

# Osteopathy workforce analysis

## Key points

The number of osteopaths in Australia grew by 31.7% over the five years between 2017/18 and 2021/22, with the most substantial growth seen in Victoria which has more osteopaths per head of population and more educational campuses offering courses leading to the qualification of osteopath than any other jurisdiction.

The increasing prevalence of musculoskeletal conditions, Australia's ageing population and attitudes held by general practitioners toward osteopathic treatment, as well as the maldistribution of osteopaths across Australia and the lack of public awareness about osteopathy are challenges currently facing the profession.

## Introduction

The information in this report is provided as a resource to help inform the National Board in its regulatory work and planning. The demographic analysis, which is based on National Registration and Accreditation Scheme (the National Scheme) and published data from other sources, complements the [published demographic snapshot](#) with a more detailed description and discussion of trends in the osteopathy workforce.

## Current state - general demographic characteristics

### Profession overview

At 30 June 2022, there were 3,147 osteopaths registered in Australia, of which 95.5% held some form of practising registration.

Osteopaths constitute 0.4% of the regulated health practitioner workforce, with 12.2 osteopaths per 100,000 head of population. Across the profession, 95.4% of registrants held general registration, 4.5% held non-practising registration and three osteopaths held provisional registration. There were no osteopaths with limited registration.

The gender division for osteopaths was 45.7% male and 54.3% female and the average age was 39 years with 44% aged under 35 years and 11.1% aged 55 years or older. Most osteopaths (86.3%) obtained their initial qualification in Australia. Osteopaths worked predominantly in group or solo private practice, in a major city and worked an average of 32.1 hours per week.

## Osteopaths with general registration

At 30 June 2022, there were 3,003 osteopaths with general registration in Australia who had an average age of 38.8 years and a gender balance of 45.8% male and 54.2% female.

Nationally, there were 12.2 osteopaths per 100,000 population who were unevenly distributed across jurisdictions. By far the highest number of osteopaths per 100,000 population was found in Victoria (28.1 osteopaths per 100,000). In contrast, the Australian Capital Territory and Tasmania had 9.7 and 9.4 respectively, and New South Wales and Queensland had 7.7 and 5.5 respectively. There were fewer osteopaths in South Australia (2.6), the Northern Territory and Western Australia (2.4 per 100,000 each).

Based on the findings of the 2020 National Health Workforce Survey conducted by the Commonwealth Department of Health, there were 9 full-time equivalent (FTE) (38 hours per week) osteopaths per 100,000 population in major cities, 8.7 per 100,000 in inner regional areas, and 3 per 100,000 in outer regional areas.<sup>1</sup> Less than five osteopaths worked in remote or very remote areas.

Around 92.1% of general registrants were employed in the profession in Australia, working an average of 32.1 hours per week (1). Some 96.5% of osteopaths defined their principal role as a clinician. The remainder identified themselves as administrators (including managers not providing clinical services), teachers, or educators.

Of those osteopaths who provided information about their work setting, 64.2% reported that their primary work setting was in group private practice and 27.6% worked in solo private practice. A further 3% worked in a medical centre and 2.3% in residential aged care. The remainder worked for an educational facility or another (unspecified) setting.

When adjusted for FTE, 96.5% of clinicians worked in the private sector and 3.5% in the public sector (for example, educational facilities, community health services) in their principal role.

## Trends over the last five years

The number of practising osteopaths increased by 31.1% over the last five years, from 2,294 in 2017/18 to 3,006 in 2021/22.<sup>2</sup> Over this period, the proportion of male and female registrants remained stable, the proportion of female registrants decreasing slightly from 54.7% to 54.3% with a corresponding increase in male registrants from 45.3% to 45.7%. The proportion aged less than 35 years increased slightly from 41.4% to 44% and the proportion aged more than 55 years decreased slightly from 12.2% to 11.1%.

Between 2017/18 and 2021/22, the proportion of osteopaths with general registration decreased from 95.7% to 95.4% and the proportion with non-practising registration increased from 4% to 4.5%.<sup>3</sup> There were seven osteopaths with provisional registration in 2017/18 and three in 2021/22.

Based on the findings of the 2020 National Health Workforce Survey, there was a decrease in the average number of hours worked per week from 33.7 hours in 2016 to 32.1 hours in 2020. The proportion of osteopaths working more than 35 hours per week decreased from 53.5% in 2016 to 48.9% in 2020 and of those working 50 or more hours per week from 11.1% to 8.9%.

Nationally, the number of osteopaths with general registration increased from 9.6 per 100,000 population in 2017/18 to 12.2 per 100,000 in 2021/22. The change in the distribution of osteopaths with general registration across jurisdictions over the five years is shown in Figure 1.

