# OUR **HEALTHCARE** FUTURE

# HEALTH 2040

# **ALLIED HEALTH**

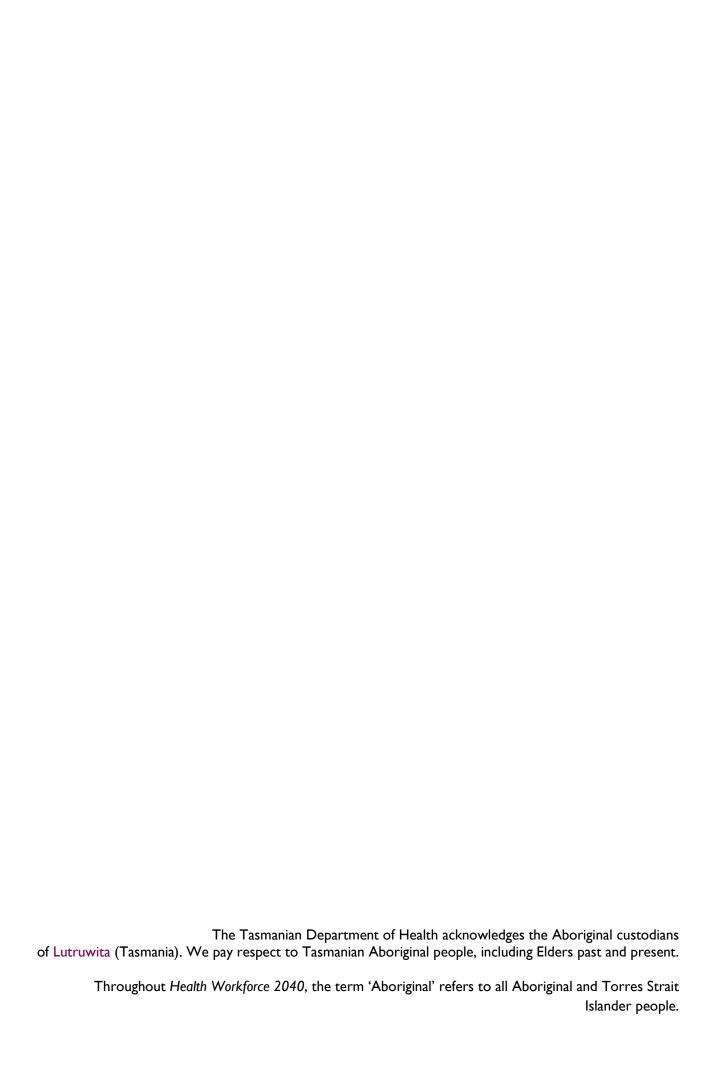












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# **EXECUTIVE SUMMARY**

# Together we provide access to services that help Tasmanians to lead healthier lives.

More than 3,350 registered allied health professionals worked across Tasmania in 2019 to enhance and maintain the physical, psychological, cognitive, and social functions of their patients and clients.

The allied health workforce plays a vital role in meeting the health needs of the Tasmanian community. An ageing population, rising incidence of chronic disease and the introduction of the National Disability Insurance Scheme are driving an increased demand for allied health professionals.

This document supports Health Workforce 2040: Strategy, along with Health Workforce 2040: Medicine and Health Workforce 2040: Nursing and Midwifery. It is an analysis of Tasmania's registered allied health workforce and some other selected allied health professions in 2019 and provides insights into future health workforce needs, challenges, and opportunities.

There are more than 30 allied health professions ranging from radiation therapists to social workers to speech pathologists and oral health professionals. Therefore, even though they are grouped together, the nature of the work is diverse, as are the people who work in the professions and the challenges and opportunities they face. Because of this variety, generalisations across the allied health workforce need to be made and read with some caution.

Our experiences in 2020 with the COVID-19 pandemic have demonstrated the importance of having a flexible workforce that can respond to rapidly changing environments and health care demands. The importance of supporting education and training has also been highlighted in upskilling health professionals in areas of demand. Additionally, COVID-19 has driven sudden developments in the way our health professionals work, with telehealth being used in new and innovative ways to provide support for patients.

Allied health interventions can often lessen or remove the need for other more invasive and costly treatments.

Allied health professionals are key to an agile and cost-effective workforce that can meet the needs of an ageing community with higher rates of chronic illness and disability.

#### **KEY FINDINGS**

The allied health professional (AHP) workforce in Tasmania is an essential part of the health professional workforce. Despite our population being older, having higher levels of chronic disease and disability, Tasmania has lower rates of many allied health professions than other jurisdictions in Australia. Superimposed on this, the distribution of the AHP workforce across Tasmania is not equitable with the North West region facing workforce challenges across most allied health professions.

The reasons for this are many and include:

- The opportunity to complete entry-level training in allied health professions is very limited in Tasmania.
- The opportunity to participate in professional development is limited in Tasmania, meaning qualified allied health professionals are usually required to travel interstate to engage in professional development.
- The career pathways for senior allied health professionals in Tasmania are limited by a lack of career structures, succession planning and the relatively small size of many of our allied health professional workforces.
- The implementation of the National Disability Insurance Scheme has had a significant impact on Tasmania's allied health workforce. With the important role of allied health professionals in supporting people with a disability, there has been a need for greater numbers of allied health professionals and a movement of some professional groups from the public to the private sector. This will need ongoing monitoring; to ensure community needs are being met and staff are well-trained and supported.

Some individual allied health professions are found in significantly lower numbers in Tasmania. These include occupational therapists and chiropractors.

#### **SCOPE**

The term 'allied health' was coined in the 1990s and is now regularly used at operational and policy levels. Many allied health professions are registered under the National Registration and Accreditation Scheme (NRAS) or are self-regulated by professional associations.

This report primarily explores the nationally registered professions (including paramedicine, for which 2019 is the first data available) and includes workforce profiles for some of the other allied health professions based on public sector employment data.

There is not a nationally agreed list of allied health professions in Australia. Different jurisdictions and peak bodies recognise different professions. Health Workforce 2040 focuses on professions that are embedded in Tasmania's current or emerging models of care, with the report's focus also being influenced by the availability of workforce data that is comparable with the other professions. There are professions that some organisations define as 'allied health' that are not included in this report. This does not mean that they don't provide a valuable service or contribution to the Tasmanian community. Conversely, due to employment arrangements in the Tasmanian public sector under the Allied Health Professionals Public Sector Unions Wage Agreement 2019, some professions are included in this report that other jurisdictions and peak bodies don't recognise as 'allied health'. See Figure I for the full list of allied health professions analysed in this document, and Appendix A for the set of 2019 allied health workforce profiles.

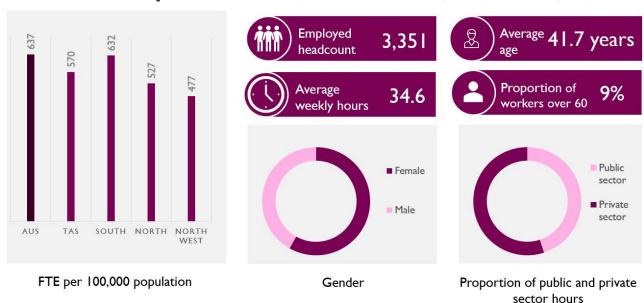
The Department of Health also recognises the significant contribution that volunteers make to Tasmania's health system and the impact that COVID-19 had on the cohort, in terms of both an increase in demand for their services and support and decrease in supply.

Australian Government - Department of Health 2013, 8.2 Allied health workforce, viewed 22 May 2019, https://www.health.gov.au/internet/publications/publishing.nsf/Content/work-review-australian-government-health-workforce-programs-toc~chapter-8-developing-dental-allied-health-workforce~chapter-8-allied-health-workforce.

# SHAPING THE WORKFORCE

The overall supply of registered and employed allied health professionals in Tasmania is less than the national average. While the workforce has been growing, the overall supply and geographic distribution of allied health professionals remains a challenge.

# Allied health professionals, Tas 2019 includes public and private sectors, registered professions



Source: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), ABS population data (2019) | Note: Includes paramedic workforce

Figure I lists the allied health professions included in this report. The data used to analyse the nationally registered professions captures the Tasmanian workforce across both the public and private sectors. The data used to analyse the self-regulated professions captures the public sector workforce only. The small professions (with a headcount of three or less) have not been profiled separately but are included in the overall numbers where appropriate.

Throughout this document, there is analysis of the number and FTE of health professionals in Tasmania per 100,000 population compared to the Australian rate. This report does not provide an assessment of how many is the right number of practitioners per population, rather it provides an observational assessment of supply relative to the national average.

This report provides a detailed picture of the Tasmanian health workforce in 2019 – comparing it to the national workforce and broad community needs. This offers a starting point for future planning, a framework for understanding the current workforce risks and provides insights into future needs. Further

insight into the health needs of Tasmania can be found in Primary Health Tasmania's Needs Assessment Report 1 July 2019 - 30 June  $2022^2$ .

Figure I Allied health professions included in Health Workforce 2040

Profession	Type of profile included in Appendix A
Audiologists	Public sector profile
Aboriginal and Torres Strait Islander Health Practitioners	Public and private sector profile
Cardiac physiologists and echocardiographers	Public sector profile
Chiropractor	Public and private sector profile
Counsellors	Public sector profile
Dental hygienists	Public and private sector profile
Dental prosthetists	Public and private sector profile
Dental therapists	Public and private sector profile
Dentists	Public and private sector profile
Oral health therapists	Public and private sector profile
Dietitians	Public sector profile
Environmental and public health officers	Public sector profile
Epidemiologists	Public sector profile
Exercise physiologists	Profile without data
Genetic counsellors	Public sector profile
Mammographic technologists	Public sector profile
Medical physicists	Public sector profile
Medical scientists	Public sector profile
Diagnostic radiographers	Public and private sector profile
Nuclear medicine technologist	Public and private sector profile
Radiation therapists	Public and private sector profile
Sonographers	Public sector profile
Occupational therapists	Public and private sector profile
Optometrists	Public and private sector profile
Orthotists and prosthetists	Public sector profile
Osteopaths	Public and private sector profile
Perfusionists	Public sector profile
Pharmacists	Public and private sector profile
Physiotherapists	Public and private sector profile
Podiatrists	Public and private sector profile
Psychologists	Public and private sector profile
Social workers	Public sector profile
Speech pathologists	Public sector profile

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<sup>&</sup>lt;sup>2</sup> Primary Health Tasmania, Needs Assessment Report 1 July 2019 – 30 June 2022, viewed 11 Aug 2020, <a href="https://www.primaryhealthtas.com.au/wp-content/uploads/2019/07/Needs-Assessment-Report-1-July-2019-30-June-2022-1.pdf">https://www.primaryhealthtas.com.au/wp-content/uploads/2019/07/Needs-Assessment-Report-1-July-2019-30-June-2022-1.pdf</a>.

#### **WORKFORCE SIZE AND GROWTH**

There were 3,351 employed allied health professionals in the registered professions in Tasmania in 2019, providing a density of allied health professionals to population of 627 per 100,000 population (Figure 2). This is lower than Australia as a whole and all other jurisdictions except the Northern Territory.

Figure 2 Allied health practitioners (headcount) in registered professions per 100,000 population, Tas, Aus and jurisdictions 2019



Source: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), ABS population data (2019) | Note: Includes paramedic workforce

Figure 3 Allied health practitioners (FTE) in registered professions per 100,000 population, Tas, Aus and jurisdictions 2019



Source: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), ABS population data (2019) | Note: Includes paramedic workforce

The story is similar whether measuring with headcount or FTE, as shown in Figure 3.

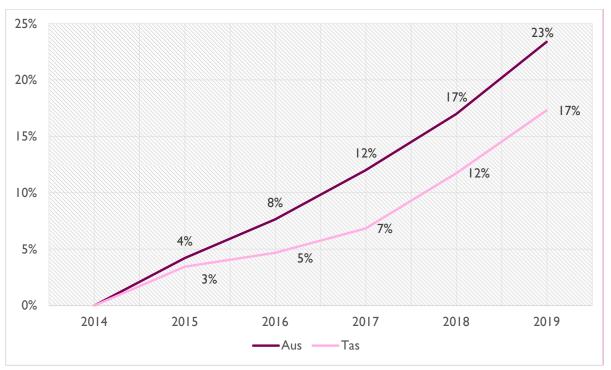
Paramedic workforce data has been included for the first time in 2019.

Nationally, in the period 2014-19, the headcount of the registered allied health workforce grew 23 per cent (excluding paramedics). Tasmanian growth has not been as strong at 17 per cent.

Over the same period, the full-time equivalent (FTE) growth was 15 per cent (excluding paramedics).

Given Tasmania's density of allied health professions – or number of professionals per 100,000 people – is already significantly less than Australia's national average density, the slower growth rate means that the gap between Australia's allied health workforce and Tasmania's, is widening, see Figure 4.

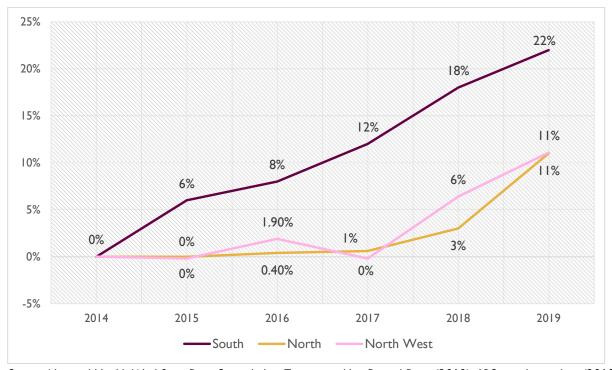
Figure 4 Percentage change of the registered allied health workforce in Aus and Tas, 2014-19



Source: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), ABS population data (2019) | Note: Does not include paramedic workforce

Figure 5 highlights that the North and North West allied health workforces – already smaller than in the South – are growing at a considerably slower rate.

Figure 5 Percentage change of the registered allied health workforce by region, Tas 2014-19



Source: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), ABS population data (2019) | Note: Does not include paramedic workforce

Figure 6 shows the headcount change from 2014-19 (per centage) broken down into selected professions. It shows the allied health professional workforces that experienced the most growth were podiatrists and physiotherapists (23 per cent) followed by occupational therapists (22 per cent) and medical radiation practitioners (21 per cent). The workforce with the least growth were dental prosthetists (-2 per cent) and dental therapy and hygiene roles (4 per cent).

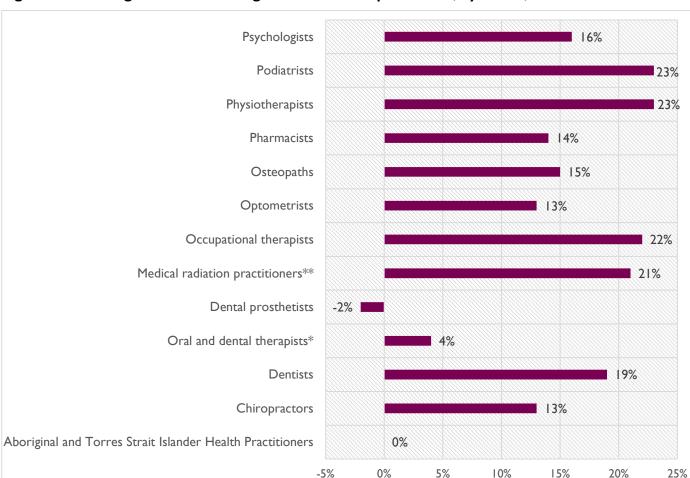


Figure 6 Percentage headcount change in allied health professions, by sector, Tas 2014-19

<sup>\*</sup> Includes dental therapists, dental hygienists, oral health therapists | \*\* Includes diagnostic radiographers, nuclear medicine technologists and radiation therapists | Source: National Health Workforce Data Set including Tasmanian Unit Record Data (2019)

#### THE NATIONAL DISABILITY INSURANCE SCHEME

The National Disability Insurance Scheme (NDIS) commenced in Australia on 1 July 2016, with the objective to provide funding for supports and services for Australians aged 65 and under who have permanent or significant disability. Essentially, the NDIS is a market-style system where government funding goes to the client, instead of the disability service providers, with the intention of shifting control to the client and allowing the client to use the funds to choose the provider they want. Approximately 4.3 million Australians experience disability.<sup>3</sup>

'Disability experience is a complex interaction between the health condition and environmental and personal factors. People's health is increasingly conceptualised in terms of their quality of life, what activities they can do, in what areas of life they are able to participate as they wish, and what long-term supports they need for living in the community.' – Australian Institute of Health and Welfare<sup>4</sup>

Allied health professions, such as physiotherapy, occupational therapy, speech pathology, dietetics, psychology, social work, podiatry and prosthetics and orthotics, work across health, education and disability sectors to deliver services and supports for people with a disability and / or health conditions.

The introduction of the NDIS has stimulated the market and resulted in increased demand for these allied health professions in the disability sector. While the tertiary education sector is increasing intakes to respond to demand in the medium to long-term, the current demands have resulted in workforce availability challenges and, in some places, thin markets to deliver services in all sectors, particularly rural, regional and remote areas. As of March 2021, over 10,000 people in Tasmania have an NDIS plan.<sup>5</sup>

Consultation for *Health Workforce 2040* indicated that a key workforce challenge of the NDIS was the reported movement of qualified professionals into NDIS roles (and out of non-NDIS roles).

