 | 2012 | | % change 2011 to 2012 |
|---|--------|--------|------------|--------------------------|
| | Number | Number | % of total | |
| Group private practice | 4,888 | 5,203 | 25.9 | 6.4 |
| Hospital (excluding outpatient services) | 4,976 | 4,188 | 20.9 | -15.8 |
| Solo private practice | 2,401 | 2,547 | 12.7 | 6.1 |
| Outpatient services | 682 | 1,600 | 8.0 | 134.6 |
| Other community healthcare services | 1,153 | 1,232 | 6.1 | 6.9 |
| Residential aged care facility | 865 | 1,044 | 5.2 | 20.7 |
| Rehabilitation/physical development service | 1,076 | 819 | 4.1 | -23.9 |
| Educational facility | 571 | 610 | 6.8 | 6.8 |
| Domiciliary service | 344 | 471 | 2.3 | 36.9 |
| Sports centre/clinic | 380 | 459 | 2.3 | 20.8 |
| Other commercial/business service | 266 | 335 | 1.7 | 25.9 |
| Other government department or agency | 302 | 316 | 1.6 | 4.6 |

| Setting | 2011 | 2012 | | % change 2011 to 2012 |
|-----------------------------------|---------------|---------------|--------------|--------------------------|
| | Number | Number | % of total | |
| Defence forces | 118 | 118 | 0.6 | - |
| Locum private practice | 68 | 75 | 0.4 | 10.3 |
| Other residential care facility | 46 | 40 | 0.2 | -13.0 |
| Aboriginal health services | 14 | 15 | 0.1 | 7.1 |
| Other | 363 | 437 | 2.2 | 20.4 |
| Inadequately described/not stated | 753 | 572 | 2.8 | -24.0 |
| Total | 19,269 | 20,081 | 100.0 | 4.2 |

Source: NHWDS: allied health practitioners 2011 and 2012

Employed physiotherapists average weekly hours worked varied by work setting, ranging from 30 hours in residential aged care facilities to 40 hours in sports centres/clinics. Physiotherapists working in group private practice also had higher working hours (37) than the national average (34 hours) (figure 5).

Figure 5: employed physiotherapists, average weekly hours worked by work setting, 2012



Source: NHWDS: allied health practitioners 2012

Clinical stream and scope of practice

Information on physiotherapists' main clinical stream and primary scope of practice was first collected in 2012. Clinical stream refers to clinical groupings – defined sets of patients or clients who have relatively homogenous conditions; while scope of practice refers to areas of specialisation within physiotherapy, which require specific training, knowledge, and experience.

Clinical stream

Rehabilitation was the most popular clinical stream, reported by approximately one-third (35 per cent or 6,318) of all employed clinical physiotherapists, followed by acute care (22 per cent or 4,023). Physiotherapists working in these streams had lower age profiles and lower percentages of females than all clinical physiotherapists (table 10).

Clinical physiotherapists working in aged care, cancer care, mental health and palliative care had higher average ages, and higher percentages aged over 55 years, than all clinical physiotherapists. This reflects the higher percentages of females in these clinical streams (as female physiotherapists have an older age profile than males).

Table 10: selected characteristics of employed clinician physiotherapists by clinical stream, 2012

| Clinical stream | Number | Average age | % aged 55+ | % female ^(a) | Average weekly hours worked |
|-----------------------------------|---------------|-------------|-------------|-------------------------|-----------------------------|
| Acute care | 4,023 | 36.2 | 8.8 | 65.7 | 35.1 |
| Aged care | 1,666 | 41.3 | 22.1 | 77.1 | 30.5 |
| Cancer care | 83 | 40.1 | 12.5 | 93.4 | 33.3 |
| Chronic disease management | 485 | 42.2 | 18.1 | 74.8 | 31.8 |
| Community based care | 2,150 | 38.9 | 13.2 | 77.2 | 32.2 |
| Mental health | 29 | 44.4 | 24.9 | 77.7 | 27.9 |
| Palliative care | 44 | 45.9 | 25.8 | 88.9 | 28.7 |
| Rehabilitation | 6,318 | 37.0 | 9.7 | 63.9 | 35.3 |
| Other | 2,470 | 39.3 | 12.0 | 66.5 | 35.0 |
| Not stated/inadequately described | 711 | 39.0 | 15.1 | 64.8 | 34.6 |
| Total | 17,980 | 38.0 | 11.9 | 68.0 | 34.4 |

(a) Calculated excluding those where gender not stated or inadequately described

Source: NHWDS: allied health practitioners 2012

Scope of practice

Approximately half (53 per cent or 9,534) of all employed clinical physiotherapists reported their primary scope of practice as musculoskeletal (table 11). Large differences existed in the gender profile of employed clinical physiotherapists across some scopes of practice, with:

- Sports having a higher percentage of males.
- Women's health and paediatrics almost completely comprised of females.

Table 11 also shows that scopes of practice with a higher than workforce average of females also had lower average weekly hours and higher average ages than the total workforce, reflecting the age and hours worked profiles shown in tables 2 and 3.

Table 11: selected characteristics of employed clinician physiotherapists by primary scope of practice, 2012

| Primary scope of practice | Number | Average age | % aged 55+ | % female ^(a) | Average weekly hours worked |
|-----------------------------------|---------------|-------------|-------------|-------------------------|-----------------------------|
| Aged care | 2,473 | 40.0 | 18.6 | 79.8 | 31.3 |
| Cardiorespiratory | 1,170 | 32.9 | 5.7 | 79.0 | 33.3 |
| Musculoskeletal | 9,534 | 38.2 | 11.2 | 58.6 | 35.6 |
| Neurological | 1,227 | 35.7 | 7.3 | 81.4 | 33.9 |
| Paediatrics | 1,004 | 39.5 | 15.2 | 94.8 | 31.5 |
| Sports | 603 | 35.9 | 4.2 | 41.1 | 40.5 |
| Women's health | 433 | 41.3 | 15.7 | 99.7 | 25.4 |
| Other | 956 | 39.6 | 14.5 | 80.0 | 32.8 |
| Not stated/inadequately described | 580 | 37.5 | 12.2 | 63.0 | 35.8 |
| Total | 17,980 | 38.0 | 11.9 | 68.0 | 34.3 |

(a) calculated excluding those where gender not stated or inadequately described

Source: NHWDS: allied health practitioners 2012

Distribution

Information from the NHWDS on the distribution of the physiotherapist workforce is based on survey respondents' reported location of main job.

State and territory

In 2012, the majority of employed physiotherapists were located in the more highly populated states of New South Wales (29 per cent), Victoria (26 per cent), and Queensland (19 per cent) (table 12). However on a per 100,000 population basis, the highest numbers of employed physiotherapists were in the Australian Capital Territory (107.2 per 100,000 population) and South Australia (107.1 per 100,000 population).

Tasmania had the highest percentage of employed female physiotherapists of all states and territories. This influenced other characteristics of the Tasmanian physiotherapy workforce – with a higher average age, higher percentage aged over 55 years, and lower average hours worked than the national average.

Table 12: selected characteristic of employed physiotherapists by state and territory, 2011 and 2012

| | NSW | VIC | QLD | SA | WA | TAS | NT | ACT | AUS |
|---------------------------------|-------|-------|-------|-------|-------|------|------|-------|---------------|
| 2012 | | | | | | | | | |
| Number | 5,859 | 5,133 | 3,907 | 1,774 | 2,501 | 361 | 141 | 402 | 20,081 |
| No. per 100,000 population | 80.2 | 91.2 | 85.6 | 107.1 | 102.8 | 70.5 | 60.0 | 107.2 | 88.4 |
| Average age | 39.9 | 37.4 | 38.3 | 39.3 | 37.5 | 42.2 | 35.8 | 38.9 | 38.6 |
| % aged 55 and over | 14.6 | 10.9 | 10.7 | 14.2 | 10.9 | 19.0 | 7.8 | 13.5 | 12.4 |
| Average hours worked | 34.1 | 34.8 | 35.0 | 33.1 | 33.4 | 31.6 | 36.9 | 33.0 | 34.2 |
| % female ^(a) | 69.0 | 68.0 | 68.1 | 65.8 | 70.7 | 75.1 | 70.0 | 69.9 | 68.8 |
| 2011 | | | | | | | | | |
| Number | 5,709 | 4,971 | 3,703 | 1,699 | 2,345 | 350 | 118 | 371 | 19,269 |
| No. per 100,000 population | 79.1 | 89.8 | 82.7 | 103.6 | 99.6 | 68.4 | 51.0 | 100.8 | 86.3 |
| % change in number 2011 to 2012 | 2.6 | 3.3 | 5.5 | 4.4 | 6.7 | 3.1 | 19.5 | 8.4 | 4.2 |

(a) Calculated excluding those where gender not stated or inadequately described

Source: NHWDS: allied health practitioners 2011 and 2012, ABS, Australian Demographic Statistics, Dec 2012, cat. no. 3101.0

Remoteness area

The remoteness area (RA) structure is a geographic classification system produced by the ABS and is used to present regional data. The RA categories are defined in terms of the physical distance of a location from the nearest urban centre (access to goods and services) based on population size.

In 2012, the number of employed physiotherapists per 100,000 population reduced with increasing remoteness, from 101 employed physiotherapists per 100,000 population in major cities to 38 in very remote areas (table 13). Employed physiotherapists in remote and very remote areas had higher average weekly working hours, a younger average age, and lower percentages aged over 55 years than physiotherapists working in the other areas.