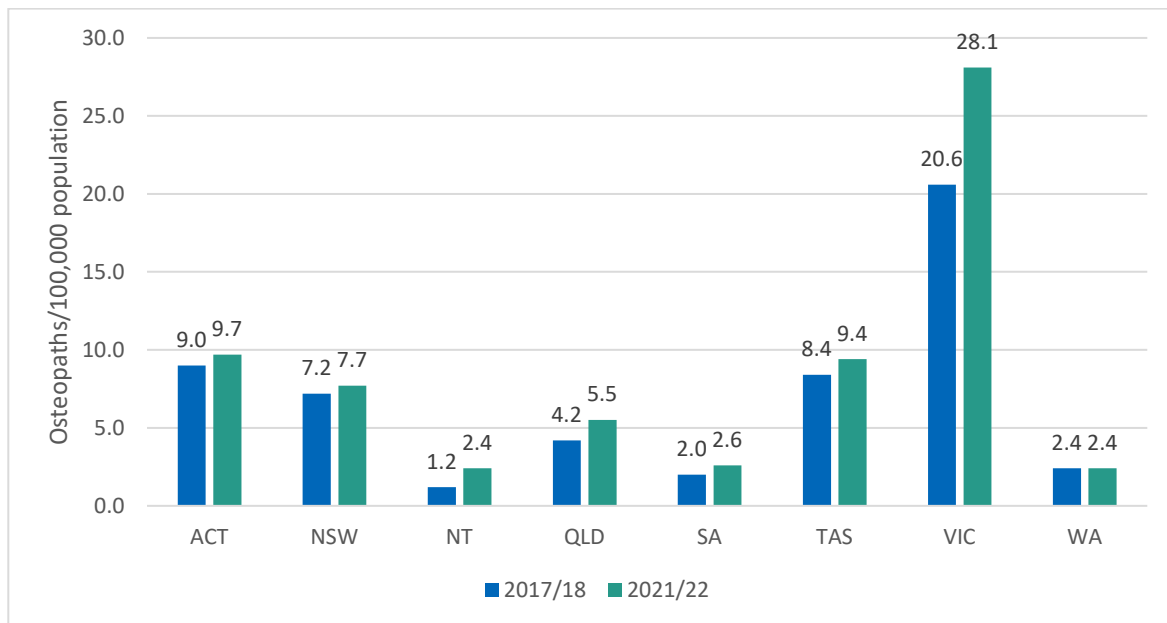
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<sup>1</sup> The number of FTE osteopaths/100,000 is lower than the number of osteopaths/100,000 because it adjusts for part-time work. As Ahpra does not collect information about full or part-time status, we are unable to similarly adjust Ahpra data.

<sup>2</sup> Includes general and provisional registration, excludes non-practising registration

<sup>3</sup> The number of non-practising osteopaths increased from 95 in 2017/18 to 141 in 2021/22.

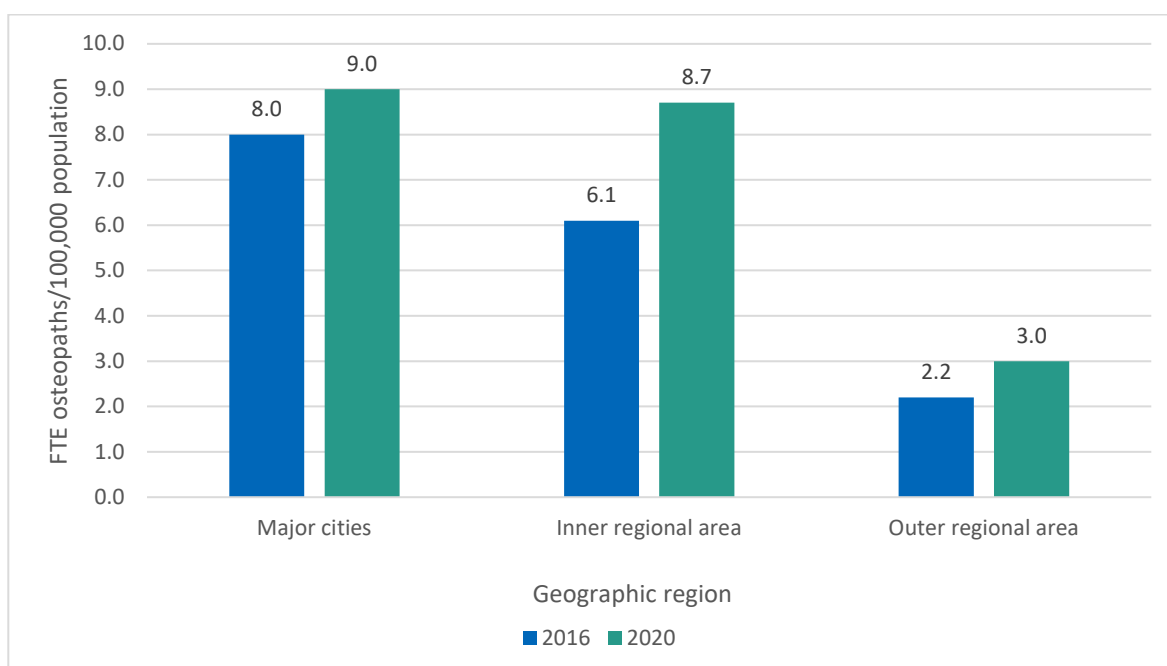
**Figure 1: The distribution of osteopaths with general registration per 100,000 population by jurisdiction for 2017/18 and 2021/22**