In a 2020 survey of Australian NDIS service providers, 69 per cent reported turning away requests for services because they did not have capacity to provide them (largely due to lack of workforce capacity). The roles reported being the hardest to fill were psychologists, occupational therapists, speech therapists and physiotherapists.<sup>6</sup>

#### **ROYAL COMMISSIONS**

The Aged Care Royal Commission reported in February 2021. There are several recommendations relating to improving access to allied health practitioners for people in residential and community based aged care services. This is likely to have an impact on the overall demand for allied health practitioners and on the balance of practitioners in the public and private sectors into the future.

<sup>&</sup>lt;sup>3</sup> Australian Government - National Disability Insurance Agency 2019, What is the NDIS? viewed 22 May 2019, https://www.ndis.gov.au/understanding/what-ndis.

<sup>&</sup>lt;sup>4</sup> Australian Government - Australian Institute of Health and Welfare 2004, Disability and its relationship to health conditions and other factors, viewed 16 July 2019, https://www.aihw.gov.au/reports/disability/disability-relationship-health-conditions/contents/table-of-contents.

<sup>&</sup>lt;sup>5</sup> Australian Government - National Disability Insurance Scheme 2021, *Understanding the NDIS – The NDIS in each state – Tasmania*, viewed 11 June 2021, <a href="https://www.ndis.gov.au/understanding/ndis-each-state/tasmania">https://www.ndis.gov.au/understanding/ndis-each-state/tasmania</a>

<sup>&</sup>lt;sup>6</sup> Australian Government – National Disability Services 2020, State of the Disability Sector Report 2020, viewed 11 June 2021, <a href="https://www.nds.org.au/item/nds-state-of-the-disability-sector-report">https://www.nds.org.au/item/nds-state-of-the-disability-sector-report</a>.

In response to concern about violence against, abuse and exploitation of, people with disability, the *Disability Royal Commission was* established in April 2019 by the Commonwealth Government. The Commission will investigate:

- protecting people with disability from experiencing violence, abuse, neglect, and exploitation
- best practice in reporting and responding to violence, abuse, neglect, and exploitation of people with disability
- promoting a more inclusive society that supports people with disability.<sup>7</sup>

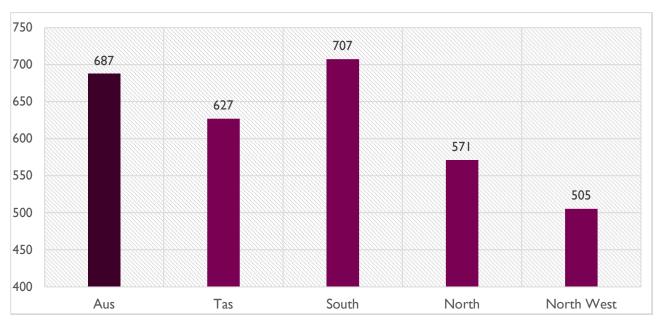
A final report to the Australian Government is due by September 2023. The report will include recommendations regarding improving laws and structures to ensure a more inclusive society and will no doubt include workforce related recommendations – likely having an impact on allied health and nursing professions.

#### GEOGRAPHIC DISTRIBUTION OF THE ALLIED HEALTH WORKFORCE

There are ongoing difficulties with the geographic distribution of Tasmania's health workforce, particularly in medicine and allied health professions. Figure 7 highlights the distribution disparity of the allied health workforce, across the regions with the South having 707 allied health professionals per 100,000 population (which is slightly higher than the Australian rate), compared to the North West with 505 allied health professionals for every 100,000 people.

The disparity is similar whether using headcount or FTE as the measure (Figure 8).

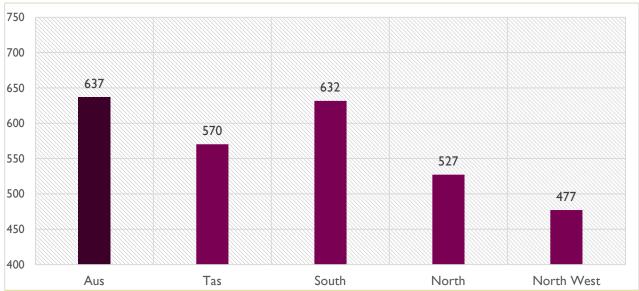
Figure 7 Geographic distribution of all registered allied health professionals (grouped) per 100,000 population (headcount), 2019



Source: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), ABS population data (2019) | Note: Includes paramedic workforce

Australian Government – Royal Commission into Violence, Abuse, Neglect and Exploitation of People with Disability n.d. viewed 11 June 2021, https://disability.royalcommission.gov.au/about-royal-commission.

Figure 8 Geographic distribution of all registered allied health professionals (grouped) per 100,000 population (FTE) 2019

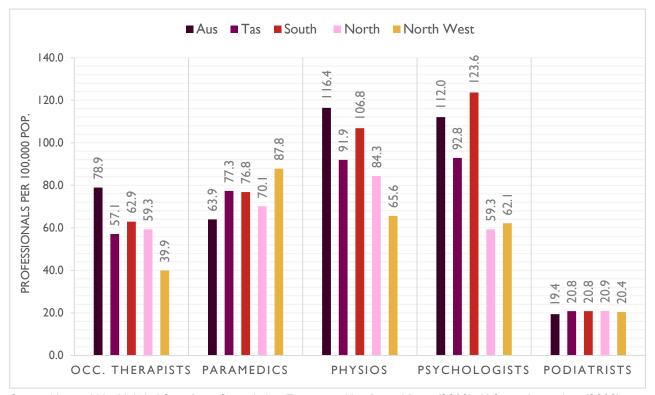


Source: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), ABS population data (2019) | Note: Includes paramedic workforce

At the profession level, this pattern continues for almost all professions. In Figure 9 we can see that the Tasmanian rate of occupational therapists, physiotherapists and psychologists is considerably lower than the Australian rate and then increases in the South before dropping off again in the North and North West. For occupational therapists, the North West has less than half the Australian rate of professionals; with 33.9 per 100,000 professionals compared to 73.8.

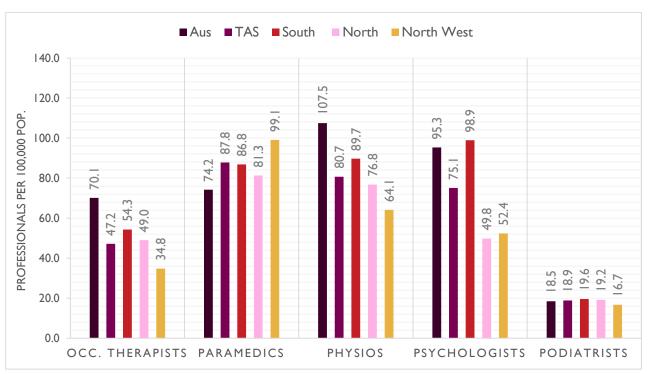
There are some professions that don't follow this trend and have a more even spread across regions, including podiatry (Figure 9 and Figure 10). Paramedicine is the most different. It is one of the few professions where the Tasmanian workforce has a higher FTE for its population than Australia (87.8 FTE per 100,000 people compared to 74.2). At a regional level, it also bucks the trend, with the South having less FTE than the North West (86.8 FTE per 100,000 population compared to 99.1). See Figure 10.

Figure 9 Geographic distribution of selected allied health professionals per 100,000 population (headcount), 2019



Source: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), ABS population data (2019)

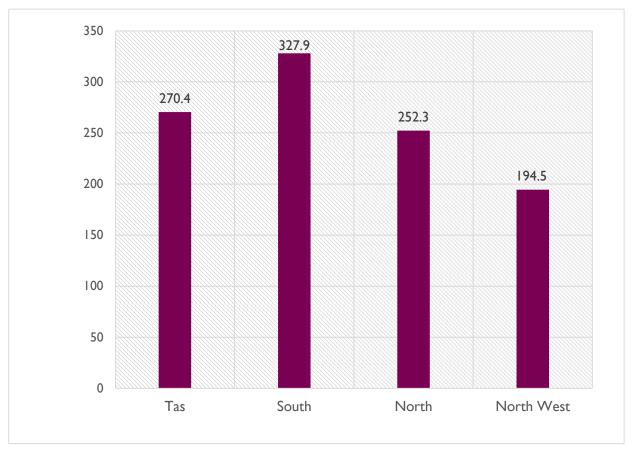
Figure 10 Geographic distribution of selected allied health professional FTE per 100,000 population 2019



Source: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), ABS population data (2019)

Consistent with the allied health workforce generally, the public sector was distributed disproportionately across the regions in 2019 – with a skew to the South and away from the North West (Figure 11).

Figure 11 Geographic distribution of all allied health professionals (FTE) working in the public sector per 100,000 population, Tas 2019



Source: Executive Reporting System (FYI) Human Resources: Establishment 19 Nov 2019; ABS population data (2019) Note: this data includes registered and non-registered allied health professions | Note: Includes paramedic workforce

#### SECTOR DISTRIBUTION

In 2019, there were 3,351 registered allied health professionals employed statewide in the public and private sectors, including 413 paramedics, for whom data was available for the first time. There is also a significant allied health workforce working in non- or self-regulated allied health professions. There is limited reliable and consistent national data for these professions.

Figure 12 shows the headcount of allied professionals working in public, private or both sectors, with optometry having the largest disparity between employment in the public and private sectors. This is predominantly due to the prevailing service model for this profession, supported by the Medicare Benefits Schedule and private health insurance.

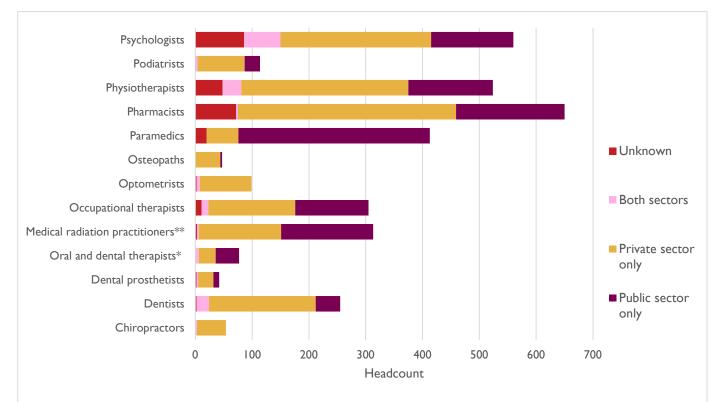


Figure 12 Employed headcount of allied health professionals by sector, Tas 2019

Tasmania's public allied health workforce is primarily employed across the Department of Health (DoH) and the Tasmanian Health Service (THS), however they also work in areas outside of health including in disability, education, justice and children and youth services. Other than those included in the National Registration and Accreditation Scheme, these professionals were out of scope of this report.

<sup>\*</sup> Includes dental therapists, dental hygienists, oral health therapists | \*\* Includes diagnostic radiographers, nuclear medicine technologists and radiation therapists | Source: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), ABS population data (2019)

#### **AVERAGE HOURS**

Registered allied health professionals reported working an average of 34.6 hours per week in 2019 – more than nurses and midwives, but less than medical practitioners. As Figure 13 shows, paramedics report working the greatest number of hours per week (43.2) and psychologists the fewest (30.9).

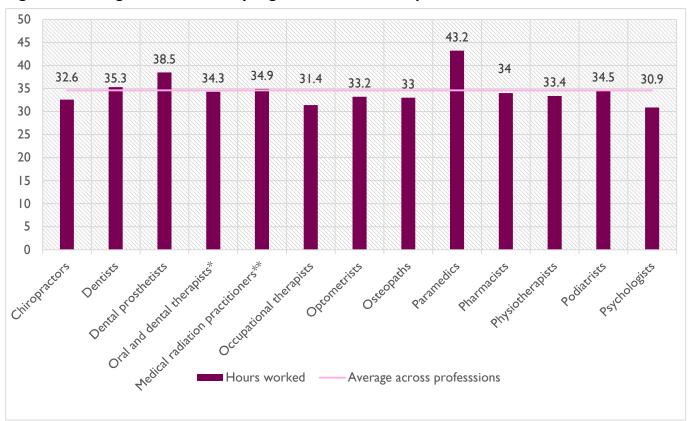


Figure 13 Average hours worked by registered allied health professionals, Tas 2019

<sup>\*</sup> Includes dental therapists, dental hygienists, oral health therapists | \*\* Includes diagnostic radiographers, nuclear medicine technologists and radiation therapists | Source: National Health Workforce Data Set including Tasmanian Unit Record Data (2019)

#### **WORKFORCE INDICATORS**

A series of 'workforce indicators' have been developed using relevant workforce metrics, to compare professions and help identify areas of concern and planning priorities.

Broadly, you can see that when a profession scores positively against a workforce indicator, the shading is light. A neutral or slightly concerning score is represented by mid shading and a more concerning score is represented with dark shading.

The workforce indicators are largely drawn from the National Health Workforce Data Set (2019) and include the workforces in both the public and private sectors. This enables a detailed assessment of where there may be current and future workforce risks in Tasmania.

Workforce indicator metric	What does it tell us?
Proportion of the workforce over 60 years of age	Workers over 60 years of age are at higher risk of exiting the workforce within the next few years. Workforces with a high proportion of over 60s workforces require planning to ensure future workforce sustainability.
Training availability in Tasmania	There are links between the availability of training in Tasmania and ease or adequacy of recruitment. Education and training are essential to 'growing your own workforce'.
	This indicator is to identify training availability for professional entry training in Tasmania.
Professional FTE in Tasmania and its regions per 100,000, compared to the	This measures the FTE of health professionals per capita in Tasmania and its regions compared to national rates. Workforce density does not provide an assessment of how many is the right number of practitioners per population, rather an observational assessment of supply relative to the national average.
Australian rate	here is an acknowledged complexity in that if the national supply of a profession is not considered to be adequate, we are basing the indicator on a starting point of relative undersupply. The same is true in cases of national oversupply.
	The region of work is self-reported by the health professional. In some cases, the region is not known. This means that in some instances the density of practitioners to population will be under-represented.
The workforce size, in headcount	The workforce size serves as a reminder that even small movements in the workforce, such as retirement, leave or resignation, can have a significant impact on the availability of a health profession and service.

Acknowledging the chart cannot be used in isolation, it does give a graphic summary of the challenges facing some professions, as well as professions facing multiple challenges, systematic issues across professions and can be used to inform policy priorities.

The allied health workforce indicators (Figure 14) illustrate:

- the lower supply of allied health professionals in Tasmania compared to the Australian average
- the geographic distribution of most of the allied health professions favours the South and demonstrates the workforce challenges faced particularly by the North West region
- the significantly low densities of the occupational therapy workforce across Tasmania
- Aboriginal and Torres Strait Islander Health Practice is the only workforce with three or less professionals statewide
- the limitation on local, entry-level training opportunities in allied health in Tasmania
- there is a reasonably low proportion of the workforce over 60 years old in all professions (dental prosthetists have the highest, with 17 per cent being over 60).

Figure 14 Allied health professions with workforce indicators, Tas 2019

Profession	Over 60	Training		FTE per 100,000 population				
	years	in Tas	Tas	South	North	North West	size	
Aboriginal and Torres Strait Islander Health Practitioners	0%	No	0.2	0.0	0.0	1.0	3 or less	
Chiropractors	7%	No	8.7	8.0	10.9	7.4	54	
Dentists	16%	No	44.4	50.1	42.6	32.9	374	
Dental prosthetists	17%	No	8.0	8.8	8.3	5.6	42	
Oral and dental therapists*	10%	No	13.0	11.4	14.5	15.0	77	
Medical radiation practitioners **	9%	No	53.7	56.5	54.2	46.4	313	
Occupational therapists	6%	No	47.2	51.3	49.0	34.8	305	
Optometrists	13%	No	16.2	19.2	12.6	13.4	99	
Osteopaths	5%	No	7.7	8.5	10.0	2.7	47	
Paramedics	6%	Yes	87.8	86.8	81.3	99.1	413	
Pharmacists	9%	Yes	108.5	122.8	98.2	87.2	647	
Physiotherapists	8%	No	80.7	89.7	76.8	64. I	491	
Podiatrists	5%	No	18.9	19.6	19.2	16.7	111	
Psychologists	15%	Yes	<b>75.</b> I	98.9	49.8	52.4	496	

st includes dental therapists, dental hygienists, oral health therapists

# Key to shading

(Proportion of workforce) over 60 years old	0-10%	11-24%	25% plus
Entry-level training available in Tasmania	Yes		No
FTE of professionals per 100,000 population compared to Aus	At or above	Below	Significantly below (by 25% or more)
Workforce size (using headcount)	More than 10		10 or fewer

<sup>\*\*</sup> Includes diagnostic radiographers, nuclear medicine technologists, and radiation therapists

### **EDUCATION AND TRAINING**

Training pathways into allied health professions in Tasmania are limited. This has a significant impact on the workforce and its capacity to meet the health needs of the community.