Table 13: selected characteristics of employed physiotherapists by remoteness area, 2011 and 2012

| | Major cities | Inner regional | Outer regional | Remote ^(a) | Very remote ^(a) | Australia |
|---------------------------------|--------------|----------------|----------------|-----------------------|----------------------------|---------------|
| 2012 | | | | | | |
| Number | 16,129 | 2,621 | 1,069 | 162 | 78 | 20,081 |
| No. per 100,000 population | 101.0 | 63.0 | 52.2 | 50.8 | 37.9 | 88.4 |
| Average age | 38.2 | 40.8 | 38.7 | 37.1 | 35.9 | 38.6 |
| % aged 55 and over | 11.8 | 16.3 | 12.7 | 11.5 | 5.3 | 12.4 |
| Average hours worked | 34.3 | 33.6 | 34.6 | 36.1 | 37.8 | 34.2 |
| % female ^(b) | 68.0 | 71.6 | 72.9 | 76.2 | 59.7 | 68.8 |
| 2011 | | | | | | |
| Number | 15,493 | 2,561 | 979 | 148 | 63 | 19,269 |
| No. per 100,000 population | 98.8 | 62.3 | 48.3 | 47.0 | 31.0 | 86.3 |
| % change in number 2011 to 2012 | 4.1 | 2.3 | 9.2 | 9.5 | 23.8 | 4.2 |

(a) Care should be taken when interpreting the figures for remote and very remote areas due to the relatively small number of employed physiotherapists who reported their usual residence was in these regions.

(b) Calculated excluding those where gender not stated or inadequately described

Source: NHWDS: allied health practitioners 2011 and 2012, ABS, Regional Population Growth, Australia, 2012, cat. no. 3218.0.

Medicare Local regions

In 2011 the Australian government established 61 Medicare Locals across Australia. The Commonwealth government funds these organisations to plan, fund and deliver healthcare services at a local level, with each Medicare Local covering a defined geographic area.

Table 14 shows the Medicare Local regions with the highest and lowest rate of employed physiotherapists per 100,000 population, by primary place of work (a full list of Medicare Locals is included as appendix 1). Please note, data in this table shows the number of physiotherapists per 100,000 population working in the relevant Medicare Local region, and provides a useful reflection of the geographical distribution of physiotherapists – it does not reflect physiotherapists employed by Medicare Local organisations.

As can be expected, the Medicare Locals with the highest rates of employed physiotherapists per 100,000 population were in capital cities, while the Medicare Locals with the lowest rates were mostly located in regional and remote areas. The concentration of physiotherapists in major cities reflects population distribution and consequently where physiotherapists practice privately, as well as the location of major employers of physiotherapists, such as hospitals.

Table 14: number of employed physiotherapists per 100,000 population by selected Medicare Local regions, 2012

| Highest | | | Lowest | | |
|---------------------|------------------------------|-------|---------------------|-----------------------------------|------|
| State/ Territory | Medicare Local | Rate | State/ Territory | Medicare Local | Rate |
| WA | Perth Central and East Metro | 218.8 | NSW | Far West NSW | 41.5 |
| SA | Central Adelaide and Hills | 183.2 | NSW | Murrumbidgee | 45.2 |
| VIC. | Inner North West Melbourne | 180.9 | Qld | Central Queensland | 46.7 |
| NSW | Eastern Sydney | 170.6 | Qld | Central and North West Queensland | 46.8 |
| VIC | Bayside | 147.0 | NSW | South Western Sydney | 47.2 |

Source: NHWDS: allied health practitioners 2012

ABS Census of Population and Housing

While the NHWDS provides a picture of the number and characteristics of the current physiotherapist workforce, historical information showing trends in the physiotherapist workforce is not currently available from this source (although as it is an annual collection, this is a short-term issue only). Census information is self-reported, so people may report as a physiotherapist without being a registered practitioner. However, the census provides a picture of the changing number and characteristics of the reported physiotherapist workforce, which is not currently available through the NHWDS.

In the census, the Australian and New Zealand Standard Classification of Occupations (ANZSCO) is used to publish occupation statistics. In ANZSCO, a physiotherapist is defined as 'someone who assesses, treats and prevents disorders in human movement caused by injury or disease'.

Please note, information is presented for people who self-reported as employed physiotherapists in the census (regardless of level of education). This includes those people working for an employer or conducting their own business, including those with their own incorporated company as well as sole traders, partnerships and contractors. Also, the ABS randomly adjusts cells to avoid the release of confidential data, so there can be slight discrepancies in totals when comparing census tables.

Age and gender

The number of employed physiotherapists increased by more than three-quarters (79 per cent or 7,050) from 1996 to 2011 (table 15). While most employed physiotherapists were female, the number of employed male physiotherapists increased at a greater rate than females across this period (140 per cent compared with 61 per cent). Consequently, employed male physiotherapists increased as a percentage of all employed physiotherapists, from almost one-quarter (23 per cent) in 1996 to almost one-third (31 per cent) in 2011.

Table 15: number of employed physiotherapists by gender, 1996 to 2011

| | 1996 | 2001 | 2006 | 2011 | % increase 1996 to 2011 |
|----------------|--------------|---------------|---------------|---------------|----------------------------|
| Males | 2,036 | 2,779 | 3,565 | 4,899 | 140.4 |
| Females | 6,843 | 7,500 | 8,718 | 11,034 | 61.2 |
| Persons | 8,879 | 10,279 | 12,283 | 15,933 | 79.4 |
| % female | 77.1 | 73.0 | 71.0 | 69.3 | .. |

Source: ABS Census of Population and Housing, 1996 to 2011

From 1996 to 2011 the percentage of employed physiotherapists aged over 55 years increased almost four percentage points, with corresponding increases in both employed male and female physiotherapists aged over 55 (table 16).

Table 16: employed physiotherapists, age profile by gender, 1996 and 2011

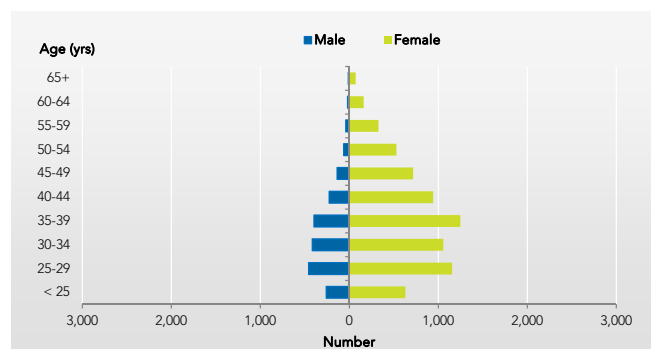
| | Average age | | Per cent aged 55 and over | |
|----------------|-------------|-------------|---------------------------|-------------|
| | 1996 | 2011 | 1996 | 2011 |
| Males | n.a. | 36.6 | 3.6 | 7.1 |
| Females | n.a. | 38.8 | 8.3 | 12.6 |
| Persons | n.a. | 38.1 | 7.2 | 10.9 |

n.a. not available

Source: ABS Census of Population and Housing, 1996 and 2011

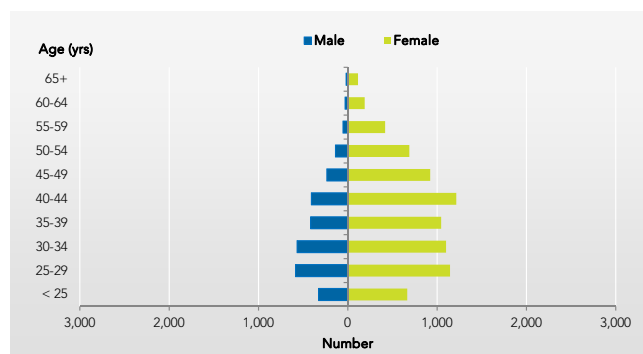
Figures 6 to 9 show a detailed age and gender breakdown of employed physiotherapists for each selected census year. The figures clearly show the greater number of employed female physiotherapists compared with males in each year. Growth in new entrants – both male and female – from 2006 to 2011 can clearly be seen.

Figure 6: number of employed physiotherapists by age and gender, 1996



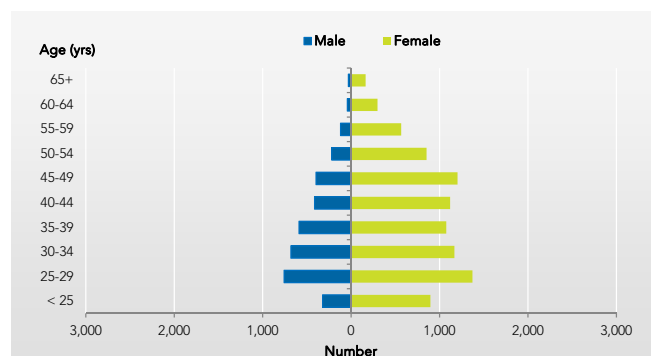
Source: ABS Census of Population and Housing, 1996

Figure 7: number of employed physiotherapists by age and gender, 2001



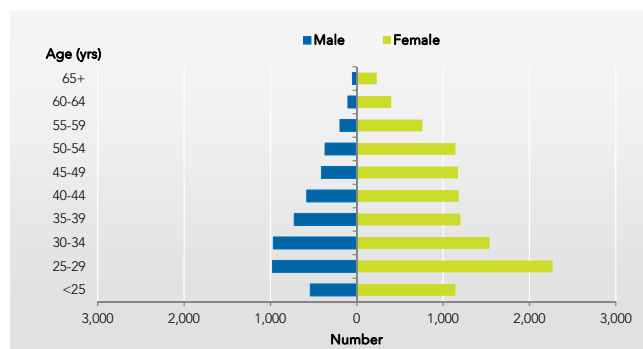
Source: ABS Census of Population and Housing, 2001