The greatest increase was seen in Victoria (where the rate increased from 20.6 to 28.1 osteopaths per 100,000 population) between 2017/18 and 2021/22. There were smaller increases in all other jurisdictions except for Western Australia over the same period. In Queensland this was from 4.2 to 5.5 per 100,000, the Northern Territory from 1.2 to 2.4 per 100,000, in Tasmania from 8.4 to 9.4 per 100,000, the Australian Capital Territory from 9.0 to 9.7 per 100,000, New South Wales 7.2 to 7.7 per 100,000 and in South Australia it increased from 2.0 to 2.6 per 100,000. There was no change in the number of osteopaths per 100,000 in Western Australia (2.4 per 100,000) for both years.

Based on the 2016 and 2020 National Health Workforce Surveys, the number of FTE osteopaths per 100,000 population increased across all geographic regions except very remote areas where it remained stable. The geographic distribution of osteopaths across Australia is shown in Figure 2.

**Figure 2: The distribution of FTE osteopaths per 100,000 population by geographic region 2016 to 2020**



The number of FTE osteopaths in major cities of Australia per 100,000 population increased from 8 to 9 FTE osteopaths per 100,000 population between 2016 and 2020. Over the same period, it increased in inner regional areas from 6.1 to 8.7 per 100,000, for outer regional areas from 2.2 to 3 per 100,000. Less than five FTE osteopaths worked in remote or very remote areas.

Over the same period, the proportion of osteopaths whose principal work setting was a group private practice decreased from 69.7% to 64.2%, and the proportion working in solo private practice increased slightly from 27.5% to 27.6%. Other changes included a decrease in the proportion working in an educational facility from 2.5% to 1.5%, while the proportion working in a medical centre increased from none to 3%, residential aged care facilities from none to 2.3%, and the proportion working in locum private practice decreased from 0.5% to none and commercial or business services from 0.4% to none.

## Supply and demand - observations and insights

### The domestic 'pipeline'

At 30 June 2022, there were 1,465 students enrolled in an approved program of study to become an osteopath which is about the same number as in 2017/18 (1,456 students). Based on data from the student register, in 2021/22, 50.3% of osteopathy students were female which is less than the proportion of female registrants (54.3%) in the same year.<sup>4</sup> Around three quarters (75.1%) of students were 25 years or younger, 94.3% were 35 years old or younger and 1.7% were aged 45 years or older.

At 30 June 2022, there were three education providers offering three approved programs of study across four different locations leading to a qualification as an osteopath. Courses were offered in Queensland, New South Wales, and Victoria. Of these, one program of study led to a double bachelor's level qualification and two to a combined bachelor's and master's level qualification. This is the same number of programs of study as was available at 1 July 2017.

### Overseas-trained practitioners

Indicators of the extent of Australia's reliance on overseas-trained practitioners (OTPs) include: the number of registered practitioners whose initial qualification was obtained overseas; the number of OTPs added to the register each year; and the number of practitioners entering Australia each year via skilled work visas. These are outlined below as they relate to osteopaths.

#### Overseas qualifications

According to the National Health Workforce Surveys in 2016 and 2020, the proportion of osteopaths who obtained their initial qualification outside of Australia decreased from 9.9% to 7.9% over the five-year period, while the proportion that qualified in Australia increased from 83.3% to 85.9%. Country of qualification was not specified for 6.8% and 6.2% of respondents to the 2016 and 2020 National Health Workforce Surveys respectively.

Using Ahpra data, the country of qualification is unknown for about 40% of osteopath registrants (41.1% of general registrants in 2017/18 and 39.1% of general registrants in 2021/22) which is too incomplete to be a reliable indicator of the proportion of osteopaths with an overseas qualification.

#### Additions to the register

Four overseas qualified osteopaths were added to the register in 2020/21, bringing the five-year total to 21 (2). Internationally qualified osteopaths added to the register made up 0.1% of all osteopath registrants in 2020/21, a slight decrease from 0.4% in 2016/17.