Most allied health professionals are educated to a bachelor's or master's degree level. Psychology and pharmacy are the only professions with a compulsory postgraduate requirement, resulting in longer training times. Figure 15 lists allied health professions and the availability of entry-level training offered in Tasmania. The lack of available entry level training in Tasmania has a significant impact on attracting a workforce to Tasmania and limits opportunities for Tasmanians who want to train in skilled professions but may not have the capacity – financial or otherwise – to move interstate.

Figure 15 Allied health training offered in Tas and Comparison of Tas and Aus professional FTE per 100,000 population, 2019

Allied health profession	Entry-level training	Tas professional FTE per 100,000		
	offered in Tasmania?	population compared to Aus		
Audiologists	No	-		
Cardiac physiologists	No	-		
Chiropractors	No	Lower		
Counsellors	Yes	-		
Dental prosthetists	No	Higher		
Dentists	No	Lower		
Dietitians	No	-		
Environmental health officers	Yes	-		
Genetic counsellors	No	-		
Medical physicists	No	-		
Medical scientists	Yes	-		
Medical radiation practitioners*	No	Lower		
Sonographers	No	-		
Occupational therapists	No	Lower		
Optometrists	No	Lower		
Oral and dental therapists†	No	Higher		
Orthotists and prosthetists	No	-		
Osteopaths	No	Lower		
Paramedics	Yes	Higher		
Perfusionists	No	-		
Pharmacists	Yes	Higher		
Physiotherapists	No	Lower		
Podiatrists	No	Higher		
Psychologists	Yes	Lower		
Social workers	Yes	-		
Speech pathologists	No	-		

<sup>†</sup> Includes dental hygienists, dental therapists, and oral health therapists | \* Includes diagnostic radiographers, nuclear medicine technologists and radiation therapists | Note that AU density data is not available for non- and self-regulated professions Source: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), ABS population data (2019)

In addition, professional development courses are also limited, meaning that qualified allied health professionals are often required to travel interstate to engage in professional development. A lack of professional development opportunities could also be a deterrent for a qualified allied health professional accepting a position in Tasmania.

The demand for health professions is growing strongly. Over the past five years, the level of employment and the number of Internet advertised vacancies grew faster for health professions than for the average of all occupations in Australia.

Employment in the health care and social assistance industry (a major employer of health professions) is projected to expand at double the pace of all industries over the five years to May 2023.8

Education and training are core to an effective health workforce, as well as being an indicator of wellness in the community more broadly, with socioeconomic disadvantage having a strong link to poor health outcomes. Only 43 per cent of eligible Tasmanians completed school to year 12 in 2015, considerably less than in Victoria (78 per cent) and in Australia generally (72 per cent).

Consultation for this report indicated that it is already difficult to attract graduates back from the mainland to fill Tasmanian allied health positions (particularly senior and clinical leadership roles) – it is likely that without a focus on a 'home grown workforce' of some description, this will become increasingly difficult as other states and territories are also targeting the allied workforce to meet health service and NDIS-related demand.

The development of additional education and training pathways is an opportunity to both build an allied health workforce and provide opportunities for young Tasmanians to enter allied health professions.

#### ALLIED HEALTH EXPANSION PROGRAM

The University of Tasmania is currently developing its Allied Health Expansion Program to better support the allied health labour force needs in Tasmania. In collaboration with government, health professionals, industry and local Tasmanian communities, the University of Tasmania is creating education and training programs which assist entry-to-practice qualifications in allied health and help practitioners with ongoing studies and professional development opportunities.

The Allied Health Expansion Program is being led by the College of Health and Medicine's School of Health Sciences. They are expecting to offer several postgraduate courses in 2022, including physiotherapy, occupational therapy, and speech pathology.

As shown in Figure 15, there is a lower density of physiotherapists and occupational therapists in Tasmania compared to Australia; by introducing training pathways this is likely to improve over the next five years

8 Australian Government – Department of Education, Skills and Employment 2019, Labour Market Research – Health Professions, Australia, 2017-18, viewed 11 June 2021, <a href="https://docs.employment.gov.au/system/files/doc/other/aushealthprofessions\_2.pdf">https://docs.employment.gov.au/system/files/doc/other/aushealthprofessions\_2.pdf</a>

<sup>&</sup>lt;sup>9</sup> Ahmed, S, Shaw, K, Tye, I, Ho, V, Edwards, L, and Kneebone, J, 2017, Primary Health Tasmania Needs assessment: health intelligence report 2017-18, Primary Health Tasmania, Hobart, TAS viewed 17 May 2019, <a href="https://www.primaryhealthtas.com.au/wp-content/uploads/2018/07/Needs-assessment-2017-18.pdf">https://www.primaryhealthtas.com.au/wp-content/uploads/2018/07/Needs-assessment-2017-18.pdf</a>.

(the density of speech therapists in Tasmania compared to Australia is unknown due to the lack of a national dataset). Creating a local supply is obviously only part of the solution - there still needs to be attractive jobs in all sectors for graduates to move into and a strong workplace culture and effective working arrangements to retain them.

#### PROGRESSION AND FLEXIBILITY

Education and training play an important role in upskilling and reorienting the workforce to manage emerging health needs, like responding to the COVID-19 pandemic. An example of this is in upskilling physiotherapists to assist in critical care environments with ventilatory therapies.

With fewer allied health professionals per 100,000 population than the national average (Figure 2) and an increasing demand for chronic illness care, it is essential that Tasmania's community needs are supported by an education framework allowing for career entrance, progression and change.

# ENHANCING CULTURE AND WELLBEING

Organisational culture represents the shared ways of thinking, feeling, and behaving in health care organisations."<sup>10</sup> Good leadership and an inclusive culture are key features of high performing organisations that are workplaces of choice.

Workplace culture, workforce wellbeing and inclusion are interconnected. When these building blocks are healthy, the organisation will be better equipped to deliver high quality health services to the community.

#### **DIVERSITY AND INCLUSION**

Having a diverse set of personal traits, backgrounds and experiences can be a key driver of workforce innovation with diversity fostering 'innovation and creativity through a greater variety of problem-solving approaches, perspectives, and ideas'<sup>11</sup>. Ever increasing expenditure on health cannot be sustained, therefore it is essential to develop ideas, efficiencies, and technologies to continually improve workforce productivity as well as health outcomes. A diverse workforce can indirectly facilitate this innovation.

#### ABORIGINAL EMPLOYMENT

Providing culturally respectful healthcare and increasing the size of the Aboriginal health workforce is a fundamental step towards improving health outcomes for Aboriginal people and closing the gap in Aboriginal life expectancy.<sup>12</sup>

'It is the responsibility of the whole health system to provide culturally appropriate health care for Australians from diverse backgrounds. But increasing the representation of Aboriginal and Torres Strait Islander people in the health workforce is one way to improve access to culturally appropriate health services for Indigenous Australians.' - AIHW, Aboriginal and Torres Strait Islander Health Performance Framework 2020 summary report<sup>13</sup>

11 Hunt, V, Layton, D and Prince, S 2015, Diversity Matters, McKinsey and Company, New York, NY, USA, viewed 24 May 2019, https://www.mckinsey.com/business-functions/organization/our-insights/why-diversity-matters.

Mannion, R and Davies, H 2018 'Understanding organisational culture for healthcare quality improvement', BMJ Vol. 363, pp. k4907, London, UK, viewed 23 July 2019, <a href="https://risweb.st-andrews.ac.uk/portal/en/researchoutput/understanding-organisational-culture-for-healthcare-quality-improvement(a79882bd-9b34-49db-ba32-45b8ad617fc2)/export.html</a>.

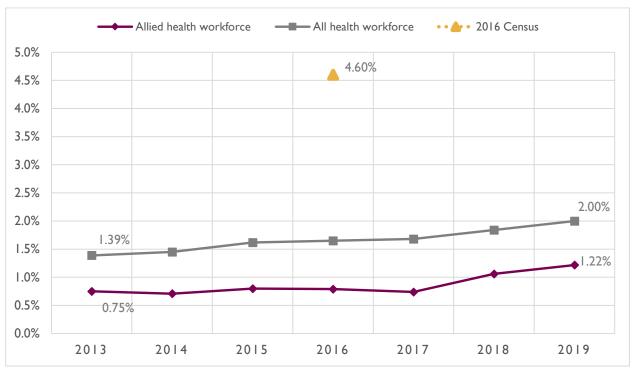
<sup>&</sup>lt;sup>12</sup> Australian Government - Department of Prime Minister and Cabinet 2014, Aboriginal and Torres Strait Islander Health Performance Framework Report, viewed 18 Jul 2019, <a href="https://www.pmc.gov.au/sites/default/files/publications/indigenous/Health-Performance-Framework-2014/tier-3-health-system-performance/312-aboriginal-and-torres-strait-islander-people-health-workforce.html">https://www.pmc.gov.au/sites/default/files/publications/indigenous/Health-Performance-Framework-2014/tier-3-health-system-performance/312-aboriginal-and-torres-strait-islander-people-health-workforce.html</a>

<sup>&</sup>lt;sup>13</sup> Australian Government – Australian Institute of Health and Welfare – National Indigenous Australians Agency 2020, Aboriginal and Torres Strait Islander Health Performance Framework 2020 summary report Cat. No IHPF 2, viewed 11 June 2021, <a href="https://www.indigenoushpf.gov.au/getmedia/f61f0a50-f749-4045-b58f-b2c358db2c6b/2020-summary-ihpf-2.pdf?ext=.pdf">https://www.indigenoushpf.gov.au/getmedia/f61f0a50-f749-4045-b58f-b2c358db2c6b/2020-summary-ihpf-2.pdf?ext=.pdf</a>.

In the 2016 Census, 4.6 per cent of people living in Tasmania identified as Aboriginal and/or Torres Strait Islander<sup>14</sup>. Of registered Tasmanian health professionals, 1.2 per cent of allied health practitioners identified as Aboriginal in 2019. Actions to increase the number of Aboriginal health professionals in the Tasmanian health workforce, aligned with the Tasmanian State Service Aboriginal Employment Strategy<sup>15</sup> and the Improving Aboriginal Cultural Respect Across Tasmania's Health System Action Plan 2020-2026<sup>16</sup> are urgently required.

Figure 16Error! Not a valid bookmark self-reference. shows the small growth from 2014 to 2019.

Figure 16 Aboriginal employment as a percentage of the allied health workforce, Tas 2014-2019 shown with last Census percentage of Aboriginal Tasmanians as a proportion of the community



Source: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), ABS population data (2019) | Note: Includes paramedic workforce

Through the *Tasmanian Government Aboriginal Employment Strategy to 2022* (2019), the Tasmanian Government aims to increase the number of Aboriginal employees as a proportion of the entire State Service to 3.5 per cent by 2022.<sup>17</sup> It is not known what proportion of the Tasmanian public health sector identifies as Aboriginal as this information is not recorded on employment, however it is estimated that Aboriginal people make up around 2.9 per cent of the Tasmanian State Service.

<sup>&</sup>lt;sup>14</sup> Australian Government - Australian Bureau of Statistics 2018, 2071.0 - Aboriginal and Torres Strait Islander population, 2016, viewed 22 February 2019,

www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/2071.0~2016~Main%20Features~Aboriginal%20and%20Torres%20Strait%20islander%20 Population%20Article~12.

<sup>15</sup> Tasmanian Government – Tasmanian State Service 2019, Aboriginal Employment Strategy to 2022, viewed 15 Jul 2019, http://www.dpac.tas.gov.au/\_\_data/assets/pdf\_file/0010/463087/DPAC4456\_Aboriginal\_Employment\_Strat\_210\_x\_210\_WEB.pdf

<sup>&</sup>lt;sup>16</sup> Australian Government - Australian Health Ministers' Advisory Council 2016, *Cultural respect framework 2016-2026 for Aboriginal and Torres Islander health*, viewed 4 Apr 2019,

 $<sup>\</sup>frac{\text{http://www.coaghealthcouncil.gov.au/Portals/0/National\%20Cultural\%20Respect\%20Framework\%20for\%20Aboriginal\%20and\%20Torres\%20Strait\%20Islander\%20Health\%202016\_2026\_2.pdf$ 

<sup>17</sup> Tasmanian Government - Tasmanian State Service 2019, Aboriginal Employment Strategy to 2022. viewed 15 Jul 2019, http://www.dpac.tas.gov.au/\_data/assets/pdf\_file/0010/463087/DPAC4456\_Aboriginal\_Employment\_Strat\_210\_x\_210\_WEB.pdf

#### Aboriginal and Torres Strait Islander Health Practitioners and Health Workers

Nationally, 'Aboriginal and Torres Strait Islander Health Practitioners' and 'Aboriginal Health Workers' make a valuable contribution both to specialised Aboriginal health service delivery and in a wide range of mainstream healthcare services.

Aboriginal and Torres Strait Islander Health Practitioners are registered health professionals requiring a minimum certificate IV program of study approved by the Aboriginal and Torres Strait Islander Health Practice Board of Australia.

The role of an Aboriginal and Torres Strait Islander Health Practitioner may include clinical services (for example vaccinations and diabetes care), assessment and screening of wellbeing health promotion and programs, administering and supplying medications, supporting clients to self-manage traditional and Western medications and advocating for clients, including interpreting and translating language. They may also provide advice and training on cultural safety to other health professionals, policy makers, researchers, and educators.

While Aboriginal Health Workers are not registered health practitioners and will not show up in registration-based data they must complete an Aboriginal and Torres Strait Islander Primary Health course. Aboriginal Health Workers perform a vital support, liaison, and health promotion role. In Tasmania, Aboriginal and Torres Strait Islander Health Practitioners and Health Workers are employed by Aboriginal community-controlled health organisations. There are no Aboriginal Health Workers or Practitioners employed in the Tasmanian Government health sector and working in those specific roles. Training and employing Aboriginal Health Workers would expose more Aboriginal Tasmanians to a career in health, increase pathways for grade 12 graduates to progress into health and provide more Tasmanian Aboriginal people with access to culturally safe care.

#### **AGE**

The registered allied health workforce was the youngest of the three workforce groups in Tasmania with an average age of 41.7 years in 2019 (Figure 17).

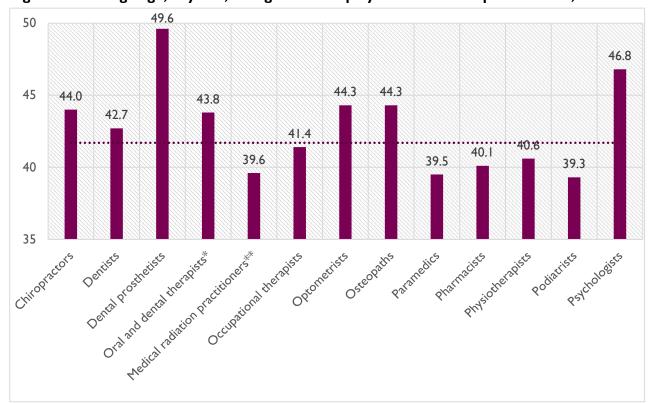


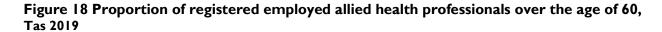
Figure 17 Average age, in years, of registered employed allied health professionals, Tas 2019

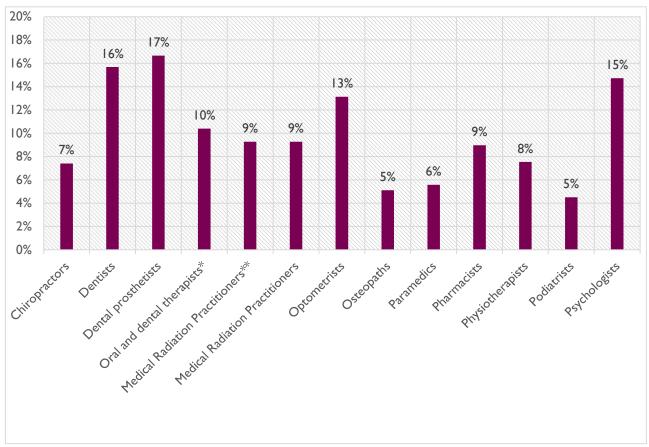
Source: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), based on employed workforce

This compared to nurses and midwives with an average of 45.5 years and medical practitioners with an average of 46.4 years. Contrary to Tasmania's population trends, the allied health workforce is getting younger, dropping from 42.6 years in 2014 to 41.7 years in 2019.

The average age of allied health practitioners nationally in 2019 was 45.3 years.

<sup>\*</sup> Includes dental therapists, dental hygienists, oral health therapists | \*\* Includes diagnostic radiographers, nuclear medicine technologists and radiation therapists





<sup>\*</sup> Includes dental therapists, dental hygienists, oral health therapists | \*\* Includes diagnostic radiographers, nuclear medicine technologists and radiation therapists | Source: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), based on employed workforce

The proportion of the workforce aged over 60 aligns broadly with the average age of the workforce.

#### **GENDER**

In 2019, 64 per cent of the employed allied health workforce in Tasmania reported their gender as female; this rate varies significantly between professions as shown in Figure 19, with optometrists having a reasonably balanced gender profile (51 per cent male and 49 per cent female) compared with the grouped oral and dental therapists who were 92 per cent female.