Figure 8: number of employed physiotherapists by age and gender, 2006



Source: ABS Census of Population and Housing, 2006

Figure 9: number of employed physiotherapists by age and gender, 2011



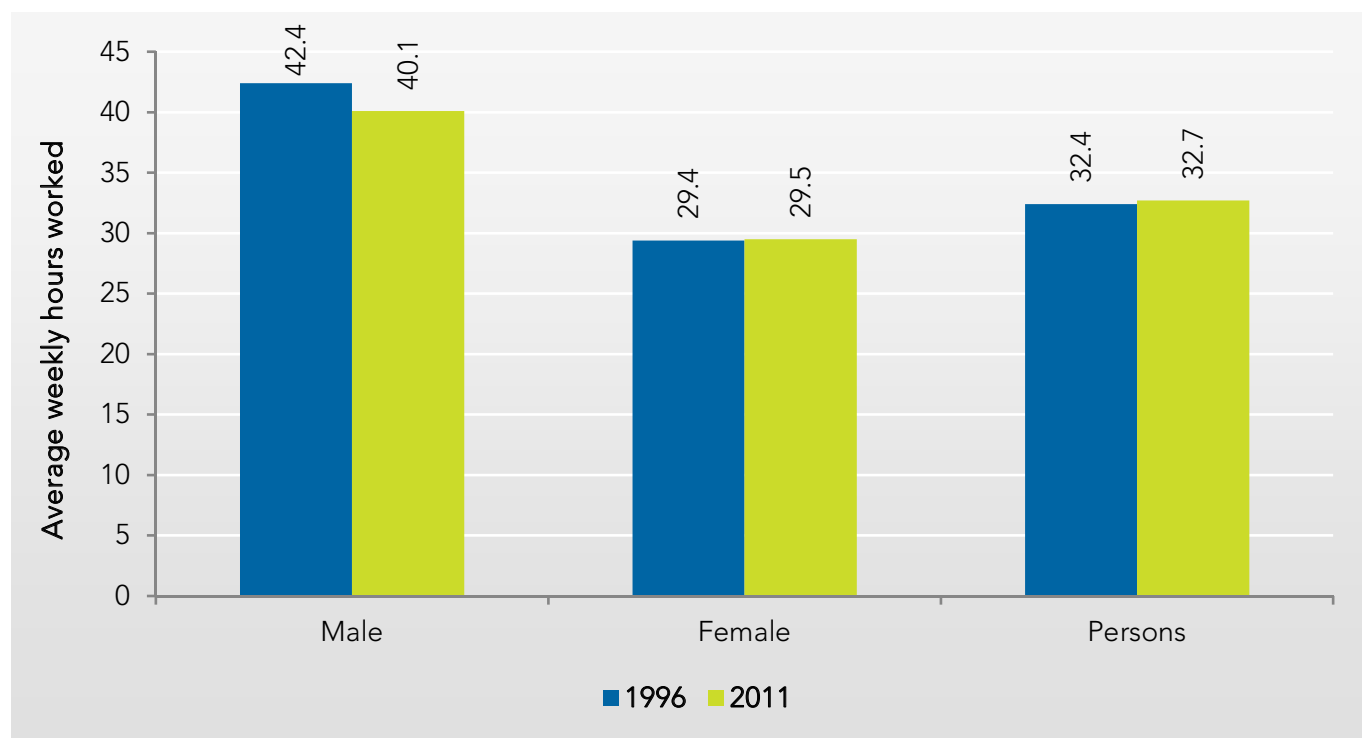
Source: ABS Census of Population and Housing, 2011

Hours worked

In both 1996 and 2011, male physiotherapists' average weekly hours worked were substantially higher than that of female physiotherapists (figure 10).

Average weekly hours worked reduced slightly for males from 1996 (42.4 hours) to 2011 (40.1 hours), while average hours for females stayed the same. With females forming the majority of all employed physiotherapists, the fall in male average weekly hours had no impact on total average weekly hours worked.

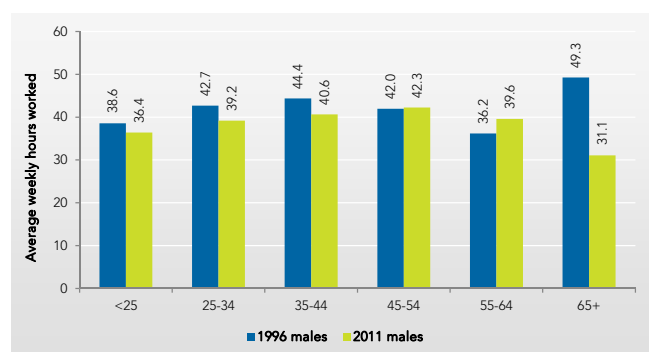
Figure 10: employed physiotherapists, average weekly hours worked, 1996 and 2011



Source: ABS Census of Population and Housing, 1996 and 2011

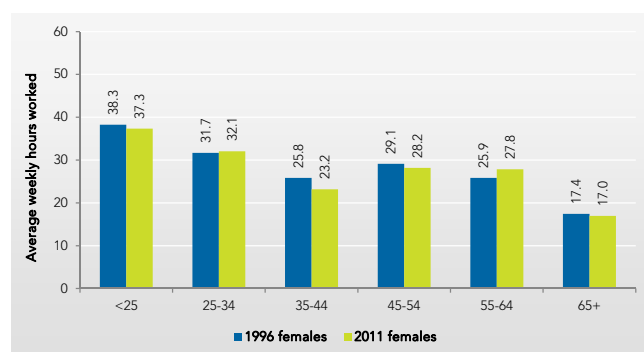
For males, average weekly hours worked fell by more than two hours across most age groups (figure 11). For females, fluctuations in average weekly hours varied across age groups. However, the general pattern was the same in 1996 and 2011, with average weekly hours highest in the youngest age group, falling during 'family formation' years and then increasing again until retirement age (figure 12).

Figure 11: employed male physiotherapists by age and average hours worked, 1996 and 2011



Source: ABS Census of Population and Housing, 1996 and 2011

Figure 12: employed female physiotherapists by age and average hours worked, 1996 and 2011



Source: ABS Census of Population and Housing, 1996 and 2011

Aboriginal and Torres Strait Islander status

Over the four selected census years, there were low (albeit increasing) numbers of employed physiotherapists of Aboriginal and Torres Strait Islander status (table 17).

Table 17: number of employed physiotherapists by Aboriginal and Torres Strait Islander status, 1996 to 2011

| | 1996 | 2001 | 2006 | 2011 |
|---|--------------|---------------|---------------|---------------|
| Aboriginal and Torres Strait Islander | 22 | 23 | 52 | 71 |
| Non-Aboriginal and Torres Strait Islander | 8,844 | 10,182 | 12,176 | 15,796 |
| Total^(a) | 8,906 | 10,225 | 12,284 | 15,928 |

(a) Includes Aboriginal and Torres Strait Islander status not stated

Source: ABS Census of Population and Housing, 1996 to 2011.

Country/region of birth

In 1996 and 2011, approximately three in every four employed physiotherapists were born in Australia. The United Kingdom was the second highest country of birth for employed physiotherapists in both years (table 18).

Table 18: employed physiotherapists – top 5 countries/regions of birth, 1996 and 2011

| 1996 | | | 2011 | | |
|--------------------------------|--------------|--------------|--------------------------------|---------------|--------------|
| Country/region of birth | Number | % | Country/region of birth | Number | % |
| Australia | 6,893 | 77.5 | Australia | 11,571 | 72.6 |
| United Kingdom | 745 | 8.4 | United Kingdom | 997 | 6.2 |
| Chinese Asia | 170 | 1.9 | New Zealand | 478 | 3.0 |
| New Zealand | 165 | 1.9 | Southern and East Africa | 440 | 2.8 |
| Southern and East Africa | 152 | 1.7 | Chinese Asia | 422 | 2.7 |
| Other countries ^(a) | 774 | 8.7 | Other countries ^(a) | 2,022 | 12.7 |
| Total | 8,899 | 100.0 | Total | 15,929 | 100.0 |

(a) Includes not stated and inadequately described

Source: ABS Population of Census and Housing, 1996 and 2011

Education

While the NHWDS provides insight into the roles and work settings that registered physiotherapists are employed in, it does not provide information on the levels of qualification held by physiotherapists. Census data provides an indicator of the types of qualifications held by physiotherapists, and also provides information about the occupation of those who are qualified in physiotherapy but not working as physiotherapists.

Table 19 shows the number of people who reported their highest level of qualification in physiotherapy, by the type of qualification and the occupation they reported working in at the time of the census.

Most people with their highest level of qualification in physiotherapy reported a bachelor degree as their highest level of qualification (12,924).

Those with their highest level of qualification in physiotherapy most commonly reported an occupation of 'professionals' (15,604), and within this, almost all reported an occupation of physiotherapist (14,450).

It should be noted that current registration standards generally require a physiotherapist to have completed an accredited bachelor or postgraduate qualification in physiotherapy (refer to 'how are physiotherapists trained?'). Those people who self-reported as a physiotherapist with an advanced diploma or diploma (737) as their highest level of qualification may not meet current registration standards to be recognised as a physiotherapist.