#### Visa statistics

The Department of Home Affairs data shows that there were five temporary resident skilled visas granted to osteopaths in 2020/21, which is the average number for each year between 2016/17 and 2020/21 (3).

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<sup>4</sup> Due to on-going improvements in validation and reporting of the student registers, these figures are indicative only and changes over time need to be interpreted with caution.

It should be noted that this data only relates to primary applicants for the visa (that is, occupation is not collected for partners and/or children of visa applicants). Furthermore, the assessment for a visa to immigrate is a separate process from the assessment of an application to register as an osteopath in Australia.

## Trends and intentions

A review of the 2020 National Health Workforce Survey item 'years intended to work', presented by age, provides some indication of likely attrition over the next few years. Since a practitioner intending to work for a particular number of years is not intending to work beyond that point in time, the question can also be interpreted as a measure of intention to cease practising.

The combination of historical growth rates, the age profile of the existing workforce and expressed intentions to work enable an assessment of likely exit points from the profession and an indication of whether the replacement rate of new entrants is likely to meet the exit rate over coming years. An assessment of low replacement rate does not equate to workforce shortage, as shortage is relative to demand.

Based on the National Health Workforce Survey, the Department of Health estimated that the replacement rate for osteopaths in 2020 was 4.2 which is higher than that for 2016 which was 2.9. That is, for every osteopath who left the register, another 4.2 (or 2.9 in 2016) were added. This figure is based on the number of osteopaths with general registration who were employed at the time of the survey.

The analysis in this section is intended to be indicative only. It is based on current age profiles, expressed intentions and historical growth rates. It takes no account of people currently in the training pipeline or demand factors.

The National Health Workforce Survey revealed that in 2020, osteopaths had worked an average of 11.5 years and intended to work for an average of 20.6 more years. About 87.9% of osteopaths aged under 35 years intended to work for at least another 10 years. The proportion of osteopaths intending to work until (or close to) the common retirement age of 65 years increased with age until the age group closest to retirement, ranging from 42.5% for those aged under 35 years to 58.3% for those aged 35 to 44 years, and 69.2% for those aged 45 to 54. Almost two thirds (63%) of osteopaths aged 55 to 64 years intended to retire at 65 years, and 79.2% intended to retire at or before 70 years.

In 2021/22, Ahpra data shows that 11.1% of osteopaths were aged 55 or older. National Health Workforce Survey data from 2020 shows that osteopaths in this age group intended to work an average of 11.0 years. Around a third (30.8%) of this cohort did not intend to be working in five years' time, and 69.9% did not intend to be working in 10 years' time.

Unpublished data held by Ahpra on lapsed registrations showed that 44 osteopaths left the profession in 2021/22, which was equivalent to 1.5% of the osteopath workforce.

Overall, these figures translate into a likely attrition rate that is consistent with that observed in recent years. If historical growth and attrition rates continue to apply, the trend would be for new entrants to exceed exits, resulting in overall growth in the osteopath workforce over coming years.

## Demand - employment projections, workforce shortages and demand drivers

### Employment projections

The Department of Employment and Workplace Relations formerly the Department of Education, Skills, and Employment (DESE) publishes employment figures and projections (derived from the Australian Bureau of Statistics (ABS) Labour Force Survey) for occupations categorised using the Australian and New Zealand Standard Classification of Occupations structure that includes osteopaths (4).

The DESE estimate that the number of employed osteopaths in 2021 was 1,500 (5). DESE projected increased growth of 19.6% by 2026 for osteopaths and chiropractors (combined). These figures are for total employment, that is, both full-time and part-time employment.

## Workforce shortage

In October 2022, the National Skills Commission (NSC) released a Skills Priority List that provides a detailed view of shortages and the expected future demand for around 800 occupations across Australia (6).

The NSC identified that there is currently a shortage of osteopaths in Western Australia but no shortage of osteopaths in other jurisdictions and there is a moderate future demand for them.

## Drivers of demand

Drivers of demand include ageing population demographics and the increased prevalence of musculoskeletal conditions, funding models, general practitioner attitudes to osteopathic treatment, workforce maldistribution across jurisdictions, service coverage for rural Australians and, public awareness.