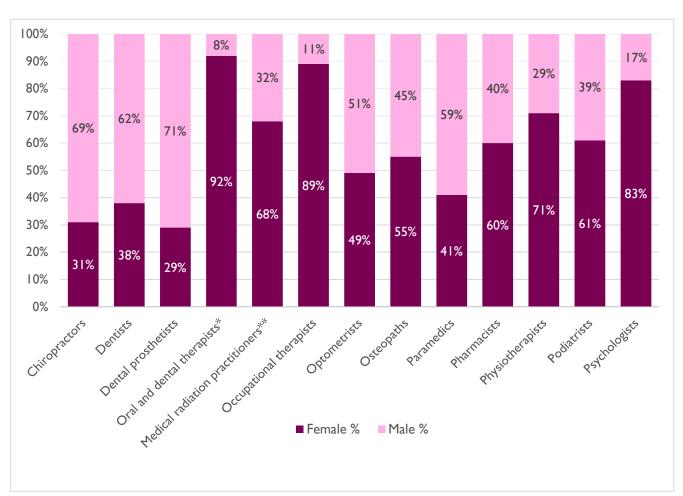


Figure 19 Gender of registered, employed allied health professionals, Tas, 2019 (per cent)

<sup>\*</sup> Includes dental therapists, dental hygienists, oral health therapists | \*\* Includes diagnostic radiographers, nuclear medicine technologists and radiation therapists | Source: National Health Workforce Data Set including Tasmanian Unit Record Data (2019)

# FOSTERING INNOVATION

Reform and innovations in healthcare are necessary to ensure a high quality, sustainable, and affordable health workforce into the future.

#### **CHANGING WORKFORCE MODELS**

The increasing incidence of chronic and complex illness makes it more important than ever to ensure that the right workforce is undertaking the right care for the right patient. It will become increasingly necessary to work in teams to provide comprehensive joined up care. The allied health workforce is an integral part of providing this care and workforce models need to continue to evolve to support effective care for the community.

The concept of a national Allied Health Rural Generalist (AHRG) Pathway has been progressing since 2013, involving both state and commonwealth governments. There is increasing recognition that health professionals working in rural and remote regions require a broad range of skills that reflect the needs of the community they are caring for. The development of the AHRG is intended to address this – to prepare health practitioners with expanded practice skills to better meet the needs of rural communities.<sup>18</sup>

In the 2021-22 federal budget, \$9.6 million has been announced to expand the AHRG pathway to attract and retain allied health professionals in rural and remote communities through an additional 90 workplace training packages, this includes up to 30 packages for Aboriginal Community Controlled Health Organisations as well as incentives for practices to employ and train up to 30 rural allied health assistant trainees.<sup>19</sup>

19 Australian Government – Department of Health n.d. Budget 2021-22 Guaranteeing Medicare – Rural Health Workforce, viewed 11 June 2021, https://www.health.gov.au/sites/default/files/documents/2021/05/guaranteeing-medicare-rural-health-workforce.pdf.

<sup>&</sup>lt;sup>18</sup> National Rural Health Alliance Ltd 2019, Supporting rural generalists in allied health professions, National Rural Health Alliance, Deakin West, ACT, viewed 2 July 2019, <a href="http://www.ruralhealth.org.au/15nrhc/media-release/supporting-rural-generalists-allied-health-professions">http://www.ruralhealth.org.au/15nrhc/media-release/supporting-rural-generalists-allied-health-professions</a>.

#### OPTIMISING, EXTENDING AND DELEGATING WORK

By optimising, and even extending the scope of allied health work at the profession level, there is capacity to improve patient access and care, and potentially lower costs. As outlined above, this can be particularly beneficial in rural and remote areas. Some examples of extended scope of practice include skill sharing between allied health professionals and allied health professionals undertaking tasks normally undertaken by a medical practitioner for which they have trained and are competent.

Trialling new methods, evaluating, and sharing outcomes are key to health access and quality improvements, and core to an innovative workplace.

An enabler of extended scope of practice is the delegation of routine tasks to the support workforce, where appropriate. Effective delegation to the support workforce, including allied health assistants, allows allied health professionals to dedicate more time to tasks at the upper end of their scope of practice. Allied health assistants are usually trained to a Certificate IV level or equivalent and work under direct supervision to provide therapeutic and program-related support.

#### PHARMACISTS IMMUNISERS

Pharmacist Immunisers are registered pharmacists with authority to administer approved vaccines to specific client groups at approved locations (such as community pharmacies). Pharmacist Immunisers are required to complete a recognised 'Immuniser program of study'. By expanding their role, the community is afforded greater access to vaccinations. In 2016, the Tasmanian Poisons Regulation (2008) was amended to allow Pharmacist Immunisers to administer influenza vaccines. Evaluation of the program indicated that:

- up to 9,000 vaccines were administered.
- of those vaccinated, 12 per cent would not have been vaccinated if the service was not offered in the pharmacy and 9 per cent had not been vaccinated against flu before
- pharmacist immunisers reported improved customer-pharmacist relationships
- concerns highlighted by general practitioners included not being notified when their patient was vaccinated, concerns of care fragmentation and missed health promotion opportunities.

The evaluation highlighted opportunities for improvement in communication and to the pharmacy environment as a vaccination space.

#### **TELEHEALTH**

Telehealth refers to health services delivered through communication technologies such as videoconferencing. Improving access to telehealth services, particularly for people with disabilities and chronic and mental conditions, is a priority for the Australian Government and state and territory governments<sup>20</sup>.

Telehealth can also be beneficial in rural and remote regions and has the capacity to encourage selfmanaged care as well as leverage the support workforce. For example, an allied health assistant may be in

<sup>&</sup>lt;sup>20</sup> Australian Government - Australian Institute of Health and Welfare 2018, Australia's health 2018 - Chapter 7.5 Primary Care, Australian Institute of Health and Welfare, Canberra, ACT, viewed 2 July 2019, <a href="https://www.AlHW.gov.au/getmedia/832c1e17-a3eb-4bb2-bd81-1a572e22a726/AlHW-aus-221-chapter-7-5.pdf.aspx">https://www.AlHW.gov.au/getmedia/832c1e17-a3eb-4bb2-bd81-1a572e22a726/AlHW-aus-221-chapter-7-5.pdf.aspx</a>.

the room with a patient on video conference to the allied health professional – working together to provide greater access to quality care. There are barriers to telehealth though, including digital literacy of patients and health care professionals, internet access, technology upgrades, apprehension to change and having staff to support patients through the process.

The recent experience with the COVID-19 pandemic has demonstrated that both the workforce and the community can adapt rapidly to a changing health care environment that enables telehealth through financial models and a motive to decrease face to face contact where possible.

Since March 2020, eligible allied health providers can claim the new temporary MBS allied health items (at least until 30 June 2021) to reduce the risk of community transmission of COVID-19 among patients and health workers. This resulted in a huge shift in the delivery of health services during the first wave of COVID-19 in Australia with 32.7 per cent of MBS services were delivered by telehealth in May 2020. The majority of these were conducted by telephone (90.0 per cent) rather than by videoconference.<sup>21</sup> As the COVID-19 situation has evolved, there has been a move back to increased face to face consultations, however there is still significant telehealth activity.

After making numerous changes to the way National Disability Insurance Scheme (NDIS) clients accessed their services and supports during COVID-19, the National Disability Insurance Agency (NDIA) recently surveyed 530 participants who had a plan during the pandemic. Of those:

- 78 per cent had their plan reviews via the phone or video
- 74 per cent found using the telephone or video for their plan review acceptable in terms of ease
- 26 per cent found it difficult
- 71 per cent were acceptably comfortable communicating over the phone or video.
- 91 per cent were happy with the privacy and security of their plan review meeting by phone or video.

Three quarters of participants reported at least one advantage to using technology. The most commonly reported were convenience, accessibility and safety.

The most commonmly reported disadvantages of having a plan review by telephone or internet were:

- the lack of visual contact
- the inability to see and share materials, reports and/or paperwork
- difficulty communicating
- not having enough time to fully explain their situation.<sup>22</sup>

Understanding the health impact and consumer experience of technological solutions is an integral part of evaluating and tailoring the role of telehealth in allied health service delivery into the future. Just as important will be the sustained education and training of the workforce.

<sup>&</sup>lt;sup>21</sup> University of Queensland, Centre for Online Health, Telehealth and coronavirus: Medicare Benefits Schedule (MBS) activity in Australia, viewed 11 June 2021, <a href="https://coh.centre.uq.edu.au/telehealth-and-coronavirus-medicare-benefits-schedule-mbs-activity-australia">https://coh.centre.uq.edu.au/telehealth-and-coronavirus-medicare-benefits-schedule-mbs-activity-australia</a>.

<sup>&</sup>lt;sup>22</sup> Australian Government – National Disability Insurance Scheme 2021, Community – Research and Evaluation – Service Design – Our Research, viewed 11 June 2021, <a href="https://www.ndis.gov.au/community/research-and-evaluation/service-design-our-research">https://www.ndis.gov.au/community/research-and-evaluation/service-design-our-research</a>.

# RECRUITMENT AND EFFECTIVE WORKING ARRANGEMENTS

The public health workforce makes up the largest proportion of the state service. The important task of managing a workforce of this size requires constant attention and review.

While Tasmania's lifestyle is a great lever for attracting graduates and more senior allied health professionals to the state, it is critical to provide effective working arrangements to help ensure their retention after they arrive.

#### ATTRACTING HEALTH PROFESSIONALS TO WORK IN TASMANIA

Due to most allied health professions currently completing their training outside Tasmania, attraction is particularly important to the sector and requires greater effort as natural flow-on from local education institutions does not exist.

Consultation with allied health managers in the public sector indicated that early career professionals are often attracted to work in Tasmania by the scope of work on offer and opportunities. However, further career opportunities then become limited and higher turnover is experienced in the mid-career years. In addition, there are limited professional development opportunities within the State.

#### RECRUITMENT

Increased recruitment often occurs in an environment where there are hard to fill vacancies – due either to a poor overall supply of the health profession or difficulties in attracting and retaining specialist staff in regional and rural areas.

It is important to have effective recruitment processes to ensure that the right person with the right skills is employed to provide the right healthcare services to the Tasmanian community. It is also important for the process to be efficient, to get the right person here promptly and without wasted administrative processes.

'The majority of employers reported difficulties attracting suitable (occupational therapy) applicants for vacancies in Tasmania. Employers noted the perception that Tasmania offers limited opportunities for career development. In addition, there is no undergraduate training available in Tasmania for occupational therapists.'<sup>23</sup>

There are also external factors that can slow the process down further, including a lack of residential rental accommodation – which can prove particularly problematic for short term roles, in more remote areas and for those moving from outside Tasmania.

#### **SKILLS SHORTAGES**

The Australian Government's Department of Education, Skills and Employment carries out research to identify skill shortages in the labour market for some professions (using a phone survey to employers).

<sup>&</sup>lt;sup>23</sup> Australian Government – Department of Education, Skills and Employment 2019, Skill Shortages Resources ANZSCO 2524-11 Occupational Therapist – TAS Occupational Report, viewed 11 June 2021, ANZSCO 2524-11 Occupational Therapist - TAS - Department of Education, Skills and Employment, Australian Government (dese.gov.au)

It identifies shortages in all of the allied health professions surveyed in Tasmania (see Figure 20): Medical diagnostic radiographers, sonographers, pharmacists, and occupational therapists, based on the ability of employers to recruit to positions. Figure 20 also highlights that other jurisdictions are facing shortages in some professions (or all, like New South Wales) and therefore the competition for recruitment becomes tighter.

Figure 20 Ratings Summary - Labour Market Analysis of skilled occupations, Aus 2018-19

Profession	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	AUS
Medical diagnostic radiographer	S	NS	R	S	S	S	CNR	S	S
Sonographer	S	R	S	NS	NS	S	CNR	S	S
Pharmacist	S	R	R-D	NS	R	S	CNR	NS	S
Occupational therapist	S	R	NS	NS	NS	S	S	D	S

Source: https://www.dese.gov.au/skill-shortages/resources/ratings-summary-labour-market-analysis-skilled-occupations

#### Key to ratings

<b>Abbreviation</b>	Rating	Description
NS	No shortage	Research did not identify any shortages
S	Shortage	Skill shortages exist when employers are unable to fill or have considerable difficulty filling vacancies for an occupation, or significant specialised skill needs within that occupation, at current levels of remuneration and conditions of employment, and in reasonably accessible locations.
М	Shortage in metropolitan areas	
R	Shortage in regional areas	
D	Recruitment difficulty	Recruitment difficulties occur when there may be an adequate supply of skilled workers, but some employers have difficulty filling vacancies for an occupation for reasons which include: the specific experience or specialist skill requirements of the vacancy; differences in hours of work required by the employer and those sought by applicants; or particular locational or transport issues. Please follow the relevant occupation link for more information on the nature of each recruitment difficulty.
R-D	Recruitment difficulty in regional areas	
M-D	Recruitment difficulty in metropolitan areas	

CNR	Cannot rate	For some occupations assessed at the state and territory level, there
		is insufficient evidence to determine a rating. A national rating may be
		provided, but this does not necessarily reflect the specific state or
		territory labour market conditions

#### **WORKFORCE MANAGEMENT**

Good clinical governance supported by empowered and skilled clinical managers contribute to better patient outcomes and experiences and a positive culture.

Consultation with clinical managers indicated that the support that is provided to clinical managers to undertake these functions is often lacking and it is often assumed that good clinical practitioners will automatically be good clinical managers.

The development of management training opportunities would assist in building capacity for workforce management at all levels.

# DATA AND METHODOLOGY

#### **DATA SOURCES**

The data used to inform this report includes:

- Australian Government Australian Bureau of Statistics 2020, 3235.0 Regional Population by Age and Sex, Australia, 2019, Austats Statistics by Catalogue Number
- Australian Government Australian Bureau of Statistics 2017, 2016 Census QuickStats: Tasmania
- Australian Government Australian Bureau of Statistics 2017, Home is where the heart is for Tasmanians, Census reveals, Media Release 139/2017, 23 October 2017
- Australian Government Australian Bureau of Statistics 2018, 4364.0.55.001 National Health Survey: First Results, 2017-18
- Australian Health Practitioner Regulation Agency Statistics 2020
- Australian Government Department of Education, Skills and Employment 2020a, Selected Higher Education Statistics 2019 Student data
- Australian Government Department of Education, Skills and Employment 2020, *uCube Higher Education Data Cube*
- Australian Government Department of Home Affairs 2019, 2018-19 Migration Program Report,
   Research and Statistics Reports
- Australian Government Department of Home Affairs 2020, 2019 -20 Migration Program Report, Migration Program Reports
- Australian Government Department of Home Affairs 2021, Australia's 2021-22 Migration Program,
   Research and Statistics Reports
- Australian Government Department of Home Affairs 2021, Migration program visa statistics live data,
   Research and Statistics Reports
- Australian Government DATA.GOV.AU 2021, Australian Migration Statistics, Australian Migration Statistics Dataset
- Australian Government Department of Human Services, Services Australia 2021, Statistics -Medicare Group Reports - Broad Type of Service
- Australian Government Department of Health 2020, Health Workforce Data Data Tool, Health Workforce Data - Data Tool – National Health Workforce Data Set
- Education provider student numbers University of Tasmania, TasTAFE and the Health and Education Research Centre.
- Tasmanian Government Department of Health 2021, Health Stats system dashboard, viewed 28
   March 2021
- Tasmanian Government Department of Health, Public Sector Establishment and Payroll Data (30 Nov 2019) unpublished internal data
- Tasmanian unit record data Re-registration survey responses (2014-2019) subset of the NHWDS.

#### DATA TREATMENT

Registration Statistics collected from the Australian Health Practitioner Regulation Agency and reregistration survey responses in the Tasmanian Unit Record subset of the National Health Workforce Data Set (NHWDS) (201-2019) were filtered to only include people who are employed and working in Tasmania. This includes respondents on leave for up to three months.

The registered health professions included in this analysis are Aboriginal and Torres Strait Islander health practitioners, chiropractors, dental practitioners, medical practitioners, medical radiation practitioners, midwives, nurses, occupational therapists, optometrists, osteopaths, paramedics, pharmacists, physiotherapists, podiatrists, and psychologists.

Chinese medicine practitioners are not profiled in this report because they are not employed in the Tasmanian state service, and do not meet the Allied Health Professions Australia (AHPA) definition of an allied health profession.

Non-regulated and self-regulated allied health professions are not included in the NHWDS. Data provided on these professions is taken from the Public Sector Establishment and Payroll Data (19 November 2019).

References to employed headcount, employed FTE, change in FTE 2014-19, average working hours, and hours in public/private sector data are self-reported responses to the re-registration survey from the Tasmanian Unit Record Data (2014-19). This is a subset of the National Health Workforce Data Set.

Age and gender related measures come from registration information included in the Tasmanian Unit Record Data (2019). These data relate to the whole of Tasmania including both public and private sectors.