Table 19: employed persons, highest level of qualification in physiotherapy, by type of qualification and occupation, 2011

| Occupation | Highest level of qualification | | | | Total ^(a) |
|--|--------------------------------|---|-----------------|------------------------------|----------------------|
| | Postgraduate degree | Graduate diploma and graduate certificate | Bachelor degree | Advanced diploma and diploma | |
| Professionals | 2,690 | 917 | 11,042 | 798 | 15,604 |
| <i>Physiotherapists</i> | 2,346 | 859 | 10,368 | 737 | 14,450 |
| Community and personal service workers | 56 | 19 | 521 | 121 | 787 |
| Clerical and administrative workers | 55 | 33 | 517 | 109 | 737 |
| Other occupations | 137 | 86 | 844 | 189 | 1,301 |
| Total | 2,938 | 1,055 | 12,924 | 1,217 | 18,429 |

(a) Includes level of education inadequately described and level of education not stated.

Source: ABS Census of Population and Housing 2011

Sector and industry of employment

In each selected census year, over two-thirds of physiotherapists were employed in the private sector (table 20). State and territory government were the second highest sector of employment, which reflects the high number of physiotherapists working in hospitals (table 21).

Table 20: number of employed physiotherapists by sector of employment

| Sector | 1996 | 2001 | 2006 | 2011 |
|--------------------------------|--------------|---------------|---------------|---------------|
| Commonwealth government | 193 | 143 | 153 | 171 |
| State and Territory government | 2,672 | 3,071 | 3,436 | 4,570 |
| Private | 5,934 | 6,897 | 8,668 | 11,155 |
| Total^(a) | 8,920 | 10,186 | 12,286 | 15,932 |

(a) includes local government and not stated

Source: ABS Census of Population and Housing, 1996 to 2011.

Almost all physiotherapists worked in the healthcare and social assistance industries in each selected year, and within this, approximately half were employed in physiotherapy services (table 21).

Table 21: number of employed physiotherapists by industry, 1996 to 2011

| Industry | 1996 | 2001 | 2006 | 2011 |
|--|--------------|---------------|---------------|---------------|
| Healthcare and social assistance industries | | | | |
| Physiotherapy services | 3,794 | 5,043 | 5,917 | 7,853 |
| Hospitals (excluding psychiatric hospitals) | 2,500 | 2,443 | 3,968 | 5,189 |
| Other healthcare and social assistance services | 1,998 | 2,226 | 1,747 | 2,040 |
| <i>Total healthcare and social assistance</i> | <i>8,292</i> | <i>9,712</i> | <i>11,632</i> | <i>15,082</i> |
| Other industries | 592 | 528 | 653 | 848 |
| Total | 8,884 | 10,240 | 12,285 | 15,930 |

Source: ABS Census of Population and Housing, 1996 to 2011.

Distribution

Information from the census on the distribution of the physiotherapist workforce is based on place of usual residence (not place of work).

State and territory

Three-quarters of all employed physiotherapists in Australia were located in New South Wales (30 per cent), Victoria (25 per cent) and Queensland (19 per cent). In line with this, three-quarters of the increase in the number of employed physiotherapists (3,643) between 2006 and 2011 occurred across these states (table 22).

In 2011, employed physiotherapists in the smallest state (Tasmania) and territory (the Northern Territory) had opposite characteristics (despite having the same percentage of female physiotherapists), with:

- Tasmania having the oldest workforce and lowest average working hours.
- The Northern Territory having the youngest workforce, with highest average working hours.

Table 22: selected characteristics of employed physiotherapists by state and territory, 2006 and 2011

| | NSW | VIC | QLD | SA | WA | TAS | NT | ACT | AUS |
|---------------------------------|-------|-------|-------|-------|-------|------|------|------|---------------|
| 2011 | | | | | | | | | |
| Number | 4,856 | 4,048 | 3,058 | 1,430 | 1,833 | 319 | 102 | 287 | 15,933 |
| No. per 100,000 population | 67.3 | 73.1 | 68.3 | 87.2 | 77.9 | 62.4 | 44.1 | 78.0 | 71.3 |
| Average age | 39.4 | 36.9 | 38.0 | 38.2 | 36.9 | 41.6 | 34.6 | 38.6 | 38.1 |
| % aged 55 and over | 13.1 | 9.5 | 8.8 | 12.1 | 9.7 | 16.5 | 3.0 | 11.1 | 10.8 |
| Average hours worked | 32.6 | 33.2 | 33.4 | 32.1 | 31.9 | 31.5 | 34.0 | 32.3 | 32.7 |
| % female | 69.7 | 68.3 | 68.8 | 67.0 | 70.9 | 76.5 | 76.5 | 70.4 | 69.3 |
| 2006 | | | | | | | | | |
| Number | 3,923 | 3,048 | 2,254 | 1,134 | 1,331 | 269 | 93 | 238 | 12,290 |
| No. per 100,000 population | 58.2 | 60.2 | 56.2 | 73.0 | 64.9 | 55.0 | 44.5 | 71.0 | 60.1 |
| % change in number 2006 to 2011 | 23.8 | 32.8 | 35.7 | 26.1 | 37.7 | 18.6 | 9.7 | 20.6 | 29.6 |

Source: ABS Census of Population and Housing, 1996 and 2011, ABS, Australian Demographic Statistics, Dec 2012, cat. no. 3101.0

Remoteness area

Table 23 shows the distribution of employed physiotherapists across remoteness areas. The distribution of physiotherapists across remoteness areas was similar in 2006 and 2011, with approximately:

- Three-quarters located in major cities.
- 15 per cent located in inner regional areas.
- Six per cent located in outer regional areas.
- Less than one per cent in remote and very remote areas

However on a number per 100,000 population basis there were substantial increases in employed physiotherapists in major cities, inner regional areas and remote areas, with little change in outer regional and very remote areas.

Table 23: Selected characteristics of employed physiotherapists by remoteness area, 2006 and 2011

| | Major cities | Inner regional | Outer regional | Remote ^(a) | Very remote ^(a) | Australia ^(b) |
|---------------------------------|--------------|----------------|----------------|-----------------------|----------------------------|--------------------------|
| 2011 | | | | | | |
| Number | 12,633 | 2,223 | 890 | 129 | 33 | 15,933 |
| No. per 100,000 population | 80.5 | 54.1 | 43.9 | 41.0 | 16.2 | 71.3 |
| Average age | 37.6 | 40.7 | 39.7 | 37.1 | 31.3 | 38.1 |
| % aged 55 and over | 10.3 | 13.8 | 12.9 | 9.4 | 0.0 | 10.9 |
| Average hours worked | 32.9 | 31.8 | 33.2 | 31.0 | 39.7 | 32.7 |
| % female | 68.3 | 72.4 | 74.9 | 80.6 | 48.5 | 69.3 |
| 2006 | | | | | | |
| Number | 9,505 | 1,845 | 802 | 111 | 27 | 12,290 |
| No. per 100,000 population | 66.9 | 48.2 | 41.6 | 36.6 | 14.7 | 60.1 |
| % change in number 2006 to 2011 | 32.9 | 20.5 | 11.0 | 16.2 | 22.2 | 29.6 |

(a) Care should be taken when interpreting the figures for Remote and Very remote areas due to the relatively small number of employed physiotherapists who reported their usual residence was in these regions.

(b) Includes migratory and no usual residence.

Source: ABS Census of Population and Housing, 2006 and 2011, ABS, Regional Population Growth, Australia, 2012, cat. no. 3218.0.

ABS Labour Force Survey

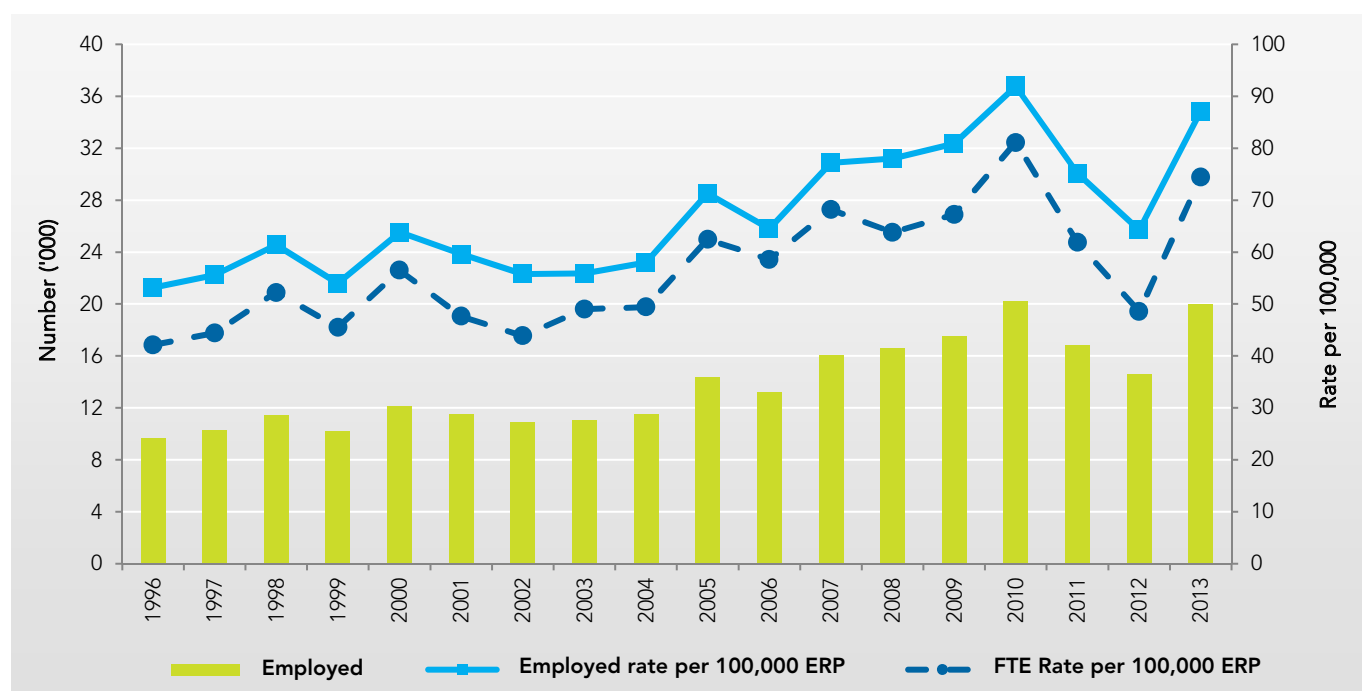
While the census occurs every five years, the ABS Labour Force Survey (LFS) is conducted monthly, and every quarter more detailed information is asked on occupation. Figure 13 presents annualised quarterly ABS LFS data, showing trends in the number of employed physiotherapists over time.