### Ageing population demographics and the increased prevalence of musculoskeletal conditions

Based on conservative assumptions, the ABS estimates that the Australian population will reach around 36.1 million people by 2050, with more than 1.3 million people aged over 85 years (7).<sup>5</sup> The most recent National Health Survey (NHS) found that the prevalence of Australians living with one or more chronic conditions rose from 42.2% in 2007/08 to 46.6% in 2020/21, with an increase of prevalence with age (8, 9). The most prevalent age-associated chronic condition identified through the NHS was back problems (15.7% of respondents) followed by arthritis (12.5%), diabetes (5.3%) and cardiovascular disease (4.0%), with two or more chronic conditions reported by 18.6% of respondents (8). The increase in the prevalence of obesity in Australia from 27.9% to 31.3% between 2014/15 and 2017/18 could signal a future increase in demand for osteopathic services as obesity is known to be linked with an increased risk of musculoskeletal problems and other chronic disorders (10-14).

A large Australian cross-sectional study found that around half (52%) of the initial presentations to a student led osteopath clinic was for acute conditions (that is less than three months duration) (n=1,617), most commonly affecting the lumbar (21%) or cervical spine (18.8%) and the most common chronic presentations were thoracic (18.5%) or lumbar spine (21.2%) conditions (15). Analysis of all presentations to the clinic (n=12,000 visits) showed that the main complaint sites were: lower back (26%), neck (18%), shoulder (14%), thoracic spine (12%), headache (6%), knee (5%), foot/ankle (3%) and other (hip, upper extremity and visceral) complaints were 16% (16).

In a simple analysis, if the current average annual increase in the osteopathy workforce continues, it may be sufficient to maintain current levels of access to services as the population grows and ages, although this assessment does not consider other factors that may influence supply and demand over time.

## Funding models

In Australia, Medicare rebates for osteopathic treatment are limited to a maximum of five bulk billed sessions per person per year where a patient is referred by a medical practitioner under a Chronic Disease Management plan or Team Care Arrangement, or, for Aboriginal and/or Torres Strait Islander Peoples, where a medical practitioner has identified the need for osteopathic treatment to be carried out following a health assessment or as part of a Health Care Home shared care plan (17). Medicare data shows that the number of osteopath services claimed by the general public increased from 192,920 in 2017/18 to 263,677 in 2021/22 (18). Over the same period, claims against Medicare items for Aboriginal and/or Torres Strait Islander Peoples increased from 230 to 571 claims. Osteopaths can claim a bulk-billed Medicare rebate for referral to digital X-rays of the pelvis, hip or spine, and a limited Medicare rebate for digital X-rays of other musculoskeletal regions and ultrasound. Medicare data on their uptake by osteopaths have the same item numbers that are used by physiotherapists and chiropractors.

Funding for osteopathy is also available through workers' compensation schemes administered through WorkSafe Australia, motor accident insurance administered by the Transport Accident Commission and the Motor Accidents Authority, as well as through programs administered by the Department of Veterans' Affairs where it is prescribed by a medical practitioner. Funding for sport injury rehabilitation may be available for professional sports people through their team.

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<sup>5</sup> Assumptions applied to data set – low fertility, medium life expectancy, medium net overseas migration

Almost all private health funds cover the cost of osteopathy with the extent of coverage varying between insurers, however, private health insurance cannot be used as an adjunct to a Medicare claim. Information about the number of claims for osteopathy services through private health insurance is not publicly available.

### **General practitioner attitudes to osteopathic treatment**

As outlined above, funding for osteopathic treatment through Medicare, workers' compensation, motor accident insurance and the Department of Veterans' Affairs can only be accessed where it is prescribed by a medical practitioner. A cross-sectional study of attitudes towards osteopathic treatment held by general practitioners working in private practice (n=630) found that while it was recognised that osteopathic treatment could be helpful for mechanical low back pain, neck and upper back pain due to muscle tension and cervicogenic headaches, only 34.0% of participants had referred a patient to osteopathic treatment (19).

Analysis of free text responses to the cross-sectional study identified three themes relevant to osteopathy (20). These were a perception that there is a lack of evidence to support the practice of osteopathy (19.0%), osteopaths lack sufficient training to be a primary health provider (15.2%), and osteopathy is redundant because physiotherapy has a strong evidence base. These perceptions are likely to be the main barriers to general practitioner referrals of their patients to osteopaths.

### **Workforce maldistribution across jurisdictions**

Victoria has almost three times the number of osteopaths per 100,000 population compared to the highest rate for other jurisdictions (28.2 osteopaths per 100,000 in Victoria compared to 9.7 osteopaths per 100,000 in the Australian Capital Territory) and around 12 times the number compared to the states with the lowest number of osteopaths (Northern Territory and Western Australia both have 2.4 osteopaths per 100,000). It has been suggested that the maldistribution of osteopaths across jurisdictions can be partially attributed to the location of educational facilities offering courses leading to the qualification as an osteopath (21). Victoria currently has two educational facilities that offer an osteopathy qualification across two urban campuses in Victoria. In contrast, there is one rural campus in New South Wales and one in a major city of Queensland (both campuses of the same university). Many of the factors influencing the choice of practice location discussed in the following section are also relevant to the distribution across jurisdictions.