References to employed headcount and FTE per 100,000 population for Tasmania and its regions draw headcount and FTE from the Tasmanian Unit Record Data (2019) and the NHWDS for the national comparison. Both public and private sectors are included in the numerator. Population figures used as the denominator for this calculation in all cases are drawn from the Australian Bureau of Statistics Population data Cat. 3235.0 for the year of the headcount numerator (2019), with the population for Tasmanian regions summed across relevant Local Government Areas.

While there is no nationally agreed number of health professionals per population in Australia, this method can be used to assess the relative supply of one region against another and can also be measured over time. Using this measure does have some limitations because it does not consider several other variables including the population structure, burden of disease, patterns of service and provider utilisation, the actual "type" of services provided and socio- demographic characteristics.

Regional density can be affected by incomplete survey responses which mean a region cannot be assigned for the practitioner, but they still contribute to the Tasmanian density figure.

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# APPENDIX A: ALLIED HEALTH WORKFORCE PROFILES

#### ABOUT THE WORKFORCE PROFILES

The workforce profiles included in this report take a closer look at the individual professions within each workforce. The profiles do not focus on the workforce or staffing levels at individual facilities; rather they are a summary of that health profession in Tasmania in 2019.

The profiles are a tool which builds an understanding of the workforce and provides an indication of where challenges and opportunities may lie in the future.

Allied health professionals work in health as well as other areas including in education, disability, aged care, justice and children and youth services.

The density of allied health professionals is provided as FTE per 100,000 population for Tasmania. Regional density can be affected by incomplete re-registration survey responses where the practitioner cannot be assigned to a region but contributes to the Tasmanian density figure.

Allied health professional training is the formal process or pathway to meeting the requirements for registration or membership with the relevant professional association. Training pathways in to allied health professions are varied in duration, administration, and requirements.

The small size of some professional groups must be considered when reviewing the data. Even minimal movement, for example the retirement of one employee, will have a significant influence on the data profile. In addition, it should be noted that even though a health professional may be registered under a certain profession, their everyday work may align to a different profession, particularly if they are in a training program.

Paramedicine became a registered profession in December 2018. Their first year of re-registration data is included in this report.

#### NATIONALLY REGISTERED PROFESSIONS

The data in the workforce profiles is sourced primarily from the National Health Workforce Data Set and includes employed, registered professionals in the public and private sectors, the acute (hospital) setting as well as community settings and in aged care. Nationally registered professions in Australia are:

- Aboriginal and Torres Strait Islander Health Professionals
- Chiropractors
- Chinese medicine practitioners
- Osteopaths
- Dental hygienists
- Dental prosthetist
- Dental therapists
- Dentists
- Oral health therapists

- Diagnostic radiographers
- Nuclear medicine technologists
- Radiation therapists
- Occupational therapists
- Optometrists
- Paramedics
- Pharmacists
- Physiotherapists
- Podiatrists
- Psychologists.

The only registered professionals not included in this report are Chinese Medicine Practitioners.

#### OTHER PROFESSIONS PROFILED IN THIS REPORT

The National Health Workforce Data Set only collects data for registered professions. Because there is no single data source for other allied health professions, we have used Tasmanian Department of Health workforce data to provide workforce profiles that summarise the other allied health professions in Tasmania. Noting that these are a summary of the public health sector workforce only.

The allied health professions profiled in this report (public health sector data only) are:

- Audiologists
- Cardiac physiologist/Echocardiographers
- Counsellors
- Dietitian/Nutritionists
- Environmental/Public health officers
- Epidemiologists
- Exercise physiologists
- Genetic counsellors
- Health physicists
- Mammographic technologists
- Medical physicists

- Medical scientists
- Microbiologists
- Orthotist/Prosthetists
- Perfusionists
- Respiratory scientists
- Social workers
- Sonographers
- Speech pathologists

There are other professionals that may be considered as 'allied health'; however, a workforce profile has not been developed due to low numbers in Tasmania, including:

- Art therapists
- Medical librarians
- Music therapists
- Orthoptists
- Respiratory scientists



# ABORIGINAL AND TORRES STRAIT ISLANDER HEALTH PRACTITIONERS

A SNAPSHOT OF THE WORKFORCE IN TASMANIA

#### **NUMBERS**

EMPLOYED	3 or less
HEADCOUNT	
EMPLOYED FTE	1.1
FTE CHANGE	150%
2014-19	
AVG. WEEKLY	40.0 hours
HOURS	
OVER 60 YEARS	0%
OLD	
AVERAGE AGE	43.0 years
GENDER	100% F
	0% M

# CLINICAL HOURS WORKED IN SECTOR

Public	Private
0%	100%

# EMPLOYMENT PER 100,000 POPULATION

	HEAD	FTE
	COUNT	
Aus	2.2	2.3
Tas	0.2	0.2
South	0.0	0.0
North	0.0	0.0
North West	0.9	1.0

Sources: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), and ABS population data (2019).

#### **DESCRIPTION**

Aboriginal and Torres Strait Islander Health Practitioners provide a range of services to their communities depending on their employer and community need, including clinical services (for example vaccinations and diabetes care), assessment and screening of wellbeing health promotion and programs, administering and supplying medications, supporting clients to self-manage traditional and Western medications and advocating for clients, including interpreting and translating language. They may also provide advice and training on cultural safety to other health professionals and educators.

An Aboriginal and Torres Strait Islander Health Practitioner is different to an Aboriginal health worker, with Practitioners usually have a more clinical focus and senior role and health workers performing more of a support, liaison, and health promotion role.

#### **TRAINING**

#### **PROGRAM SUMMARY**

Aboriginal and Torres Strait Islander Health Practitioners must complete a Certificate IV in Aboriginal and Torres Strait Islander Primary Health Care Practice accredited by the Aboriginal and Torres Strait Islander Health Practice (ATSIHP) Board.

#### **IN TASMANIA**

Limited, ad hoc availability, depending on enrolment numbers.

### **REGISTRATION**

Aboriginal and Torres Strait Islander Health Practitioners must be registered with the ATSIHP Board.

#### **NOTES**

The small size of this group must be considered when reviewing the data any trends within. Even minimal movement, for example the resignation of one employee, will have a significant influence on the data profile.



# **CHIROPRACTORS**

A SNAPSHOT OF THE WORKFORCE IN TASMANIA

### **NUMBERS**

EMPLOYED	54
HEADCOUNT	
EMPLOYED FTE	46.3
FTE CHANGE	9%
2014-19	
AVG. WEEKLY	32.6 hours
HOURS	
OVER 60 YEARS	7%
OLD	
AVERAGE AGE	44.0 years
GENDER	31% <b>F</b>
	69% M

# CLINICAL HOURS WORKED IN SECTOR

Public	Private
8%	92%

# EMPLOYMENT PER 100,000 POPULATION

	HEAD	FTE
	COUNT	
Aus	19.6	16.8
Tas	10.1	8.7
South	9.1	8.0
North	12.8	10.9
North West	8.9	7.4

Sources: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), and ABS population data (2019).

## **DESCRIPTION**

Chiropractors work with people seeking treatment for musculoskeletal disorders, particularly back or neck pain. They may provide ergonomic and lifestyle advice, massage or manipulation, and work predominantly in private practice.

### **TRAINING**

#### PROGRAM SUMMARY

Chiropractors must complete a three-year chiropractic bachelor undergraduate and two-year master program of study accredited by the Council on Chiropractic Education Australasia.

#### **IN TASMANIA**

There are no approved training programs for chiropractors in Tasmania.

#### REGISTRATION

Chiropractors must be registered with the Chiropractic Board of Australia.

#### **NOTES**

Chiropractors with general registration who perform X-ray procedures must be licensed. The Department of Health Radiation Protection Unit provides licenses to practice in accordance with the *Tasmanian Radiation Protection Act 2005* and the *Radiation Protection Regulations 2016*.

While the data points to chiropractors working in the public sector, the Tasmanian Health Service does not employ chiropractors.



# **DENTAL PRACTITIONERS:**

# INTRODUCTION

A SNAPSHOT OF THE WORKFORCE IN TASMANIA

#### **NUMBERS**

EMPLOYED	374
HEADCOUNT	
EMPLOYED FTE	349.2
FTE CHANGE	9%
2014-19	
AVG. WEEKLY	35.5 hours
HOURS	
OVER 60 YEARS	15%
OLD	
AVERAGE AGE	43.7 years
	-
GENDER	48% F
	52% M

# CLINICAL HOURS WORKED IN SECTOR

Public	Private
29%	71%

# EMPLOYMENT PER 100,000 POPULATION

	HEAD	FTE
	COUNT	
Aus	84.0	76.7
Tas	70.0	65.3
South	74.2	70.2
North	69.5	65.4
North West	60.3	53.4

Sources: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), and ABS population data (2019).

## **DESCRIPTION**

Dental practitioners are a group of professions that focus on dental and oral health. They include:

- dental hygienists
- dentists
- dental hygienists
   dental prosthetists
- oral health therapists
- dental therapists

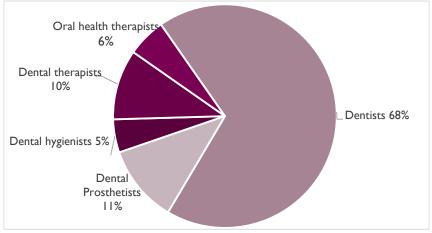
The data in this profile includes all these professions.

# DENTAL PROFESSIONALS IN TASMANIA, 2019

Profession/Profession Group	Headcount	FTE
Dental hygienists	18	15.3
Dental prosthetists	42	42.6
Dental therapists	38	33.6
Dentists	255	237.2
Oral health therapists	21	20.6
TOTAL	374	349.3

As shown in Figure 1.0, dentists make up most of the dental practitioners in Tasmania (68%).

Figure 1.0 Dental Practitioners by Registration Division, TAS 2019



Source: National Health Workforce Data Set including Tasmanian Unit Record Data (2019)



# **DENTAL HYGIENISTS**

SNAPSHOT OF THE WORKFORCE IN TASMANIA

## **NUMBERS**

EMPLOYED	18
HEADCOUNT	
EMPLOYED FTE	15.3
FTE CHANGE	20%
2014-19	
AVG. WEEKLY	32.3 hours
HOURS	
OVER 60 YEARS	0%
OLD	
AVERAGE AGE	42.5 years
	-
GENDER	94% F
	6% M

CLINICAL HOURS WORKED IN SECTOR

Public	Private
0%	100%

EMPLOYMENT PER 100,000 POPULATION

	HEAD COUNT	FTE
Aus	6.0	4.4
Tas	3.4	2.9
South	3.7	3.0
North	4.0	3.8
North West	2.7	2.7

Sources: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), and ABS population data (2019).

## **DESCRIPTION**

Dental hygienists work under the direction of a dentist to assess a patient's oral health and to diagnose, treat and prevent oral disease.

### **TRAINING**

#### PROGRAM SUMMARY

Dental hygienists must complete a minimum two-year advanced diploma, or three-year undergraduate program of study approved by the Dental Board of Australia.

#### **IN TASMANIA**

There are no approved training programs for dental hygienists in Tasmania.

### **REGISTRATION**

Dental hygienists must be registered with the Dental Board of Australia.

### **NOTES**

The Department of Health Radiation Protection Unit provides licenses to practice in accordance with the Tasmanian Radiation Protection Act 2005 and the Radiation Protection Regulations 2016.



# **DENTAL PROSTHETISTS**

SNAPSHOT OF THE WORKFORCE IN TASMANIA

### **NUMBERS**

EMPLOYED	42
HEADCOUNT	
EMPLOYED FTE	42.6
FTE CHANGE	-5%
2014-19	
AVG. WEEKLY	38.5 hours
HOURS	
OVER 60 YEARS	17%
OLD	
AVERAGE AGE	49.6 years
GENDER	29% F
	71% M

CLINICAL HOURS WORKED IN SECTOR

Public Private 29% 71%

EMPLOYMENT PER 100,000 POPULATION

	HEAD COUNT	FTE
Aus	4.6	4.5
Tas	7.9	8.0
South	8.4	8.8
North	7.4	8.3
North West	7.1	5.6

Sources: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), and ABS population data (2019).

## **DESCRIPTION**

Dental prosthetists design, construct, repair and fit dentures and mouth guards for patients who have been referred to them by a dentist.

### **TRAINING**

#### PROGRAM SUMMARY

Dental prosthetists must complete a minimum three-year undergraduate, or one-year postgraduate program of study approved by the Dental Board of Australia.

#### IN TASMANIA

There are no approved training programs for dental prosthetists in Tasmania.

### **REGISTRATION**

Dental prosthetists must be registered with the Dental Board of Australia.

### **NOTES**

The Department of Health Radiation Protection Unit provides licenses to practice in accordance with the *Tasmanian Radiation Protection Act* 2005 and the *Radiation Protection Regulations* 2016.



# **DENTAL THERAPISTS**

SNAPSHOT OF THE WORKFORCE IN TASMANIA

#### **NUMBERS**

EMPLOYED	38
HEADCOUNT	
EMPLOYED FTE	33.6
FTE CHANGE	-13%
2014-19	
AVG. WEEKLY	33.6 hours
HOURS	
OVER 60 YEARS	21%
OLD	
AVERAGE AGE	51.6 years
	•
GENDER	92% F
	8% M

CLINICAL HOURS WORKED IN SECTOR

Public Private 87% 13%

EMPLOYMENT PER 100,000 POPULATION

	HEAD COUNT	FTE
Aus	3.2	2.5
Tas	7.1	6.3
South	4.4	4.1
North	6.7	6.1
North West	14.2	11.8

Sources: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), and ABS population data (2019).

### **DESCRIPTION**

Dental therapists diagnose and treat oral disease in children up to 18 years. Dental therapists examine, clean and extract teeth as well as undertake preventative work and health promotion. Dental therapists may work in general or specialised dental practices under the general supervision of a dentist.

### TRAINING

#### PROGRAM SUMMARY

Dental therapists used to complete a minimum three-year undergraduate program of study approved by the Dental Board of Australia however these programs have ceased (nationwide) and have been replaced with oral health therapy courses.

#### IN TASMANIA

There are no approved training programs for dental therapists in Tasmania.

#### REGISTRATION

Dental therapists must be registered with the Dental Board of Australia.

#### **NOTES**

The Department of Health Radiation Protection Unit provides licenses to practice in accordance with the *Tasmanian Radiation Protection Act* 2005 and the *Radiation Protection Regulations* 2016.

The higher average age of this profession reflects that the profession is being phased out and replaced with oral health therapy.



# **DENTISTS**

SNAPSHOT OF THE WORKFORCE IN TASMANIA

### **NUMBERS**

EMPLOYED	255
HEADCOUNT	
EMPLOYED FTE	237.2
FTE CHANGE	11%
2014-19	
AVG. WEEKLY	35.3 hours
HOURS	
OVER 60 YEARS	16%
OLD	
AVERAGE AGE	42.7 years
	•
GENDER	38% F
	62% M

CLINICAL HOURS WORKED IN SECTOR

Public Private 79%

EMPLOYMENT PER 100,000 POPULATION

	HEAD	FTE
	COUNT	
Aus	63.0	58.7
Tas	47.7	44.4
South	53.4	50.1
North	46.5	42.6
North West	35.5	32.9

Sources: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), and ABS population data (2019).

### **DESCRIPTION**

Dentists prevent, diagnose, and treat dental disease, injury, decay and malformations of the teeth, gums, hard and soft tissue found on the mouth and other orofacial structures using surgery and other techniques.

### **TRAINING**

#### PROGRAM SUMMARY

Dentists must complete a minimum five-year undergraduate, or four-year postgraduate master program of study approved by the Dental Board of Australia. Further training is required for specialisation.

#### IN TASMANIA

There are no approved training programs for dentists in Tasmania.

#### REGISTRATION

Dentists must be registered with the Dental Board of Australia.

### **NOTES**

The Department of Health Radiation Protection Unit provides licenses to practice in accordance with the *Tasmanian Radiation Protection Act* 2005 and the *Radiation Protection Regulations* 2016.



# **ORAL HEALTH THERAPISTS**

SNAPSHOT OF THE WORKFORCE IN TASMANIA

### **NUMBERS**

EMPLOYED	21
HEADCOUNT	
EMPLOYED FTE	20.6
FTE CHANGE	124%
2014-19	
AVG. WEEKLY	37.2 hours
HOURS	
OVER 60 YEARS	0%
OLD	
AVERAGE AGE	30.7 years
	•
GENDER	90% F
	10% M

CLINICAL HOURS WORKED IN SECTOR

Public Private 50% 50%

EMPLOYMENT PER 100,000 POPULATION

	HEAD COUNT	FTE
Aus	7.3	6.5
Tas	3.9	3.9
South	4.4	4.3
North	4.7	4.6
North West	0.9	0.0

Sources: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), and ABS population data (2019).

### **DESCRIPTION**

Oral health therapists hold a dual qualification as a dental therapist and dental hygienist. Oral health therapists work with children and adults under the direction of a dentist to assess a patient's oral health and to diagnose, treat and prevent oral disease.

### **TRAINING**

#### PROGRAM SUMMARY

Oral health therapists must complete a minimum three-year undergraduate program of study approved by the Dental Board of Australia. Oral health therapy courses have replaced dental therapy courses.