The ABS LFS shows that over the period from 1996 to 2013:

- The number of employed physiotherapists generally increased, particularly from 2006, with an average annual growth rate of 4.4 per cent.
- The number of employed physiotherapists per 100,000 had an average annual growth of 3.0 per cent.
- The FTE rate per 100,000 population (calculated using 38 hours) had an average annual growth of 3.4 per cent.

The FTE rate per 100,000 follows a similar pattern to the employment rate, indicating there was minimal change in hours worked over the period.

Figure 13: Employed physiotherapists – number, number per 100,000 and FTE per 100,000, 1996 to 2013.



Source: ABS, Labour Force, Australia, Detailed Quarterly, Feb 2013. Cat. no. 6291.0.55.003. Data cube E08

Table 24 shows average weekly hours worked calculated from the LFS for selected years. Consistent with the NHWDS and Census information, male average weekly hours worked were greater than females. However with females accounting for the majority of employed physiotherapists, overall average weekly hours worked aligned with female average hours.

Table 24: Employed physiotherapists, average weekly hours worked by gender, selected years

| | 1996 | 2000 | 2004 | 2008 | 2012 |
|----------------|-------------|-------------|-------------|-------------|-------------|
| Males | 40.0 | 39.1 | 42.6 | 39.0 | 34.4 |
| Females | 27.0 | 32.8 | 28.7 | 28.3 | 27.1 |
| Persons | 30.1 | 33.6 | 32.4 | 31.1 | 28.7 |

Source: ABS Labour Force, Australia, Detailed Quarterly, Nov 2012. Cat no. 6291.0.55.003. Data cube E08

Workforce inflows

Information on workforce inflows is an important component of workforce planning, to understand how many people are entering the workforce. There are two primary streams to become a physiotherapist in Australia – through the education system and through immigration. Information available on both streams is presented in this section.

Students

There are currently two sources of information on physiotherapy students in Australia – AHPRA and DE. Information from both sources is presented in this section.

Registered physiotherapy students

As outlined earlier, a person needs to complete an accredited program of study to become a physiotherapist in Australia. Students gaining a qualification that enables them to practise as a registered health professional usually undertake periods of clinical practice (involving direct patient contact) as a part of their course of study. In the interests of public safety, Health Ministers agreed that monitoring of students undertaking clinical practice is reasonable, and in line with the monitoring of fully qualified health professionals³.

Therefore, under the National Law, education providers provide AHPRA the details of people undertaking a Board approved program of study or clinical training. For students enrolled in approved programs of study, student registration commences from the first year of the program (except for psychology, which does not register students).

For students not enrolled in an approved program of study, registration occurs upon commencement of clinical training. Examples of this include:

- When an overseas student arranges a clinical placement as part of the course requirements set out by the education provider in their home country.
- When an education provider is running a course that is accredited by an accreditation authority but is not yet approved by a National Board.
- When an education provider is running a course that has not yet been accredited by an accreditation authority or approved by a National Board⁴.

Student registration numbers are cumulative and reflect the number of students who have an active registration on 30 June, based on the expected completion date supplied by the education provider⁵.

3 Occupational Therapy Board website: <http://www.occupationaltherapyboard.gov.au/Codes-Guidelines/FAQ.aspx#Whydostudentsneedtoberegistered>. Accessed 6 June 2013.

4 AHPRA Fact sheet for education providers: <http://www.ahpra.gov.au/Registration/Student-Registrations/fact-sheet-for-education-providers.aspx>. Accessed on 6 June 2013

5 Australian Health Practitioner Regulation Agency Annual Report 2012-13

As at 30 June 2013 there were 5,853 registered physiotherapy students in accredited physiotherapy courses (table 25). Additionally, there were 2,308 students undertaking clinical training that does not currently form part of an approved program of study.

Table 25: number of registered physiotherapy students, 2011 to 2013

| | 30 June 2011 | 30 June 2012 | 30 June 2013 | % increase 2011 to 2013 |
|--|--------------|--------------|--------------|----------------------------|
| Approved program of study ^(a) | 4,366 | 5,655 | 5,853 | 34.1 |
| Clinical training ^(b) | 241 | 1,193 | 2,308 | 857.7 |

(a) Students enrolled in a course approved by a National Board and leads to general registration.

(b) Students undertaking any form of clinical experience that does not form part of an approved program of study and the person does not hold registration in the health profession in which the clinical training is being undertaken.

Source: AHPRA Annual reports 2010-11, 2011-12, and 2012-13

The Department of Education student numbers

While the AHPRA student registration numbers show the number of students in accredited physiotherapy courses, it is cumulative only and student characteristics are not published. The DE conducts the Higher Education Statistics Collection, which provides a range of information on the provision of higher education in all Australian universities. From this collection, information is available on the number of student commencements and completions in higher education courses allocated to the physiotherapy field of education, as well as the characteristics of those students. While this does not specifically include only those students in accredited physiotherapy courses, it does provide an indication of student trends over time, which can assist with workforce planning.

In this section, information on student commencements and completions in higher education courses allocated to the physiotherapy field of education is presented.

Cautions to note with the DE data:

- Information may include courses allocated to the physiotherapy field of education that do not lead to registration as a physiotherapist. That is, it may include students in non-accredited courses.
- The accuracy of coding courses to field of education is the responsibility of each university, and is subject to the knowledge of those allocating the codes.
- Information includes combined courses where the course has been allocated to two fields of education. Combined courses are courses designed to lead to a single combined award or to meet the requirements of more than one award.

Student commencements

Table 26 shows physiotherapy student commencements from 2008 to 2012. Despite an initial fall, student commencements increased by close to half (45 per cent or 787 students) from 2008 to 2012.

This increase was apportioned relatively equally in number across bachelor courses (up 351 commencements) and postgraduate courses (up 436). However, in percentage terms, postgraduate commencements increased 80 per cent compared with an increase of 29 per cent for bachelor commencements – indicating the increasing popularity of the postgraduate pathway.

From 2008 and 2012, female student commencements fell as a percentage of total student commencements (from 64 per cent in 2008 to 58 per cent in 2012). This is consistent with census information showing male physiotherapists increased at a greater rate than females.

The majority of physiotherapy students were domestic students, with overseas-students comprising less than 15 per cent of all commencements across the selected years – ranging from a high of 250 in 2008 to a low of 200 in 2009 (table 26).

Table 26: number of student commencements within the physiotherapy field of education by course type and characteristics, 2008 to 2012

| | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------|--------------|--------------|--------------|--------------|--------------|
| Bachelor | 1,219 | 1,159 | 1,251 | 1,457 | 1,570 |
| Postgraduate | 537 | 512 | 677 | 720 | 973 |
| Total | 1,756 | 1,671 | 1,928 | 2,177 | 2,543 |
| % female | 63.9 | 62.0 | 60.7 | 58.8 | 58.3 |
| % overseas | 14.2 | 12.0 | 12.6 | 10.9 | 9.8 |

Source: Department of Education

Student completions

Similar trends are shown for physiotherapy student completions as with commencements, including:

- An overall increase in completions over the period 2008 to 2012 (up 11 per cent or 159 completions).
- Postgraduate completions increasing at a greater rate than bachelor completions.
- Female completions falling as a percentage of all completions (from 17 per cent in 2008 to 10 per cent in 2012).

Table 27: number of student completions within the physiotherapy field of education by course type and characteristics, 2008 to 2012

| | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------|--------------|--------------|--------------|--------------|--------------|
| Bachelor | 932 | 949 | 932 | 1,038 | 911 |
| Postgraduate | 459 | 436 | 559 | 546 | 639 |
| Total | 1,391 | 1,385 | 1,491 | 1,584 | 1,550 |
| % female | 66.4 | 62.5 | 61.3 | 61.9 | 62.5 |
| % overseas | 16.6 | 13.1 | 14.1 | 11.3 | 10.3 |

Source: Department of Education

Immigration

Physiotherapists appear on the Skilled Occupation List and the Consolidated Sponsored Occupation List. This means that physiotherapists can migrate to Australia independently or through sponsored programs including employer, state and territory or regional sponsored schemes.

The APC is responsible for assessing qualifications and skills of overseas-trained physiotherapists for the purpose of migration to Australia. Two assessments exist:

1. If an applicant requires DIBP to consider their skilled employment for the purpose of awarding points.
2. If an applicant does not require DIBP to consider their skilled employment for the purpose of awarding points.

Before being granted a visa, overseas-qualified physiotherapists wishing to practise in Australia are required to register with the Physiotherapy Board of Australia, and undergo a separate assessment process (also conducted by the APC).

Temporary visa grants

Most temporary visas were granted under the 457 temporary work (skilled) visa. This stream has become more popular with increasing numbers of visas granted from 2005-06 to 2012-13 (table 28).