### **Service coverage for rural Australians**

People living in outer regional and remote areas of Australia are often disadvantaged in relation to access to primary healthcare services and have higher rates of risky health behaviours such as heavy alcohol use (22). The 2020 National Health Survey found an inverse association between the availability of osteopaths and geographic location. At 30 June 2022, there were 9 FTE osteopaths per 100,000 in major cities of Australia and 8.7 per 100,000 in inner regional areas, which decreased to 3 per 100,000 in outer regional areas and less than five practising in remote or very remote areas.

A mixed methods study of osteopaths identified the main factors influencing their decision as to whether to practise in a rural area of Australia as being either personal or external (23). Personal factors included those related to the preferences of intimate partners or obligations to immediate family members, the practitioner's history of relocation and self-confidence. External factors included the ability to carry financial risk, a preference for a wider range of patients and clinical issues, the opportunity to work and network with other osteopaths, and proximity to hometown. Participants practising outside of a major city of Australia described their major challenges as difficulties in recruiting and retaining practitioners, unrealistic attitudes held by many new graduates and lack of appropriate mentors.

Qualitative research into career intentions of recent osteopathy graduates found that the main factors influencing an intention to practise in a rural area were: location preferences held by intimate partners, lack of high quality mentoring in rural areas, and, the quality of the clinical environment, with some participants intending to use metropolitan clinics as a training ground before moving to more demanding rural practice (24). An osteopathy course is available at one rural campus (Lismore, New South Wales).

### **Public awareness**

As outlined above, the greatest concentration of osteopaths can be found in Victoria, and major cities. A cross-sectional study of Melbourne residents found that 83% of respondents were aware of osteopathy as

a treatment modality, compared to 96.5% who were aware of chiropractic and 97.5% of physiotherapeutic approaches (25). However, only 23% rated their knowledge of osteopathy as very good or average, compared to 76% for chiropractic and 83% for physiotherapy. Twenty-nine per cent of respondents were unsure of what an osteopath does. Although 53% of participants had first heard about osteopathy from a friend, participants thought that the best way to learn about osteopathy would be through a doctor (21%), by reading a pamphlet (19%), the internet (14%), television programs (11%) and news items (11%).

## Policy developments and considerations

Policy developments and considerations include the findings of the Royal Commission on Aged Care Quality and Safety (the Royal Commission) and changes to the higher education system in response to the COVID-19 pandemic.

### Royal Commission on Aged Care Quality and Safety

The Royal Commission heard evidence relating to difficulties in accessing allied health services through the aged care system for both home and residential care, in part due to lack of overall funding, limitations with the Aged Care Funding Instrument and to inconsistencies in the availability of multidisciplinary allied care teams. Evidence was also presented that these issues are exacerbated in groups who are already at disadvantage, such as Aboriginal and Torres Strait Islander Peoples, those living in rural and remote regions and those from a culturally and linguistically diverse background.

The Royal Commission made two recommendations relevant to osteopaths providing care to people ageing in the home. These were:

- Recommendation 35, that a new category be introduced to the Care at Home Subsidies so that allied health services are included.
- Recommendation 36, that care at home should include a level of allied healthcare appropriate to each person's needs.

In 2021, the Australian Government responded by introducing the 'Home Care – Future design and funding' measure to design a new program that involves model development and sector consultation (26).

### Changes to higher education support

In October 2021, the *Higher Education Support Amendment (Job-Ready Graduates and Supporting Regional and Remote Students) Act 2020* became law and legislated a decrease in funding for domestic Commonwealth supported students, as well as other changes to higher education programs from 1 January 2021. These changes were made following a 5.1% decline in enrolments, and a 23% decline in commencements by overseas students to December 2019 compared to December 2020 due to COVID-19 travel restrictions resulting in an estimated loss of \$1.8 billion to the higher education sector (27).

Introduced on 1 January 2021, the stated intentions of the reforms are to 'deliver more job-ready graduates in the disciplines and regions where they are needed most and help drive the nation's economic recovery from the COVID-19 pandemic' (28). Allied health disciplines, including osteopathy, are identified as an area of priority. The reforms reduce the Australian Government contribution for domestic students in osteopathy courses by \$297/equivalent full-time study load (EFTSL), and decrease the student contribution by \$1,748/EFTSL, representing a net decrease in course income of \$2,045/EFTSL for universities (29).

The changes to higher education also include a National Priorities and Industry Linkage Fund (NPILF) that allocates block grants to universities to support better collaboration between universities and industry. This is to design courses that equip students with job ready skills and experience through, for example, internships, practicums, and other work-based learning opportunities. A pilot of the NPILF is being conducted from 2022 to 2024 which may increase opportunities for osteopathy students to undergo a clinical placement.