#### IN TASMANIA

There are no approved training programs for oral health therapists in Tasmania.

### **REGISTRATION**

Oral health therapists must be registered with the Dental Board of Australia.

#### **NOTES**

The Department of Health Radiation Protection Unit provides licenses to practice in accordance with the *Tasmanian Radiation Protection Act* 2005 and the *Radiation Protection Regulations* 2016.

There has been a significant increase in the workforce over the past five years. This is from a low starting point.



# MEDICAL RADIATION PRACTITIONERS: INTRODUCTION

SNAPSHOT OF THE WORKFORCE IN TASMANIA

#### **NUMBERS**

EMPLOYED	313
HEADCOUNT	
EMPLOYED FTE	287.2
FTE CHANGE	15%
2014-19	
AVG. WEEKLY	34.9 hours
HOURS	
OVER 60 YEARS	9%
OLD	
AVERAGE AGE	39.6 years
GENDER	68% F

# CLINICAL HOURS WORKED IN SECTOR

32% M

Public	Private
55%	45%

# EMPLOYMENT PER 100,000 POPULATION

	HEAD	FTE
	COUNT	
Aus	58.6	54.2
Tas	58.6	53.7
South	61.8	56.5
North	58.0	54. I
North West	51.4	46.4

Sources: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), and ABS population data (2019).

### **DESCRIPTION**

Medical radiation practitioners perform diagnostic imaging studies on patients, plan and administer radiation treatments and prepare and administer nuclear medicine. The following professions are included:

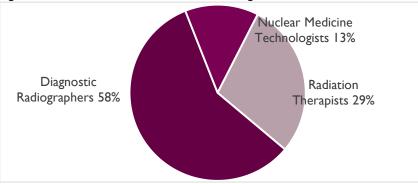
- Diagnostic radiographers
- Radiation therapists
- Nuclear medicine technologists

The tables to the left combine the data for these professions to give an overall picture of the group.

#### MEDICAL RADIATION PRACTITIONERS IN TAS, 2019

Registration division	Headcount	FTE
Diagnostic Radiographers	232	206.1
Nuclear Medicine Technologists	17	17.3
Radiation Therapists	64	63.7

Figure 1.0 Medical Radiation Practitioners Registration Division Tas, 2019



Source: National Health Workforce Data Set including Tasmanian Unit Record Data (2019)

### **NOTES**

The Department of Health Radiation Protection Unit provides licenses to practice in accordance with the *Tasmanian Radiation Protection Act* 2005 and the *Radiation Protection Regulations* 2016.

Sonographers are included in the self-regulated profession profiles.



# DIAGNOSTIC RADIOGRAPHERS

SNAPSHOT OF THE WORKFORCE IN TASMANIA

#### **NUMBERS**

EMPLOYED	232
HEADCOUNT	
EMPLOYED FTE	206.1
FTE CHANGE	15%
2014-19	
AVG. WEEKLY	33.8 hours
HOURS	
OVER 60 YEARS	12%
OLD	
AVERAGE AGE	41.1 years
	•
GENDER	71% <b>F</b>
	29% M

CLINICAL HOURS WORKED IN SECTOR

Public Private 49% 51%

EMPLOYMENT PER 100,000 POPULATION

	HEAD	FTE
	COUNT	
Aus	46.0	*
Tas	43.4	38.6
South	47.9	41.8
North	37. l	34.4
North West	40.8	36. I

Sources: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), and ABS population data (2019).

### **DESCRIPTION**

Diagnostic radiographers use specialised equipment to produce x-rays, computerised tomography (CT), magnetic resonance imaging (MRI), mammography, ultrasound, angiography, and other images to diagnose, monitor and treat injury and illness. Diagnostic radiographers calculate details of the procedure, for example, the correct equipment settings, explain the procedure to the patient, monitor them throughout and communicate findings to the referring medical practitioner.

#### **TRAINING**

#### PROGRAM SUMMARY

Diagnostic radiographers must complete a minimum four-year undergraduate, or two-year postgraduate program of study approved by the Medical Radiation Practice Board of Australia.

#### IN TASMANIA

The University of Tasmania offers an approved course in collaboration with Charles Sturt University's Wagga Wagga campus, where the final two years of the Bachelor of Health Science (Medical Radiation Science) take place. Students can use the degree to enter postgraduate courses throughout Australia.

#### REGISTRATION

Diagnostic radiographers must be registered with the Medical Radiation Practice Board of Australia.

#### **NOTES**

The Department of Health Radiation Protection Unit provides licenses to practice in accordance with the *Tasmanian Radiation Protection Act* 2005 and the *Radiation Protection Regulations* 2016.

Some diagnostic radiographers are dual qualified as sonographers. These individuals are included in this profile (and not included again in the 2018 Sonographer profile).

<sup>\*</sup> Not available



# NUCLEAR MEDICINE TECHNOLOGISTS

SNAPSHOT OF THE WORKFORCE IN TASMANIA

#### **NUMBERS**

EMPLOYED	17
HEADCOUNT	
EMPLOYED FTE	17.3
FTE CHANGE	-3%
2014-19	
AVG. WEEKLY	38.7 hours
HOURS	
OVER 60 YEARS	0%
OLD	
AVERAGE AGE	33.5 years
GENDER	35% F
	65% M

CLINICAL HOURS WORKED IN SECTOR

Public Private 76%

EMPLOYMENT PER 100,000 POPULATION

	HEAD	FTE
	COUNT	
Aus	4.1	*
Tas	3.2	3.2
South	4.0	4.4
North	3.4	3.0
North West	0.9	0.9

Sources: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), and ABS population data (2019).

### **DESCRIPTION**

Nuclear medicine technologists use radioactive materials, called radiopharmaceuticals, to investigate, diagnose and treat disease. To do this, nuclear medicine technologists create images of organs, study body functions and analyse biological specimens. Specialised technicians may also work with ultrasound, positron emission tomography (PET), computer programming or bone mineral densitometry. Nuclear medicine technologists calculate procedure details, for example, the correct equipment settings, explain the procedure to the patient, monitor them throughout and communicate findings to the referring medical practitioner.

#### TRAINING

#### PROGRAM SUMMARY

Nuclear medicine technologists must complete a minimum three-year undergraduate, or two-year postgraduate master program of study approved by the Medical Radiation Practice Board of Australia.

#### IN TASMANIA

The University of Tasmania offers an approved four-year course in collaboration with Charles Sturt University's Wagga Wagga campus, where the final two years of the Bachelor of Health Science (Medical Radiation Science) take place. Students can use the degree to enter postgraduate courses throughout Australia.

### REGISTRATION

Nuclear medicine technologists must be registered with the Medical Radiation Practice Board of Australia.

#### **NOTES**

The Department of Health Radiation Protection Unit provides licenses to practice in accordance with the *Tasmanian Radiation Protection Act* 2005 and the *Radiation Protection Regulations* 2016.

<sup>\*</sup> Not available



# RADIATION THERAPISTS

SNAPSHOT OF THE WORKFORCE IN TASMANIA

#### **NUMBERS**

EMPLOYED	64
HEADCOUNT	
EMPLOYED FTE	63.7
FTE CHANGE	21%
2014-19	
AVG. WEEKLY	37.8 hours
HOURS	
OVER 60 YEARS	3%
OLD	
AVERAGE AGE	35.8 years
	•
GENDER	67% F
	33% M

CLINICAL HOURS WORKED IN SECTOR

Public Private 83% 17%

EMPLOYMENT PER 100,000 POPULATION

	HEAD	FTE
	COUNT	
Aus	8.6	*
Tas	12.0	11.9
South	9.9	10.3
North	17.5	16.8
North West	9.8	9.4

Sources: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), and ABS population data (2019).

### **DESCRIPTION**

Radiation therapists design, plan and administer radiation treatment to cancer patients, and provide related care to patients in conjunction with radiation oncologists or other medical specialists. Radiation therapists use 3D and 4D imaging equipment and computer planning systems to create and calculate the best treatment for the patient as prescribed by the radiation oncologist. They are responsible for radiation treatment delivery and use advanced technology and imaging to ensure minimal damage to healthy tissue surrounding the tumour.

#### **TRAINING**

#### **PROGRAM SUMMARY**

Radiation therapists must complete a minimum four-year undergraduate, or two-year postgraduate master program of study approved by the Medical Radiation Practice Board of Australia.

#### IN TASMANIA

The University of Tasmania offers an approved course in collaboration with Charles Sturt University's Wagga Wagga campus, where the final two years of the Bachelor of Health Science (Medical Radiation Science) take place. Students can use the degree to enter postgraduate courses throughout Australia.

#### REGISTRATION

Radiation therapists must be registered with the Medical Radiation Practice Board of Australia.

### **NOTES**

The Department of Health Radiation Protection Unit provides licenses to practice in accordance with the *Tasmanian Radiation Protection Act* 2005 and the *Radiation Protection Regulations* 2016.

<sup>\*</sup> Not available



# **OCCUPATIONAL THERAPISTS**

SNAPSHOT OF THE WORKFORCE IN TASMANIA

### **NUMBERS**

EMPLOYED	305
HEADCOUNT	
EMPLOYED FTE	252.2
FTE CHANGE	24%
2014-19	
AVG. WEEKLY	31.4 hours
HOURS	
OVER 60 YEARS	6%
OLD	
AVERAGE AGE	41.4 years
	•
GENDER	89% F

CLINICAL HOURS WORKED IN SECTOR

11% M

Public Private 47% 53%

EMPLOYMENT PER 100,000 POPULATION

	HEAD	FTE
	COUNT	
Aus	78.9	70. l
Tas	57. l	47.2
South	62.9	51.3
North	59.3	49.0
North West	39.9	34.8

Sources: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), and ABS population data (2019).

### **DESCRIPTION**

Occupational therapists work with people of all ages and abilities to do the things they need and want to in all aspects of life, such as taking care of themselves and others, working, volunteering, and participating in hobbies, interests and social events. Occupational therapists call these 'occupations'.

Occupational therapists are experts in the relationships between what people do and their health and well-being, and work with people to help make every day living easier through developing skills, finding new ways to do things and changing the environment to suit a person's needs.

### **TRAINING**

#### PROGRAM SUMMARY

Occupational therapists must complete a minimum four-year undergraduate, or two-year postgraduate master program of study approved by the Occupational Therapy Board of Australia.

#### IN TASMANIA

There are no approved training programs for occupational therapists in Tasmania.

### **REGISTRATION**

Occupational therapists must be registered with the Occupational Therapy Board of Australia.



# **OPTOMETRISTS**

SNAPSHOT OF THE WORKFORCE IN TASMANIA

### **NUMBERS**

99
86.4
7%
33.2 hours
13%
44.3 years
•
49% F
51% M

CLINICAL HOURS WORKED IN SECTOR

Public Private 95%

EMPLOYMENT PER 100,000 POPULATION

	HEAD	FTE
	COUNT	
Aus	21.0	19.1
Tas	18.5	16.2
South	21.9	19.2
North	14.8	12.6
North West	15.1	13.4

Sources: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), and ABS population data (2019).

### **DESCRIPTION**

Optometrists investigate, diagnose, treat, and provide preventative health care in relation to the human eye and vision systems. Optometrists perform eye and vision tests to assess visual, ocular, and other abnormalities, ocular and systemic diseases with ocular manifestations. They also prescribe lenses, optical aids, therapy, and medication to correct and manage vision problems and eye diseases.

### **TRAINING**

#### PROGRAM SUMMARY

Optometrist must complete a five-year undergraduate, five year combined undergraduate/masters (or 3.5 year accelerated) or four-year master program of study approved by the Optometry Board of Australia.

#### IN TASMANIA

There are no approved training programs for optometry in Tasmania.

#### REGISTRATION

Optometrists must be registered with the Optometry Board of Australia.



# **OSTEOPATHS**

A SNAPSHOT OF THE WORKFORCE IN TASMANIA

### **NUMBERS**

EMPLOYED	47
HEADCOUNT	
EMPLOYED FTE	40.9
FTE CHANGE	8%
2014-19	
AVG. WEEKLY	33.0 hours
HOURS	
OVER 60 YEARS	5%
OLD	
AVERAGE AGE	42.8 years
	•
GENDER	55% F
	45% M

CLINICAL HOURS WORKED IN SECTOR

Public	Private
1%	99%

EMPLOYMENT PER 100,000 POPULATION

	HEAD	FTE
	COUNT	
Aus	9.5	8.1
Tas	8.8	7.7
South	9.5	8.5
North	12.1	10.0
North West	2.7	2.7

Sources: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), and ABS population data (2019).

## **DESCRIPTION**

Osteopaths focus on human movement related strains and injuries. Mostly working in private practice, they provide lifestyle and exercise advice to reduce pain and improve movement.

#### **TRAINING**

#### PROGRAM SUMMARY

Osteopaths are required to have completed a Bachelor or Master of Osteopathy degree approved by the Osteopathy Board of Australia.

#### IN TASMANIA

There are no approved training programs for osteopathy in Tasmania.

## **REGISTRATION**

Osteopaths must be registered with the Osteopathy Board of Australia.

### **NOTES**

While the data points to osteopaths working in the public sector, the Tasmanian Health Service does not employ osteopaths.



# **PARAMEDICS**

A SNAPSHOT OF THE WORKFORCE IN TASMANIA

#### **NUMBERS**

EMPLOYED	413
HEADCOUNT	
EMPLOYED FTE	469.4
FTE CHANGE	No 2014-18
2014-19	data
AVG. WEEKLY	43.2 hours
HOURS	
OVER 60 YEARS	6%
OLD	
AVERAGE AGE	39.5 years
GENDER	41% F
	59% M

# CLINICAL HOURS WORKED IN SECTOR

Public	Private	
85%	15%	

# EMPLOYMENT PER 100,000 POPULATION

	HEAD	FTE
	COUNT	
Aus	63.9	74.2
Tas	77.3	87.8
South	76.8	86.8
North	70. l	81.3
North West	87.8	99.1

Sources: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), and ABS population data (2019).

#### **DESCRIPTION**

Paramedics provide emergency care to patients and transport to medical facilities. Their duties and tasks include:

- assessment of a patient's condition and provision of medical treatment and care
- · resuscitating and stabilising patients if necessary
- using complex life support techniques, administer oxygen, drips, and medical drugs where required
- making decisions whether and how to move patients
- collaboration with other emergency services personnel.

Paramedics work closely with their colleagues, often in physically and emotionally challenging situations.

#### **TRAINING**

#### PROGRAM SUMMARY

Paramedics must complete a minimum three-year undergraduate program of study approved by the Paramedicine Board of Australia.

Postgraduate master programs are available at the specialist paramedic level for intensive care, aeromedical and retrieval and extended care paramedic practice.

#### **IN TASMANIA**

The University of Tasmania offers an approved two-year course studying across three semesters a year.

#### REGISTRATION

Paramedics must be registered with the Paramedicine Board of Australia.

### **NOTES**

Paramedicine became a nationally regulated health profession on 30 November 2018. Most of the National Health Workforce Data Set is based on re-registration data, meaning 2019 is the first full year of workforce data.



# **PHARMACISTS**

SNAPSHOT OF THE WORKFORCE IN TASMANIA

### **NUMBERS**

EMPLOYED	647
HEADCOUNT	
EMPLOYED FTE	579.7
FTE CHANGE	13%
2014-19	
AVG. WEEKLY	34.0 hours
HOURS	
OVER 60 YEARS	9%
OLD	
AVERAGE AGE	40.1 years
	•
GENDER	60% F

CLINICAL HOURS WORKED IN SECTOR

40% M

Public Private 32% 68%

EMPLOYMENT PER 100,000 POPULATION

	HEAD	FTE
	COUNT	
Aus	101.9	94.5
Tas	121.1	108.5
South	139.7	122.8
North	109.9	98.2
North West	90.5	87.2

Sources: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), and ABS population data (2019).

### **DESCRIPTION**

Pharmacists compound and dispense pharmaceuticals and other drugs and medicines, conduct research on production, storage, quality control and distribution of drugs and related supplies and advise patients and other health professionals on the selection, dosage, interactions, and side effects of pharmaceuticals. Pharmacists work with other health professionals to monitor the health and progress of patients and ensure medications are taken in a safe and effective manner.

Pharmacists have a legislated regulatory role in the manufacture, supply and distribution of drugs and poisons and work closely with other health professionals managing medication risk.

### **TRAINING**

#### PROGRAM SUMMARY

Pharmacists must complete a minimum four-year undergraduate, or two-year postgraduate master program of study approved by the Pharmacy Board of Australia. A recognised program of study is required to gain endorsement as a pharmacist immuniser.

#### IN TASMANIA

The University of Tasmania offers approved training programs for pharmacists in Tasmania.

### **REGISTRATION**

Pharmacists must be registered with the Pharmacy Board of Australia.



# **PHYSIOTHERAPISTS**

SNAPSHOT OF THE WORKFORCE IN TASMANIA

### **NUMBERS**

EMPLOYED	491
HEADCOUNT	
EMPLOYED FTE	431.4
FTE CHANGE	21%
2014-19	
AVG. WEEKLY	33.4 hours
HOURS	
OVER 60 YEARS	8%
OLD	
AVERAGE AGE	40.6 years
	•
GENDER	71% F

CLINICAL HOURS WORKED IN SECTOR

29% M

Public Private 63%

EMPLOYMENT PER 100,000 POPULATION

	HEAD	FTE
	COUNT	
Aus	116.4	107.5
Tas	91.9	80.7
South	106.8	89.7
North	84.3	76.8
North West	65.6	64.1

Sources: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), and ABS population data (2019).