Table 28: temporary visa grants by subclass, 2005-06 to 2012-13

| Visa category | 2005 -06 | 2006 -07 | 2007 -08 | 2008 -09 | 2009 -10 | 2010 -11 | 2011 -12 | 2012-13 |
|------------------------------|-----------|-----------|------------|------------|-----------|-----------|------------|------------|
| 442 occupational trainee | 5 | 4 | 9 | 5 | 3 | 0 | 0 | 0 |
| 457 temporary work (skilled) | 58 | 82 | 91 | 102 | 90 | 99 | 114 | 118 |
| Total | 63 | 86 | 100 | 107 | 93 | 99 | 114 | 118 |

Source: Department of Immigration and Border Protection administrative data

Permanent visa grants

Most permanent visas were granted under the general skilled migration category, with a peak of 132 grants in 2009-10. Visa grants in this category have since fallen, while visas granted under the employer sponsored category increased over the period, from seven grants in 2005-06 to 30 grants in 2012-13 (table 29).

Table 29: permanent visa grants^(a) by visa type, 2005-06 to 2012-13

| Visa category | 2005 -06 | 2006 -07 | 2007 -08 | 2008 -09 | 2009 -10 | 2010 -11 | 2011 -12 | 2012-13 |
|--|-----------|-----------|-----------|------------|------------|------------|------------|------------|
| Employer sponsored | 7 | 5 | 9 | 12 | 11 | 24 | 33 | 30 |
| General skilled migration ^(b) | 81 | 82 | 56 | 93 | 132 | 95 | 80 | 80 |
| Total | 88 | 87 | 65 | 108 | 143 | 119 | 113 | 110 |

(a) Includes provisional visas.

(b) Includes skilled independent, skilled regional and state/territory nominated visas.

Source: Department of Immigration and Border Protection administrative data

On 1 July 2012, SkillSelect was implemented, a process where a person wanting to migrate to Australia first completes an expression of interest (EOI); and an invitation to apply for a visa is then extended to people with an EOI, in order of those who scored the most points. Caps on the number of visa grants allowed for each occupation have been implemented from 1 July 2012. This is in contrast to the previous process where there were no caps, and anyone could submit an application without being invited to apply. The impact of these changes on skilled independent immigration numbers is yet to be seen.

How can workforce activity be measured?

As well as understanding the existing workforce stock and having an indication of how many people are entering the workforce, understanding workforce demand also forms an integral component of workforce planning. Potential data sources that could be used to measure demand for the physiotherapist workforce are outlined in this section.

Many physiotherapy services are covered by private health insurance. Therefore Private Health Insurance Administrative Council data is one source of information that can be used to measure workforce activity.

Many physiotherapists are also employed in the state/territory hospital sectors. National hospital morbidity database (NHMD) information on physiotherapy procedures in a hospital setting is therefore another source of information on workforce activity.

NHMD information is also available on hospital separations for diseases of the musculoskeletal system and the Australian Institute of Health and Welfare have also produced projections of the incidence of diseases of the musculoskeletal system - these sources may be of assistance in determining demand for the physiotherapy workforce.

Limited information is available from Medicare to measure physiotherapy service provision. Medicare rebates for physiotherapy (and other selected allied health) services is limited to chronically ill people who are being managed by their general practitioner under a chronic disease management plan, through the Medicare allied health initiative.

What issues have stakeholders identified for the physiotherapy workforce?

Considerations that may impact future workforce supply or demand are important in providing a real world context for interpreting the historical trends presented in this report, and developing an understanding of future workforce requirements. Consultation was conducted with employers and the profession to obtain their views on such considerations, which are summarised in this section.

What were the jurisdiction views?

In terms of the existing workforce, jurisdictions highlighted that while there is adequate supply of graduate and early career physiotherapists, recruitment and retention of senior staff, particularly to specialist positions, is difficult. It was noted this is exacerbated by the fact the physiotherapy workforce has a high attrition rate at the early career stage.

In terms of building the future workforce, clinical placements were highlighted as an issue. This is linked to difficulties in finding senior staff, which limits the workforce's capacity to provide clinical supervision for students and graduates. Increasing student numbers and the introduction of physiotherapy programs at new universities has compounded this issue.

Additionally, it was noted the ageing population and an increasing incidence of lifestyle diseases is likely to:

- Increase the need for specialisation (also driven by the National Disability Insurance Scheme).
- Increase the need for the evolution of extended scope roles.

Public sector career structures and budget constraints were highlighted as limiting specialist role development supporting career advancement within this sector.

Regarding the geographic distribution of the physiotherapist workforce, extreme difficulties in recruiting to rural and regional areas was highlighted, resulting in long waiting times for patients as service demand exceeds the existing workforce.

What were the APA's views?

APA views were consistent with those of the jurisdictions, with the APA highlighting:

- Concerns about the availability and quality of clinical placements resulting from recent increases in student numbers.
- Difficulties in recruiting physiotherapists to specialist positions, particularly cardiorespiratory and aged care positions.
- Increasing demand for physiotherapists as a result of the ageing population.

The APA emphasised concerns about physiotherapy in the aged care sector, that while strong demand for services exists and is expected to continue, service provision is affected by low levels of funding, limited scope of practice, and a high rate of staff turnover (with anecdotal reports suggesting positions in aged care are often filled by overseas-trained physiotherapists on temporary visas).

The APA also advised that technological advances, particularly in information technology and robotics, as well as changes in models of care and scopes of practice, are expected to impact the physiotherapy workforce in future.

HWA's assessment of this workforce

HWA's assessment of the physiotherapy workforce comprises three components:

1. An assessment of existing workforce position – used to assess whether workforce supply matches demand for services (whether the workforce is in balance or not) at this point in time.
2. A set of indicators – collectively called the workforce dynamics indicator – used to highlight aspects of the current workforce that may be of concern into the future.
3. Comparison with other occupations – NHWDS data is used to compare key characteristics of the physiotherapy workforce with other registered health occupations.

Existing workforce position

Ideally, quantitative evidence should be used to determine whether a workforce is in balance or not at a point in time. However, there is a lack of such evidence. Therefore, to provide an understanding of the existing workforce position for the health workforces, HWA conducted an assessment using a range of partial measures. These measures were:

- Assessment by key stakeholders.
- Waiting times.
- Vacancy rates.

Each of these measures is discussed on the following page.

Assessment by key stakeholders

HWA consulted with jurisdictions, the peak association, and employers to obtain their assessment of the existing workforce position of the physiotherapy workforce. Where provided, these views are incorporated within the existing workforce position assessment.

Waiting times

Waiting times are a measure of access to a health professional – not specifically a measure of workforce imbalance. It is for this primary reason that waiting times can only be used as a partial measure to demonstrate existing workforce position. Factors aside from workforce availability influence waiting times and affect its use as an indicator, including the length of time someone has to wait, as this influences their likelihood to wait, and demand for a particular health profession.

Budget can also strongly influence waiting times for health professions primarily based in the public sector. Budget constraints influence supply by limiting the availability of staff, which impacts waiting times.

Vacancy rates

Vacancy rates and duration of vacancies are often used to assess potential workforce imbalances. Vacancies can imply there is an insufficient sized workforce as there are not enough people to fill positions available. However there is a range of cautions to note with using vacancy rates as a measure of workforce shortage:

- Vacancies occur as part of normal operations due to turnover and lags in filling positions.
- There is no single level of vacancy rate considered to reflect a workforce shortage.
- Vacancies can occur for reasons other than shortage, for example: the vacancy could be in an unattractive location; an employer may choose not to fill a vacancy for reasons such as budget constraints; or, applicants for a position may not have sufficient experience the employer is looking for.
- Vacancy rates may also understate workforce shortage, for example positions may not be advertised if they are not expected to be filled.

The sector in which this measure is being applied also determines its usefulness. In the public health sector, positions are salaried so vacancy rates can be an appropriate indicator. However in the private sector, private practitioners often deliver services so there may be minimal identified vacancies. Other indicators such as waiting times for a first appointment may be more appropriate for the private sector. For the reasons above, vacancy rates can also only be used as a partial indicator – they should not solely be considered as a measure of workforce shortage.

A number of other partial indicators can also be used to provide a picture of the existing workforce position, including overtime rates, salaries and predicted employment growth. However for this publication, the measures described above were focused on.

Existing workforce position assessment scale

Using available information from the three measures outlined above, the following scale was used to assess the existing workforce position of physiotherapists.

| | |
|---------------|---|
| White | Current perceived excess supply – current aggregate workforce exceeds existing expressed service demand, including across geographic areas |
| Green | No current perceived shortage – sufficient workforce for existing expressed service demand, minimal number of vacancies, no difficulty filling positions, and short waiting times |
| Yellow | Perceived maldistribution – localised excess supply and localised shortages – existing workforce supply exceeds existing expressed service demand in some locations, while in other locations expressed service demand exceeds existing workforce. |
| Orange | Perceived maldistribution – localised adequate supply and localised shortages – existing sufficient workforce for existing expressed service demand in some locations, however expressed service demand exceeds existing workforce in other locations |
| Red | Perceived current shortage – that is, expressed service demand in excess of existing workforce, ongoing vacancies exist, difficult/unable to fill positions, and extended waiting times across geographic areas |

Existing workforce position assessment

Reflecting the fact allied health professionals are employed and deployed differently across jurisdictions, the range of stakeholder views received and the difficulty in assigning weightings to stakeholders to generate a national assessment; a single existing workforce position assessment has not been assigned for physiotherapists.