Another change is that more university places have been made available for students from metropolitan areas to study priority area courses, including osteopathy, in regional areas. This funding relates to the campus location, not the location of the student. At 30 June 2022, one education provider offered a course to qualify as an osteopath in a rural location.



## Concluding comments

Over the five years between 2017/18 and 2021/22, the osteopath workforce grew by 2.6 osteopaths per 100,000 population (31.7%). The most substantial growth was seen in Victoria which has the highest concentration of osteopaths in Australia, being several times more than that found in other jurisdictions. Victoria has more educational campuses offering courses leading to the qualification of osteopath than any other jurisdiction.

According to the National Skills Commission, there is no shortage of osteopaths in any jurisdiction, with moderate future demand. The ability of the profession to meet this demand rests in the balance between incoming practitioners and those leaving the profession as reflected in the replacement rate which has increased over the last five years. By far the largest inflow of osteopaths are new graduates, however, their numbers have not increased over the last five years. The Job Ready Graduates Package introduced on 1 January 2021 was designed to encourage enrolment by significantly reducing university fees for students, but it remains to be seen whether this approach will have the intended effect, given it results in universities having less income per student to deliver the same courses with the same accreditation requirements.

The Australian Government response to the ageing of Australia's population, the increasing prevalence of musculo-skeletal conditions, the attitudes held by general practitioners toward osteopathic treatment, the maldistribution of osteopaths across Australia and the lack of public awareness about osteopathy are challenges currently facing the profession.

## References

1. Australian Government Department of Health and Aged Care. Factsheet Selector Dashboard Canberra, ACT: Australian Government Department of Health and Aged Care; 2022 [3 Sept 2022]. Available from: [www.hwd.health.gov.au/mdcl-dashboards/](http://www.hwd.health.gov.au/mdcl-dashboards/).
2. Australian Health Practitioner Regulation Agency. Internationally qualified practitioners by year, profession, gender and state from 2014-15 to 2019-20 Melbourne, Victoria: Australian Health Practitioner Regulation Agency; 2020 [2022]. Available from: [www.AHPRA.gov.au/about-AHPRA/what-we-do/statistics.aspx#previous-requests](http://www.AHPRA.gov.au/about-AHPRA/what-we-do/statistics.aspx#previous-requests).
3. Department of Home Affairs. BP0014 Temporary work (skilled) visas granted pivot table report Canberra, ACT: Department of Home Affairs; 2022 [cited 2022]. Available from: [www.data.gov.au/dataset/ds-dga-2515b21d-0dba-4810-afd4-ac8dd92e873e/details](http://www.data.gov.au/dataset/ds-dga-2515b21d-0dba-4810-afd4-ac8dd92e873e/details).
4. Australian Bureau of Statistics. 1220.0 Australian and New Zealand Standard Classification of Occupations, 1st edition, 1st revision. Canberra, ACT: Australian Bureau of Statistics; 2009.
5. Jobs and Skills Australia. Labour Market Insights Canberra, ACT: Jobs and Skills Australia; 2022 [cited 2022]. Available from: <https://lmip.gov.au/default.aspx?LMIP/GainInsights/EmploymentProjections>.
6. National Skills Commission. Skills Priority List Melbourne, Victoria: National Skills Commission; 2022 [Available from: [www.nationalskillscommission.gov.au/topics/skills-priority-list](http://www.nationalskillscommission.gov.au/topics/skills-priority-list)].
7. Australian Bureau of Statistics. Population Projections, Australia Canberra, ACT: Australian Bureau of Statistics; 2018 [
8. Australian Bureau of Statistics. Health Conditions Prevalence Canberra, ACT: Australian Bureau of Statistics; 2022 [Available from: [www.abs.gov.au/statistics/health/health-conditions-and-risks/health-conditions-prevalence/2020-21](http://www.abs.gov.au/statistics/health/health-conditions-and-risks/health-conditions-prevalence/2020-21)].
9. Australian Bureau of Statistics. Health Conditions Prevalence Canberra, ACT: Australian Bureau of Statistics; 2018 [Available from: [www.abs.gov.au/statistics/health/health-conditions-and-risks/national-health-survey-first-results/latest-release](http://www.abs.gov.au/statistics/health/health-conditions-and-risks/national-health-survey-first-results/latest-release)].
10. Australian Bureau of Statistics. Overweight and Obesity Canberra, ACT: Australian Bureau of Statistics; 2018 [Available from: [www.abs.gov.au/statistics/health/health-conditions-and-risks/overweight-and-obesity/latest-release](http://www.abs.gov.au/statistics/health/health-conditions-and-risks/overweight-and-obesity/latest-release)].
11. Hakkak R, Bell A. Obesity and the link to chronic disease development. *Journal of Obesity and Chronic Disease*. 2016;1(1):1-3.
12. Vega-Fernández G, Olave E, Lizana PA. Musculoskeletal disorders and quality of life in Chilean teachers: a cross-sectional study. *Frontiers in Public Health*. 2022;701.
13. Cannata F, Vadalà G, Ambrosio L, Fallucca S, Napoli N, Papalia R, et al. Intervertebral disc degeneration: A focus on obesity and type 2 diabetes. *Diabetes/Metabolism Research and Reviews*. 2020;36(1):e3224.
14. Molina-Garcia P, Migueles JH, Cadenas-Sanchez C, Esteban-Cornejo I, Mora-Gonzalez J, Rodriguez-Ayllon M, et al. A systematic review on biomechanical characteristics of walking in children and adolescents with overweight/obesity: Possible implications for the development of musculoskeletal disorders. *Obesity Reviews*. 2019;20(7):1033-44.
15. Vaughan B, Fitzgerald K, Fleischmann M, Mulcahy J. Determinants of health, health behaviours and demographic profile of patients attending an Australian university student-led osteopathy clinic. *Chiropractic & manual therapies*. 2020;28:1-11.
16. Vaughan B, MacFarlane C, Florentine P. Clinical education in the osteopathy program at Victoria University. *International Journal of Osteopathic Medicine*. 2014;17(3):199-205.
17. Australian Government Department of Health and Aged Care. MBS On-line Canberra, ACT: Australian Government Department of Health and Aged Care; 2022 [Available from: [www9.health.gov.au/mbs/search.cfm?q=chiropractor&sopt=S](http://www9.health.gov.au/mbs/search.cfm?q=chiropractor&sopt=S)].
18. Australian Government Department of Human Services. Medicare Item Reports Canberra, ACT: Australian Government Department of Human Services; 2022 [Available from: [www.medicarestatistics.humanservices.gov.au/statistics/mbs\\_item.jsp](http://www.medicarestatistics.humanservices.gov.au/statistics/mbs_item.jsp)].
19. Engel RM, Brown BT, Swain MS, Lystad RP. The provision of chiropractic, physiotherapy and osteopathic services within the Australian private health-care system: a report of recent trends. *Chiropractic & Manual Therapies*. 2014;22:1-7.
20. Grace S, Engel R, Jalsion I. Themes underlying Australian general practitioner views towards chiropractic and osteopathy: an assessment of free text data from a cross-sectional survey. *Evidence-Based Complementary and Alternative Medicine*. 2018;2018.
21. Mastronardo C, Wong D, Grace S, Fazalbhoy A, Muddle L. Preparing osteopathy graduates for future careers: A review of osteopathic education in Australia. *Focus on Health Professional Education: A Multi-disciplinary Journal*. 2022;23(1):65-85.