### **DESCRIPTION**

Physiotherapists investigate, diagnose, treat, and provide preventative care in relation to the structure and movement of the human body. To optimise physical function, aid in recovery from injury or illness, reduce pain and prevent further injury, physiotherapists use various treatment methods, including exercise and rehabilitation programs to improve mobility and strengthen muscles, joint mobilisation and manipulation to reduce pain and stiffness, muscle re-education to improve control, airway clearance techniques and breathing exercises, soft tissue mobilisation and dry needling, assistance with the use of mobility aides, hydrotherapy and electrotherapy.

#### TRAINING

#### PROGRAM SUMMARY

Physiotherapists must complete a minimum four-year undergraduate, two-year postgraduate master program of study or professional doctorate program that is approved by the Physiotherapy Board of Australia.

#### IN TASMANIA

There is no training program for physiotherapy in Tasmania.

#### REGISTRATION

Physiotherapists must be registered with the Physiotherapy Board of Australia.

### **NOTES**

The Department of Health Radiation Protection Unit provides licenses to practice in accordance with the *Tasmanian Radiation Protection Act* 2005 and the *Radiation Protection Regulations* 2016.



# **PODIATRISTS**

SNAPSHOT OF THE WORKFORCE IN TASMANIA

#### **NUMBERS**

EMPLOYED	111
HEADCOUNT	
EMPLOYED FTE	100.9
FTE CHANGE	20%
2014-19	
AVG. WEEKLY	34.5 hours
HOURS	
OVER 60 YEARS	5%
OLD	
AVERAGE AGE	39.3 years
	-
GENDER	61% F
	39% M

CLINICAL HOURS WORKED IN SECTOR

Public Private 73%

EMPLOYMENT PER 100,000 POPULATION

	HEAD	FTE
	COUNT	
Aus	19.4	18.5
Tas	20.8	18.9
South	20.8	19.6
North	20.9	19.2
North West	20.4	16.7

Sources: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), and ABS population data (2019).

### **DESCRIPTION**

Podiatrists specialise in the prevention, diagnosis, treatment, and rehabilitation of disorders of the foot and lower leg for children and adults. Podiatrists undertake nail surgery and manage foot ulcers and the impact of chronic disease such as diabetes.

#### TRAINING

#### PROGRAM SUMMARY

Podiatrists must complete a minimum three-year undergraduate or two-year postgraduate master program of study approved by the Podiatry Board of Australia. Further training is required to become a podiatric surgeon and to gain endorsement for scheduled medicines.

#### IN TASMANIA

There are no approved training programs for podiatry in Tasmania.

#### REGISTRATION

Podiatrists must be registered with the Podiatry Board of Australia. Podiatrists may administer or apply some medications (such as local anaesthetic and topical creams) as a part of treatment without further endorsement. To prescribe and administer a limited supply of other medications (such as antibiotics) podiatrists must complete additional qualifications and supervised practice to gain endorsement for scheduled medicines by the Podiatry Board of Australia.

#### **NOTES**

The Department of Health Radiation Protection Unit provides licenses to practice in accordance with the *Tasmanian Radiation Protection Act* 2005 and the *Radiation Protection Regulations* 2016.



# **PSYCHOLOGISTS**

SNAPSHOT OF THE WORKFORCE IN TASMANIA

#### **NUMBERS**

EMPLOYED	496
HEADCOUNT	
EMPLOYED FTE	401.4
FTE CHANGE	10%
2014-19	
AVG. WEEKLY	30.9 hours
HOURS	
OVER 60 YEARS	15%
OLD	
AVERAGE AGE	46.8 years
	•
GENDER	83% F
	17% M

# CLINICAL HOURS WORKED IN SECTOR

Public	Private
40%	60%

# EMPLOYMENT PER 100,000 POPULATION

	HEAD	FTE
	COUNT	
AUS	112.0	95.3
TAS	92.8	75.I
South	123.6	98.9
North	59.3	49.8
North West	62.1	52.4

Sources: National Health Workforce Data Set including Tasmanian Unit Record Data (2019), and ABS population data (2019).

### **DESCRIPTION**

Psychologists provide services to help adults and children improve relationships, behaviour or thinking processes through a range of methods, including cognitive and psychological assessments, counselling, treatment programs and applied research. Psychologists may undertake further training to gain endorsement in a particular area of practice such as clinical, occupational or neuro psychology.

### **TRAINING**

#### PROGRAM SUMMARY

Psychologists must complete a minimum four-year program of study approved by the Psychology Board of Australia, followed by further approved postgraduate study and/or internship.

#### IN TASMANIA

The University of Tasmania offers approved undergraduate and postgraduate psychology training options in Tasmania

#### REGISTRATION

Psychologists must be registered with the Psychology Board of Australia.



# **AUDIOLOGISTS**

## **PUBLIC HEALTH**

# **SECTOR NUMBERS**

OCCUPIED	4
HEADCOUNT	
OCCUPIED FTE	2.7
OVER 60 YEARS	25%
OLD	
AVERAGE AGE	44 years
AVERAGE AGE GENDER	44 years 75% F
	<u> </u>

# OCCUPIED FTE PER 100,000 POPULATION

Tas	0.5 *
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<sup>\*</sup> Statewide service

Sources: Executive Reporting System (FYI) Human Resources: Establishment 20 November 2019; ABS population data (2019)

### **DESCRIPTION**

Audiologists assess, determine, and manage non-medical ear disorders of children and adults which includes hearing loss, tinnitus, hyperacusis and vertigo. Audiologists also provide rehabilitation technology such as hearing aids, cochlear implants, and other surgically implanted devices.

### **TRAINING**

#### **PROGRAM SUMMARY**

To gain accreditation, audiologists must complete a masters-level degree in clinical audiology and undertake a one-year clinical internship, as approved by the industry peak body, Audiology Australia.

#### IN TASMANIA

There are no accredited training programs for audiology in Tasmania.

### **REGULATION**

Audiology is a self-regulated profession; audiologists can apply for yearly accreditation through Audiology Australia.

#### **NOTES**

This profile is a summary of the workforce employed by the Tasmanian Health Service and Department of Health.

The small size of this group must be considered when reviewing the data and any trends within. Even minimal movement, for example the resignation of one employee will have a significant influence on the data profile.



# CARDIAC PHYSIOLOGISTS / ECHOCARDIOGRAPHERS

### **PUBLIC HEALTH**

# **SECTOR NUMBERS**

OCCUPIED	12
HEADCOUNT	
OCCUPIED FTE	8.2
<b>OVER 60 YEARS</b>	0%
OLD	
AVERAGE AGE	43 years
GENDER	83% F
	17% M

# OCCUPIED FTE PER 100,000 POPULATION

Tas	1.5
South	2.6
North and North West*	0.4

<sup>\*</sup>Shared service

Sources: Executive Reporting System (FYI) Human Resources: Establishment 20 November 2019; ABS population data (2019)

### **DESCRIPTION**

Cardiac physiologists and echocardiographers form part of the cardiology team operating a range of specialist equipment and provide data to Cardiologists and other medical practitioners for use in patient care. The data for these workforces are combined in this profile.

Cardiac Physiologists are involved in the diagnosis and treatment of patients with heart disease. They use ultrasound and other technical equipment to create an image of the heart, then record and analyse physiological data to diagnose and treat cardiac disease.

Echocardiographers provide technical services for investigation, diagnosis, and treatment of heart disease (echocardiography).

#### **TRAINING**

#### PROGRAM SUMMARY

Cardiac physiologists are usually educated to at least a bachelor's degree level in clinical physiology, biomedical science, health science, nursing, or exercise physiology. The Bachelor of Echocardiography and Cardiac Physiology / Graduate Diploma in Echocardiography are the first Australian courses allowing undergraduate entry to this field.

#### **IN TASMANIA**

There are no training programs for cardiac physiologists or echocardiographers in Tasmania.

#### **REGULATION**

Cardiac physiology and echocardiography are non-regulated professions. Cardiac physiologists and echocardiographers can apply for membership with the Australian Council for Clinical Physiology and/or accreditation with the Australian Sonographer Accreditation Registry depending on the role being performed.

#### NOTES

This profile is a summary of the workforce employed by the Tasmanian Health Service and Department of Health. Cardiac physiology and echocardiographers are employed under the Allied Health Professional Agreement. However, they do not meet Allied Health Professions Australia's definition of an allied health professional.



# **COUNSELLORS**

## **PUBLIC HEALTH**

# **SECTOR NUMBERS**

OCCUPIED	18
HEADCOUNT	
OCCUPIED FTE	15.4
OVER 60 YEARS	17%
OLD	
AVERAGE AGE	46 years
	•
GENDER	67% F
	33% M

# OCCUPIED FTE PER 100,000 POPULATION

Tas	2.9
South	5.6
North	0.0
North West	0.0

Sources: Executive Reporting System (FYI) Human Resources: Establishment 20 November 2019; ABS population data (2019)

### **DESCRIPTION**

Counsellors use counselling, psychotherapeutic and psychological theories with individuals, couples, families, or groups to effect understanding and change in the clients' lives. Through therapeutic relationships, the counsellor helps individuals to explore and resolve issues that are affecting them.

## **TRAINING**

#### PROGRAM SUMMARY

There are various counselling tertiary qualifications and programs of study; most starting at diploma level.

#### IN TASMANIA

There are training courses in Tasmania for counsellors.

### **REGULATION**

Counselling is a non-regulated profession.

Counsellors can apply for certification through either of the leading industry bodies, the Psychotherapy and the Counselling Federation of Australia or the Australian Counselling Association.

#### **NOTES**

This profile is a summary of the workforce employed by the Tasmanian Health Service and Department of Health.

Counsellors are employed under the Allied Health Professional Agreement. However, they do not meet Allied Health Professions Australia's definition of an allied health professional.



# DIETITIANS / NUTRITIONISTS

### **PUBLIC HEALTH**

### **SECTOR NUMBERS**

OCCUPIED	72
HEADCOUNT	
OCCUPIED FTE	51.9
OVER 60 YEARS	4%
OLD	
AVERAGE AGE	39 years
GENDER	99% F
	1% M

# OCCUPIED FTE PER 100,000 POPULATION

Tas	9.7
South	12.0
North	7.8
North West	6.6

Sources: Executive Reporting System (FYI) Human Resources: Establishment 20 November 2019; ABS population data (2019)

## **DESCRIPTION**

Dietitians can work in any of the areas that nutritionists work but, additionally they can provide nutrition advice for treatment of a broad range of diseases and health conditions.

Nutritionists assess nutritional needs, plan diets, and educate children and adults to attain, maintain and promote health through healthy eating.

### TRAINING

#### PROGRAM SUMMARY

Dietitians are required to complete a bachelor or master's degree accredited by the industry peak body Dietitians Association of Australia (DAA).

Nutritionists can have a number of training pathways including higher education Bachelor degrees with a major in nutrition and science degrees with postdoctoral studies in nutrition.

#### - IN TASMANIA

There are no accredited training programs for dietitians in Tasmania.

There are various nutritionist courses available in Tasmania through TAFE and the University of Tasmania.

### **REGULATION**

Nutrition is a non-regulated profession. Nutritionists can apply for membership with the Nutrition Society of Australia (NSA). Dietetics is a self-regulated profression. Dietitians can apply for accreditation through the DAA.

#### NOTES

This profile combines the dietitian and nutritionist professions.

This profile is a summary of the workforce employed by the Tasmanian Health Service and Department of Health.



# ENVIRONMENTAL / PUBLIC HEALTH OFFICERS

### **PUBLIC HEALTH**

# **SECTOR NUMBERS**

OCCUPIED	9
HEADCOUNT	
OCCUPIED FTE	8.0
<b>OVER 60 YEARS</b>	0%
OLD	
AVERAGE AGE	49 years
GENDER	44% F
	56% M

# OCCUPIED FTE PER 100,000 POPULATION

Tas	1.5 *

<sup>\*</sup> Statewide service

Sources: Executive Reporting System (FYI) Human Resources: Establishment 20 November 2019; ABS population data (2019)

### **DESCRIPTION**

Environmental health officers assess and control physical, chemical, and biological factors that can influence a person's health. Environmental health officers focus on disease prevention and creating health-supportive environments.

Public health officers focus on the overall health of communities. They educate the public on health risks and healthy living. They also create programs to encourage healthier lifestyles and minimise the risk of illness, disease and infection through education, policy making and research.

#### **TRAINING**

#### PROGRAM SUMMARY

There are various education paths leading to environmental health and public health officer careers, including studying environmental or public health, science and/or management at university or TAFE.

Tertiary qualifications and programs of study for environmental health are accredited by Environmental Health Australia (EHA).

#### **IN TASMANIA**

There are courses available in Tasmania for environmental and public health officers.

### **REGULATION**

Environmental health officers and public health officers are non-regulated professions. However, they can apply for membership with EHA and Public Health Association of Australia, respectively.

#### NOTES

This profile is a summary of the workforce (environmental / public health officers combined) employed by the Department of Health.

Environmental Health Officers and Public Health Officers include several different roles employed under the Allied Health Professional Agreement. However, they do not meet Allied Health Professions Australia's definition of an allied health professional. The small size of this group must be considered when reviewing the data and any trends within. Even minimal movement, for example the resignation of one employee, will have a significant influence on the data profile.



# **EPIDEMIOLOGISTS**

## **PUBLIC HEALTH**

# **SECTOR NUMBERS**

OCCUPIED	3 or less
HEADCOUNT	
OCCUPIED FTE	2.7
OVER 60 YEARS	33%
OLD	
AVERAGE AGE	50 years
GENDER	67% F
	33% M

# OCCUPIED FTE PER 100,000 POPULATION

Tas	0.5 *
-----	-------

<sup>\*</sup> Statewide service

Sources: Executive Reporting System (FYI) Human Resources: Establishment 20 November 2019; ABS population data (2019)

### **DESCRIPTION**

Epidemiology combines the disciplines of medicine, health sciences, social science, and statistics. Epidemiologists investigate and study the occurrence of disease patters in human populations and identify causes of disease or other health related conditions or events. They provide essential data to manage, evaluate and plan services for the prevention, control and treatment of disease and other health related events.

#### **TRAINING**

#### PROGRAM SUMMARY

There are many pathways to becoming an epidemiologist. This requires at least, a master's degree in public health with an emphasis in epidemiology.

#### IN TASMANIA

The University of Tasmania offers undergraduate and postgraduate courses leading to recognition as an epidemiologist.

#### REGULATION

Epidemiology is a non-regulated profession. Epidemiologists can apply for membership with the Australasian Epidemiological Association.

#### **NOTES**

This profile is a summary of the workforce employed by the Department of Health.

Epidemiologists are employed under the Allied Health Professional Agreement. However, they do not meet Allied Health Professions Australia's definition of an allied health professional.

The small size of this group must be considered when reviewing the data and any trends within. Even minimal movement, for example the resignation of one employee, will have a significant influence on the data profile.

2019

# **EXERCISE PHYSIOLOGISTS**

#### **DESCRIPTION**

Accredited Exercise Physiologists (AEPs) are allied health professionals who are trained in the physical and psychological components of health and exercise prescription, and who have specialised knowledge in chronic and complex care. They are skilled in prevention and risk factor modification, providing evidence-based health advice and group education.

AEPs have skills in engaging patients in the process of self-managing their health, as well as in community health promotion and can be particularly beneficial to clients for whom regular exercise will be of key preventative or rehabilitative benefit.

Their range of skills equips them to work in roles ranging from primary practitioner through to population health, and in workplace health, research, primary prevention, education or in advocacy roles within health.

#### TRAINING

#### PROGRAM SUMMARY

Accredited exercise physiologists complete a minimum four years of study in an Exercise and Sport Science Australia (ESSA) accredited course meeting the AQF requirements for Level 7 that leads to bachelor's degree qualifications

#### IN TASMANIA

The University of Tasmania offers an accredited course, the Bachelor of Exercise and Sport Science with Clinical Honours in Exercise Physiology.

#### REGULATION

Exercise physiology is a self-regulated profession. AEPs can be accredited through the peak body, ESSA.

#### **NOTES**

The Tasmanian Health Service does not currently employ exercise physiologists.



# GENETIC COUNSELLORS

### **PUBLIC HEALTH**

# **SECTOR NUMBERS**

OCCUPIED	5
HEADCOUNT	
OCCUPIED FTE	4.6
OVER 60 YEARS	0%
OLD	
AVERAGE AGE	44 years
GENDER	100% F

# OCCUPIED FTE PER 100,000 POPULATION

Tas 0.9 \*

Sources: Executive Reporting System (FYI) Human Resources: Establishment 20 November 2019; ABS population data (2019)

### **DESCRIPTION**

Genetic counsellors help individuals, couples and families understand and adapt to the medical, psychological, familial, and reproductive implications of the genetic contribution to specific health conditions. Genetic counsellors help people make informed decisions about genetic testing, interpret test results, and communicate the implications of the result, for the individual and their family members. Genetic counsellors also consider the implications of a genetic diagnosis on the patient's immediate and extended family.