However from information obtained, the physiotherapy existing workforce position assessment is clearly in the **orange to red** scale – only one stakeholder rated this workforce as 'green' (no current perceived shortage). The reasons behind these ratings are reflected in the workforce issues section of this report, and reflect:

- Difficulties in recruiting to rural and regional areas.
- Difficulties in recruiting to specialist positions.

The distinction between 'orange' and 'red' tended to relate to the long-term nature of vacancies.

The existing workforce position information obtained by HWA is consistent with the Department of Employment research. The Department of Employment conduct research to identify skill shortages in the Australian labour market, and publish the results of their research in individual occupation reports. The skill shortage research methodology is based on a sample survey of employers who had recently advertised vacancies, examining whether they were able to find suitable workers for the advertised position. Employers are identified through sources including national and regional newspapers, online job boards, association websites, professional journals and specialist publications. The labour market rating for physiotherapy (at June 2013) was 'regional shortage'. It was noted that while overall approximately 70 per cent of vacancies were filled in 2012 (compared with 57 per cent in 2011 and 60 per cent in 2010), almost 80 per cent of vacancies were filled in metropolitan areas compared with 52 per cent in regional areas⁶.

⁶ Department of Employment website. <http://docs.employment.gov.au/node/31533>. Accessed 22 October 2013.

Workforce dynamics indicator

The workforce dynamics indicator (WDI) is used to highlight aspects of the current workforce that may be of concern into the future. The WDI was adapted from Health Workforce New Zealand's (HWNZ) medical discipline vulnerability ranking method⁷, where a traffic light approach is used to score workforces against the selected indicators.

HWA selected the following indicators for scoring.

- **Average age** – workforces with a higher average age are more susceptible to higher exit rates (through retirement) with lower entry rates.
- **Percentage aged 55 and over** – this can be a useful indicator of those potentially retiring or reducing working hours within the next 10 years.
- **Change in average hours worked** – workforces with falling average weekly hours worked can be an indicator of sufficient workforce supply, or supply exceeding demand; while workforces with increasing hours of work can indicate supply pressures.
- **Replacement rate** – this item is designed to calculate the ratio of newly registered professionals to workforce exits in a given year. This indicates whether the number currently completing training is sufficient to replace those presently leaving the workforce.
- **Dependence on internationally trained professionals (ITPs)** – workforces with high percentages of ITPs are of greater concern due to their dependence on a less reliable supply stream (for example, changes in immigration policy may impact on supply).
- **Duration of training program** – the greater the duration of training, the longer it takes to train a replacement workforce.

The WDI provides a visual summary of the key dynamics of workforce recruitment, retention and retirement. They provide an easily understood presentation of health workforce planning information.

Workforce dynamic indicator assessment

NHWDS data was used to calculate the WDI, except for duration of training. For duration of training, the assessment is based on the shortest accredited training pathway to general registration. Given the maldistribution of the health workforce is one of the key findings across a number of HWA consultations, the WDI has also been calculated by remoteness area. This visually shows any differences in the characteristics of the employed physiotherapist workforce by remoteness area.

Table 30 shows the WDI assessment for employed physiotherapists by remoteness area. The value used to determine the WDI assessment is shown in the table, and shaded according to the assessment scale (table 31).

⁷ Prioritisation of Medical Disciplines for Funding by Health Workforce New Zealand. <www.rnzcgp.org.nz> Accessed 3 May 2012

Table 30: physiotherapists – workforce dynamics indicators

| | Major cities | Inner regional | Outer regional | Remote ^(a) | Very remote ^(a) | Australia |
|---------------------------------|--------------|----------------|----------------|-----------------------|----------------------------|-----------|
| Average age | 38.2 | 40.8 | 38.7 | 37.1 | 35.9 | 38.6 |
| Percentage aged 55+ | 11.8 | 16.3 | 12.7 | 11.5 | 5.3 | 12.4 |
| Change in average hours | -0.2 | -0.1 | -0.7 | 0.2 | -1.4 | -0.3 |
| Replacement rate ^(b) | not assessed | | | | | |
| Dependence on ITPs | 14.3 | 14.0 | 19.2 | 15.0 | 11.4 | 14.5 |
| Duration of training | 4 | 4 | 4 | 4 | 4 | 4 |

(a) Care should be taken when interpreting the figures for remote and very remote areas due to the relatively small number of employed physiotherapists who reported their location of main job in these regions.

(b) As the NHWDS is a longitudinal dataset, replacement rate should be able to be calculated in the future.

Source: NHWDS: allied health practitioners 2011 and 2012

Indicator range boundaries

The range boundaries for most indicators were selected as an extension of the HWNZ ranking method. In this development of the WDI, the ranges for each indicator were set to be relatively equal, rather than being established using a statistical base.

To be able to score against the WDIs, an extensive range of data is required. Where a score cannot be allocated due to insufficient data, the indicator is not assessed.

The indicators used are basic measures only – ideally as data availability improves, more sophisticated measures can be developed. Table 31 summarises the indicators and their score ranges.

Table 31: workforce dynamics indicators

| Indicator | Minimal concern | | | | | Significant concern |
|---|-----------------|----------------------------|----------------------------|----------------------------|---------------|---------------------|
| Average age | <40 | 40–44 | 45–49 | 50–54 | 55+ | |
| Percentage aged 55+ | <20% | 20% – <30% | 30% – <40% | 40% – <50% | 50%+ | |
| Annual change in average hours | ± <0.3 hrs | ±(0.3 –<0.6) hrs | ±(0.6 –<0.9) hrs | ±(0.9 –<1.2) hrs | ±1.2 hrs+ | |
| Replacement rate | 95% – 105% | 90% – <95% 105% – <110% | 80% – <90% 110% – <120% | 70% – <90% 120% – <130% | <70% 130%+ | |
| Dependence on internationally trained professionals | <12% | 12% – 24% | 25% – 37% | 37% – 49% | 50%+ | |
| Duration of training | <4 | 4 | 5 | 6 | 7+ | |

How do physiotherapists compare with other registered health occupations?

Table 32 shows the key characteristics of those employed in the registered health occupations using NHWDS data. Amongst the allied registered health occupations, physiotherapists had the third highest employed workforce numbers (20,081) behind psychologists (22,404) and pharmacists (21,331). Key characteristics varied across all the registered occupations (where measured), with physiotherapists having:

- A relatively young age profile, reflected in low values for average age and percentage aged 55 years and over – consistent with many of the allied health occupations, and lower than the medical, nursing and dentist workforces.
- The median average weekly hours worked within the registered health occupations (34.2 hours) – with half of the other workforces working on average more than this each week, and half working less.
- One of the higher levels of dependence on ITPs (noting it was still rated at the lower end of the WDI scale in terms levels of concern).
- Over two-thirds of the employed workforce being female.

Table 32: registered health occupations, WDI ratings and selected characteristics

| Occupation | WDI ratings ^(a) | | | | | Other selected characteristics | | | |
|---|----------------------------|------------|---|--------------------|----------------------|--------------------------------|-----------------------------|-------------------------|--|
| | Ave. Age | % aged 55+ | Annual change in ave hrs ^(b) | Dependence on ITPs | Duration of training | Number employed | Average weekly hours worked | % female ^(c) | Remoteness distribution ^(d) |
| Medical practitioner | 46.0 | 26.6 | -0.5 | 35.1 | 5 | 79,653 | 42.7 | 37.9 | 79: 13: 6: 1 |
| Nurse ^(e) | 44.6 | 23.1 | n.a. | n.a. | 3 | 288,236 | 31.6 | 89.7 | 71: 18: 9: 2 |
| Midwife ^(f) | 49.5 | 34.9 | n.a. | n.a. | 3 | 30,792 | 19.0 | 98.2 | 68: 19: 10: 3 |
| Dentist | 43.4 | 23.4 | -0.3 | 28.5 | 5 | 13,266 | 37.0 | 36.5 | 80: 14: 6: <1 |
| Dental therapist | 46.4 | 20.4 | 0.2 | 7.5 | 3 | 1,117 | 29.4 | 96.9 | 63: 21: 13: 3 |
| Dental hygienist | 37.4 | 5.7 | 0.7 | 15.2 | 2 | 1,425 | 29.4 | 94.6 | 84: 10: 5: <1 |
| Oral health therapist | 31.0 | 1.9 | 1.0 | 1.7 | 3 | 675 | 33.7 | 84.7 | 71: 19: 9: 1 |
| Dental prosthetist | 49.1 | 31.3 | 0.0 | 5.9 | 4 | 1,100 | 42.7 | 14.7 | 73: 21: 6: <1 |
| Aboriginal and Torres Strait Islander health practitioner | 44.4 | 18.8 | n.a. | - | 2 | 233 | 40.5 | 71.9 | 3: 4: 31: 61 |
| Chiropractor | 41.2 | 15.2 | -0.2 | 14.4 | 5 | 4,029 | 33.3 | 34.8 | 75: 18: 6: <1 |
| Medical radiation practitioner | 39.1 | 14.7 | n.a. | 14.0 | 3 | 7,806 | 34.4 | 66.7 | 83: 13: 3: <1 |
| Occupational therapist | 36.8 | 8.0 | n.a. | 7.5 | 4 | 7,231 | 33.1 | 91.5 | 76: 19: 4: <1 |

| Occupation | WDI ratings ^(a) | | | | | Other selected characteristics | | | |
|---|----------------------------|-------------|---|--------------------|----------------------|--------------------------------|-----------------------------|-------------------------|--|
| | Ave. Age | % aged 55+ | Annual change in ave hrs ^(b) | Dependence on ITPs | Duration of training | Number employed | Average weekly hours worked | % female ^(c) | Remoteness distribution ^(e) |
| Optometrist ^(g) | 41.2 | 15.4 | 0.2 | 14.3 | 5 | 4,066 | 36.1 | 48.2 | 78: 16: 5: <1 |
| Osteopath | 38.8 | 13.2 | -0.5 | 11.1 | 5 | 1,543 | 35.7 | 46.5 | 82: 15: n.p.: n.p. |
| Pharmacist | 39.7 | 16.7 | 0 | 12.7 | 5 | 21,331 | 35.9 | 58.2 | 76: 15: 7: 1 |
| Physiotherapist | 38.6 | 12.4 | -0.3 | 14.5 | 4 | 20,081 | 34.2 | 68.8 | 80: 13: 5: 1 |
| Podiatrist | 37.6 | 8.2 | -0.2 | 11.7 | 3 | 3,491 | 36.4 | 58.0 | 76: 17: 6: <1 |
| Psychologist | 45.6 | 26.9 | -0.6 | 7.5 | 6 | 22,404 | 32.6 | 76.7 | 82: 12: 5: <1 |
| Traditional Chinese medicine practitioner | 47.0 | 28.5 | n.a. | 31.8 | 4 | 3,580 | 31.8 | 52.3 | 88: 9: 3: <1 |

n.a. not available. n.p. not publishable.