22. Australian Institute of Health and Welfare. Australia's Health 2020: in brief Canberra, ACT: Australian Institute of Health and Welfare; 2020 [cited 2022. Available from: [www.aihw.gov.au/reports/australias-health/australias-health-2020-in-brief/summary](http://www.aihw.gov.au/reports/australias-health/australias-health-2020-in-brief/summary).
23. Steel A, Dingle T, Wardle J, Adams J. A study of the factors impacting on workforce distribution of Australian osteopaths: The perspectives of osteopathic students, academics and clinicians. *International journal of osteopathic medicine*. 2020;36:11-8.
24. Axtens L, Spruyt T, Grace S. Student research: Primary attractors for allied health professionals in Australian rural and regional communities. *Journal of the Australian Traditional-Medicine Society*. 2019;25(3):156-9.
25. Tomolo R. The public's attitude, knowledge, and perceptions towards osteopathic medicine in Melbourne. Melbourne, Victoria: Victoria University; 2006.
26. Australian Government Department of Health. Australian Government Response to the Final Report of the Royal Commission into Aged Care Quality and Safety. Canberra, ACT: Australian Government Department of Health; 2021. p. 102.
27. Universities Australia. Media Release - 17,000 Uni Jobs Lost to COVID-19 Canberra, ACT: Universities Australia; 2021 [Available from: [www.universitiesaustralia.edu.au/media-item/17000-uni-jobs-lost-to-covid-19/](http://www.universitiesaustralia.edu.au/media-item/17000-uni-jobs-lost-to-covid-19/)].
28. Department of Education. Job-ready Graduates Package. Canberra, ACT: Department of Education; 2021.
29. Universities Australia. 2020 Higher Education Facts and Figures. Canberra, ACT: Universities Australia; 2020.