(a) Replacement rate not included as this has not been assessed for any registered occupations at this point in time.

(b) Aboriginal and Torres Strait Islander health practitioners, medical radiation practitioners, occupational therapists and traditional Chinese medicine practitioners joined the NRAS from 1 July 2012, so NHWDS data not available for 2011 for these occupations. Therefore annual change in average hours worked was not calculated for these occupations.

(c) For osteopaths, optometrists, physiotherapists and podiatrists, calculated excluding those where gender not stated or inadequately described.

(d) Percentage of workforce located in major cities : inner regional : outer regional : remote or very remote areas.

(e) Includes registered and enrolled nurses plus dual registered nurses and midwives. The duration of training WDI indicator for nurses was based on registered nurse training time.

(f) Includes those registered as midwives only plus dual registered nurses and midwives.

(g) For optometrists, the minimum duration of programs with full accreditation at time of publication is 5 years. A 3.5 year fast track program offered by Deakin University holds conditional accreditation at time of publication.

Sources: NHWDS: medical practitioners 2011 and 2012, NHWDS: nurses and midwives 2012, NHWDS: dental practitioners 2011 and 2012, NHWDS: allied health practitioners, 2011 and 2012

What does the analysis show?

The NHWDS shows the physiotherapy workforce is:

- Substantial in size.
- Predominantly female.
- Works part-time.
- Metropolitan-based.

Findings from the census, while based on a different methodology, are consistent with the NHWDS findings. With the longer time-series information available, census data also highlights:

- A substantial increase in workforce numbers from 1996 (increasing by almost 80 per cent).
- An increasing percentage of male physiotherapists compared with females (unlike many other health occupations).

In relation to the supply stream of education, student and graduate numbers in the field of physiotherapy have generally increased over the last six years (noting information presented may include students in non-accredited courses). Males comprised an increasing percentage of student commencements from 2008 to 2012, which is consistent with census trends, and is likely to translate into an increasing percentage of male physiotherapists into the future.

Immigration does not form a significant supply stream for the profession – it rates relatively low on the WDI assessment scale, which is based on country of first qualification information from the NHWDS. Additionally, permanent and temporary visa grants have remained similar across recent years, and are much lower than student numbers.

The WDI assessment suggests no strong areas of concern for this workforce – all indicators (except replacement rate, which could not be assessed) across remoteness areas tended towards the ‘minimal concern’ end of the WDI scale, except for some changes in average weekly hours worked in outer regional and very remote areas.

However the key workforce issues, not captured by the WDI, and highlighted by all stakeholders, is difficulties in filling positions in rural and remote areas, and a shortage of more experienced and specialised physiotherapists.

In relation to more experienced and specialised physiotherapists, the average years worked information in the NHWDS shows a large gap between clinician’s years worked, and years worked by those in administrator and educator roles. This suggests relatively few physiotherapists’ stay in the profession and advance to these roles. This, in combination with stakeholder feedback, suggests career pathways may be an area to investigate to identify ways to retain experienced physiotherapists in the profession. The NHWDS, which is a longitudinal dataset, provides some opportunity to examine this, and to also quantify those leaving the profession. Expanded scope of practice roles, highlighted as likely to develop into the future (and already in practice in some areas, such as physiotherapists in emergency departments), is one area that may assist in increasing retention.

Push and pull factors for physiotherapists, and service delivery models for rural and remote areas are areas for investigation for this workforce.

Appendix one – Physiotherapists by Medicare Local regions

Table 33 shows the number of employed physiotherapists per 100,000 population across all Medicare Local regions. Data in this table shows the number of physiotherapists per 100,000 population working in the relevant Medicare Local region, and provides a useful reflection of the geographical distribution of physiotherapists – it does not reflect physiotherapists employed by Medicare Local organisations.

Table 33: number of employed physiotherapists per 100,000 population by Medicare Local regions, 2012

| Medicare Local | State/Territory | Rate | Area (km ²) |
|--|-----------------|-------|-------------------------|
| Perth Central and East Metro | WA | 218.8 | 2,149 |
| Central Adelaide and Hills | SA | 183.2 | 1,657 |
| Inner North West Melbourne | VIC | 180.9 | 149 |
| Eastern Sydney | NSW | 170.6 | 106 |
| Bayside | VIC | 147.0 | 215 |
| Sydney North Shore and Beaches | NSW | 143.8 | 307 |
| Metro North Brisbane | QLD | 130.2 | 3,999 |
| Inner East Melbourne | VIC | 128.2 | 319 |
| Fremantle | WA | 125.6 | 243 |
| Northern Sydney | NSW | 119.8 | 592 |
| Australian Capital Territory | ACT | 107.2 | 2,352 |
| Frankston - Mornington Peninsula | VIC | 100.2 | 854 |
| Southern Adelaide - Fleurieu - Kangaroo Island | SA | 99.9 | 8,027 |
| Greater Metro South Brisbane | QLD | 97.3 | 3,775 |
| Hume | VIC | 92.3 | 39,200 |
| Gold Coast | QLD | 89.9 | 1,843 |
| Barwon | VIC | 89.4 | 7,913 |
| Sunshine Coast | QLD | 87.4 | 9,968 |
| South Eastern Sydney | NSW | 87.1 | 400 |
| Loddon - Mallee - Murray | VIC | 77.9 | 49,202 |
| Central Coast NSW | NSW | 77.2 | 1,680 |
| Northern Melbourne | VIC | 77.0 | 1,304 |
| Inner West Sydney | NSW | 75.1 | 126 |

| Medicare Local | State/Territory | Rate | Area (km ²) |
|--|-----------------|------|-------------------------|
| Illawarra - Shoalhaven | NSW | 74.5 | 5,687 |
| North Coast NSW | NSW | 74.3 | 32,767 |
| Perth North Metro | WA | 74.3 | 880 |
| Western Sydney | NSW | 71.4 | 775 |
| Hunter | NSW | 71.1 | 32,747 |
| Tasmania | TAS | 70.5 | 68,018 |
| Eastern Melbourne | VIC | 70.4 | 2,641 |
| Bentley - Armadale | WA | 69.2 | 1,734 |
| South West WA | WA | 68.9 | 219,939 |
| Townsville - Mackay | QLD | 65.6 | 239,180 |
| Northern Adelaide | SA | 65.4 | 1,605 |
| Kimberley - Pilbara | WA | 64.8 | 925,390 |
| Goldfields - Midwest | WA | 62.3 | 1,373,296 |
| Northern Territory | NT | 60.0 | 1,348,190 |
| Nepean - Blue Mountains | NSW | 59.5 | 9,122 |
| Southern NSW | NSW | 59.0 | 4,534 |
| Grampians | VIC | 57.7 | 47,885 |
| Darling Downs - South West Queensland | QLD | 57.5 | 407,815 |
| Macedon Ranges and North Western Melbourne | VIC | 57.1 | 3,275 |
| Far North Queensland | QLD | 56.3 | 270,956 |
| New England | NSW | 55.1 | 98,905 |
| Great South Coast | VIC | 55.0 | 22,885 |
| Western NSW | NSW | 53.8 | 117,845 |
| Perth South Coastal | WA | 53.5 | 3,093 |
| West Moreton - Oxley | QLD | 52.4 | 9,596 |
| South Western Melbourne | VIC | 50.4 | 606 |
| Country South SA | SA | 49.3 | 69,522 |
| Goulburn Valley | VIC | 49.2 | 16,519 |
| Lower Murray | VIC | 49.1 | 75,172 |

| Medicare Local | State/Territory | Rate | Area (km ²) |
|-----------------------------------|-----------------|------|-------------------------|
| Wide Bay | QLD | 48.9 | 36,974 |
| Country North SA | SA | 48.2 | 903,379 |
| South Eastern Melbourne | VIC | 48.1 | 1,821 |
| Gippsland | VIC | 48.0 | 41,557 |
| South Western Sydney | NSW | 47.2 | 6,241 |
| Central and North West Queensland | QLD | 46.8 | 634,891 |
| Central Queensland | QLD | 46.7 | 110,959 |
| Murrumbidgee | NSW | 45.2 | 89,471 |
| Far West NSW | NSW | 41.5 | 275,512 |

Source: NHWDS allied health practitioners 2012



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