### **TRAINING**

#### PROGRAM SUMMARY

Certified genetic counsellors are required to complete a master's degree. Most programs of study accredited by the Human Genetics Society of Australasia require an undergraduate degree along with experience in counselling and/or genetics.

#### **IN TASMANIA**

There are no accredited training programs for genetic counsellors in Tasmania.

### **REGULATION**

Genetic counselling is a self-regulated profession. Genetic Counsellors can be certified by the Human Genetics Society of Australasia.

### **NOTES**

This profile is a summary of the workforce employed by the Tasmanian Health Service and Department of Health.

The small size of this group must be considered when reviewing the data and any trends within. Even minimal movement, for example the resignation of one employee, will have a significant influence on the data profile.

<sup>\*</sup> Statewide service



# **HEALTH PHYSICISTS**

## **PUBLIC HEALTH**

# **SECTOR NUMBERS**

OCCUPIED	4
HEADCOUNT	
OCCUPIED FTE	3.8
OVER 60 YEARS	25%
OLD	
AVERAGE AGE	42 years
GENDER	100% M

# OCCUPIED FTE PER 100,000 POPULATION

Tas	0.7

<sup>\*</sup> Statewide service

Sources: Executive Reporting System (FYI) Human Resources: Establishment 20 November 2019; ABS population data (2019)

### **DESCRIPTION**

Health physicists evaluate, and control health hazards to permit the safe use and application of radiation (for example, x-ray, radioactive materials, lasers, and radio waves). Health physicists understand how these forms of radiation interact with matter and advise the government, agencies and the public on radiation safety and participate in national committees where radiation protection standards are set.

### **TRAINING**

#### PROGRAM SUMMARY

 Health physicists usually hold a bachelor's degree or higher with a major in physics.

#### IN TASMANIA

The University of Tasmania offers science degrees.

### **REGULATION**

Health physics is a non-regulated profession. Health physicists can apply for membership through the leading industry body, the <u>Australasian College of Physical Scientists and Engineers in Medicine (ACPSEM)</u>.

#### **NOTES**

This profile is a summary of the workforce employed by the Tasmanian Health Service and Department of Health.

The small size of this group must be considered when reviewing the data and any trends within. Even minimal movement, for example the resignation of one employee, will have a significant influence on the data profile.

Health physics are employed under the Allied Health Professional Agreement. However, they do not meet Allied Health Professions Australia's definition of an allied health professional.



# MAMMOGRAPHIC TECHNOLOGISTS

## **PUBLIC HEALTH**

# **SECTOR NUMBERS**

OCCUPIED	3 or less
HEADCOUNT	
OCCUPIED FTE	1.2
OVER 60 YEARS	0%
OLD	
AVERAGE AGE	37 years
	-
GENDER	100% F

# OCCUPIED FTE PER 100,000 POPULATION

Tas	0.2
128	U.Z

<sup>\*</sup> Statewide service

Sources: Executive Reporting System (FYI) Human Resources: Establishment 20 November 2019; ABS population data (2019)

#### DESCRIPTION

Mammographic technologists are responsible for performing imaging procedures (in mammography) to ensure client screening and assessment occurs to a contemporary professional standard. The quality of the image and accuracy of positioning is crucial for the radiologist to make an accurate interpretation. These technologists maintain and operate imaging equipment and accessories in accordance with radiation protection and safety and infection control guidelines.

### **TRAINING**

#### PROGRAM SUMMARY

The Graduate Diploma of Mammography provides an alternative pathway for training mammography practitioners and to meet personnel shortages in the health sector. The course has been designed to align with the Australian Society of Medical Imaging and Radiation Therapy's (ASMIRT) Certificate of Clinical Proficiency in Mammography. Entry to this course requires successful completion of an AQF Level 7 Bachelor's degree (or equivalent) in a health or science-based field.

#### IN TASMANIA

There are no training programs for mammographic technologists in Tasmania.

### **REGULATION**

Mammographic technology is a non-regulated profession.

#### **NOTES**

The Department of Health Radiation Protection Unit provides licenses to practice in accordance with the Tasmanian Radiation Protection Act 2005 and the Radiation Protection Regulations 2016.

This profile is a summary of the workforce employed by the Tasmanian Health Service and Department of Health. The small size of this group must be considered when reviewing the data and any trends within. Even minimal movement, for example the resignation of one employee, will have a significant influence on the data profile.

Mammographic Technologists are employed under the Allied Health Professional Agreement. However, they do not meet Allied Health Professions Australia's definition of an allied health professional.



# **MEDICAL PHYSICISTS**

## **PUBLIC HEALTH**

# SECTOR NUMBERS

OCCUPIED	7
HEADCOUNT	
OCCUPIED FTE	7.0
<b>OVER 60 YEARS</b>	0%
OLD	
AVERAGE AGE	44 years
GENDER	29% F
	71% M

# OCCUPIED FTE PER 100,000 POPULATION

Tas	1.3
South	0.7
North and North	1.9
West	

Sources: Executive Reporting System (FYI) Human Resources: Establishment 20 November 2019; ABS population data (2019)

## **DESCRIPTION**

Medical physicists research, diagnose and implement new technologies, systems, and treatments for human diseases. Medical physicists also assist staff in physical and computational matters. Medical physicists may specialise in radiation oncology, diagnostic radiology, or nuclear medicine.

## TRAINING

#### PROGRAM SUMMARY

To be certified, medical physicists must complete training with the peak industry body, the Australian College of Physical Scientists and Engineers in Medicine (ACPSEM), which includes completing an accredited postgraduate degree.

#### IN TASMANIA

There is no accredited training program for medical physicists in Tasmania.

## **REGULATION**

Medical physics is a non-regulated profession. Medical physicists can apply for certification through ACPSEM.

### NOTES

The Department of Health Radiation Protection Unit provides licenses to practice in accordance with the *Tasmanian Radiation Protection Act* 2005 and the *Radiation Protection Regulations* 2016.

This profile is a summary of the workforce employed by the Tasmanian Health Service and Department of Health.

The small size of this group must be considered when reviewing the data and any trends within. Even minimal movement, for example the resignation of one employee, will have a significant influence on the data profile.

Medical physicists are employed under the Allied Health Professional Agreement. However, they do not meet Allied Health Professions Australia's definition of an allied health professional.



# **MEDICAL SCIENTISTS**

# **PUBLIC HEALTH**

# **SECTOR NUMBERS**

OCCUPIED	101
HEADCOUNT	
OCCUPIED FTE	84.8
OVER 60 YEARS	7%
OLD	
AVERAGE AGE	44 years
GENDER	72% F
	28% M

# OCCUPIED FTE PER 100,000 POPULATION

Tas	15.9
South	21.7
North and North West	9.8

Sources: Executive Reporting System (FYI) Human Resources: Establishment 20 November 2019; ABS population data (2019)

## **DESCRIPTION**

Medical scientists assess and interpret medical laboratory tests for obtaining information to diagnose, treat, monitor, and prevent disease. Medical scientists may work in anatomical pathology, clinical biochemistry, cytology, cytogenetics, haematology, medical microbiology, molecular pathology, or transfusion medicine.

# **TRAINING**

#### PROGRAM SUMMARY

Medical scientists usually complete a Bachelor of Science or laboratory medicine.

#### IN TASMANIA

There are training courses in Tasmania for medical scientists through the University of Tasmania.

# **REGULATION**

Medical science is a non-regulated profession. Medical Scientists can apply for membership with the Australian Institute of Medical Scientists, Australian Association of Clinical Biochemists or Australian Society of Microbiology, depending on the role being performed.

#### **NOTES**

This profile is a summary of the workforce employed by the Tasmanian Health Service and Department of Health.

Medical Scientists are employed under the Allied Health Professional Agreement. However, they do not meet Allied Health Professions Australia's definition of an allied health professional.



# **MICROBIOLOGISTS**

# **PUBLIC HEALTH**

# **SECTOR NUMBERS**

OCCUPIED	5
HEADCOUNT	
OCCUPIED FTE	4.6
OVER 60 YEARS	0%
OLD	
AVERAGE AGE	38 years
GENDER	60% F
	40% M

# OCCUPIED FTE PER 100,000 POPULATION

Tas

0.9 \*

Sources: Executive Reporting System (FYI) Human Resources: Establishment 20 November 2019; ABS population data (2019)

## **DESCRIPTION**

Microbiologists are scientists who specialise in the field of microbiology and study organisms on a cellular level. From food production to public health, microbiologists study the microbes' environments, how they live, and the effect they have on the world around them.

## **TRAINING**

## PROGRAM SUMMARY

To work as a Microbiologist in Australia, a bachelor's degree in Science with a major in microbiology is required. Post graduate study is not required but helpful for career advancement.

#### IN TASMANIA

The University of Tasmania offers training courses for microbiology.

### REGULATION

Microbiology is a non-regulated profession. Microbiologists can apply for membership with the professional association Australian Society of Microbiology

#### NOTES

This profile is a summary of the workforce employed by the Tasmanian Health Service and Department of Health.

Microbiologists are employed under the Allied Health Professional Agreement. However, they do not meet Allied Health Professions Australia's definition of an allied health professional.

The small size of this group must be considered when reviewing the data and any trends within. Even minimal movement, for example the resignation of one employee, will have a significant influence on the data profile.

<sup>\*</sup>Statewide service



# **ORTHOTISTS / PROSTHETISTS**

# **PUBLIC HEALTH**

# **SECTOR NUMBERS**

OCCUPIED	14
HEADCOUNT	
OCCUPIED FTE	12.4
OVER 60 YEARS	7%
OLD	
AVERAGE AGE	44 years
GENDER	71% F
	29% M

# OCCUPIED FTE PER 100,000 POPULATION

Tas	2.3	
South	3.3	
North	1.6	
North West	0.9	

Sources: Executive Reporting System (FYI) Human Resources: Establishment 20 November 2019; ABS population data (2019)

## **DESCRIPTION**

Orthotists and prosthetists assess and treat physical and functional limitations of people through illness, disability, or limb amputations. Orthotists and prosthetists prescribe, design, fit and monitor artificial and externally applied devices to replace missing limbs, provide bodily support and alignment, and reduce pain to enhance mobility and independence.

### **TRAINING**

#### PROGRAM SUMMARY

Orthotists/prosthetists in Australia are required to complete a bachelor's degree approved by the Australian Orthotic Prosthetic Association (AOPA).

#### IN TASMANIA

There are no accredited training programs for orthotists/prosthetists in Tasmania.

## **REGULATION**

Orthotics and Prosthetics is a self-regulated profession.
Orthotists/prosthetists can apply for membership with AOPA.

### **NOTES**



# OTHER ALLIED HEALTH PROFESSIONS

#### **ART THERAPISTS**

Arts therapists use visual artmaking, drama, dance, and movement to improve physical, mental, and emotional well-being. They provide therapeutic interventions using the visual arts, including drawing, painting, sculpture, sand and play for mental health diagnoses, wellbeing, early intervention, and developmental disorders. They can help people to:

- resolve conflicts and manage behaviour
- develop interpersonal skills
- reduce stress
- increase self-esteem and achieve insight.

#### **MEDICAL LIBRARIANS**

Medical Librarians obtain organise and provide access to selected, relevant, current, and authoritative information, which supports clinical decision making, through delivery of services to users. They:

- provide a client focused information service
- develop and manage collections of authoritative information sources for their organisation
- use resources and technology to facilitate effective and efficient client access to information
- provide value adding services such as training and assisting clients to effectively access information and use relevant technology
- provide current awareness services based on understanding of client's information needs.

#### MUSIC THERAPISTS

Music therapy is the planned and creative use of music to attain and maintain health and well-being, benefitting people of any age or ability regardless of their musical skill or background. Music Therapists help patients deal with stress, discomfort, and pain. They provide support in the areas of:

- emotional and bereavement support for patients and their relatives and carers
- pain, stress, and anxiety management
- depression and helplessness, and feelings of isolation and withdrawal.

#### **ORTHOPTISTS**

Orthoptists investigate, diagnose, treat, and provide preventative medical care in relation to eye movement disorders and other sensory deficiencies in both adults and children. Orthoptists work independently and with other health professionals to care for patients with eye conditions including glaucoma, cataract or retinal disease, eye movement disorders and trauma and vascular events. An orthoptist is not a medical doctor and cannot prescribe drugs.

#### RESPIRATORY SCIENTISTS

Respiratory scientists assess patients' respiratory function. They perform specialised tests, analyse results, maintain equipment, evaluate new methods, participate in education, and research activities and practice quality assurance.



# **PERFUSIONISTS**

# **PUBLIC HEALTH**

# **SECTOR NUMBERS**

OCCUPIED	4
HEADCOUNT	
OCCUPIED FTE	4.0
OVER 60 YEARS	50%
OLD	
AVERAGE AGE	49 years
GENDER	50% F
	50% M

# OCCUPIED FTE PER 100,000 POPULATION

Tas	0.7 *
Tas	0.7

<sup>\*</sup> Statewide service

Sources: Executive Reporting System (FYI) Human Resources: Establishment 20 November 2019; ABS population data (2019)

## **DESCRIPTION**

Perfusionists are part of the cardiovascular team during cardiopulmonary bypass surgery and associated therapies of patients. Perfusionists operate heart and lung equipment to keep a patient in a safe and stable condition while their heart is stopped.

## **TRAINING**

### PROGRAM SUMMARY

Certified perfusionists usually complete a science degree or equivalent and a 2-3-year training courses in perfusion theory and practice, through the Australian and New Zealand College of Perfusionists.

#### IN TASMANIA

There are no training programs in perfusion in Tasmania.

# **REGULATION**

Perfusion is a self-regulated profession. Perfusionists can apply for certification with the Australasian Board of Cardiovascular Perfusion.

### **NOTES**

This profile is a summary of the workforce employed by the Tasmanian Health Service and Department of Health.

The small size of this group must be considered when reviewing the data and any trends within. Even minimal movement, for example the resignation of one employee, will have a significant influence on the data profile.



# **SOCIAL WORKERS**

# **PUBLIC HEALTH**

# **SECTOR NUMBERS**

OCCUPIED	189
HEADCOUNT	
OCCUPIED FTE	153.0
OVER 60 YEARS	14%
OLD	
AVERAGE AGE	48 years
GENDER	84% F
	16% M

# OCCUPIED FTE PER 100,000 POPULATION

Tas	28.6
South	30.4
North	30.2
North West	22.3

Sources: Executive Reporting System (FYI) Human Resources: Establishment 20 November 2019; ABS population data (2019)

## **DESCRIPTION**

Social workers use a range of services underpinned by evaluation and research to help people with personal and social problems such as poverty, substance abuse or homelessness. Social workers may work with individuals as well as groups or communities through planning or undertaking programs. Social workers may also develop and monitor public mental health policy, procedures, and programs.

### **TRAINING**

#### PROGRAM SUMMARY

Social workers must complete a bachelor or master's degrees in social work approved by the national peak body, the Australian Association of Social Workers (AASW).

#### IN TASMANIA

The University of Tasmania offers programs accredited by the AASW.

## **REGULATION**

Social work is a self-regulated profession. Social workers can apply for membership with AASW.

### **NOTES**



# **SONOGRAPHERS**

# **PUBLIC HEALTH**

# **SECTOR NUMBERS**

OCCUPIED	13
HEADCOUNT	
OCCUPIED FTE	7.1
OVER 60 YEARS	8%
O , O	8%
OLD	
AVERAGE AGE	43 years
GENDER	62% F
	38% M

# OCCUPIED FTE PER 100,000 POPULATION

Tas	1.3	
South	1.5	
North	2.0	
North West	0.0	

Sources: Executive Reporting System (FYI) Human Resources: Establishment 20 November 2019; ABS population data (2019)

## **DESCRIPTION**

Sonographers use ultrasound (high-frequency sound waves) equipment to create, interpret and record anatomical images that can be used for medical diagnosis. Sonographers calculate procedure details, explain the procedure to the patient, monitor them throughout and communicate findings to the referring medical practitioner.

# **TRAINING**

#### PROGRAM SUMMARY

Accredited sonographers complete a postgraduate course recognised by the Australian Sonographer Accreditation Registry (ASAR).

#### **IN TASMANIA**

There are no ASAR accredited sonography programs in Tasmania.

## **REGULATION**

Sonography is a self-regulated profession. Sonographers need to be accredited with ASAR to perform clinical ultrasound exams eligible for Medicare rebates.

### **NOTES**

Some sonographers are dual qualified as diagnostic radiographers. These individuals are included in the diagnostic radiographer profile and not included again in this profile.



# SPEECH PATHOLOGISTS

# **PUBLIC HEALTH**

# **SECTOR NUMBERS**

OCCUPIED	45
HEADCOUNT	
OCCUPIED FTE	32.2
<b>OVER 60 YEARS</b>	4%
OLD	
AVERAGE AGE	40 years
GENDER	98% F
	2% M

# OCCUPIED FTE PER 100,000 POPULATION

Tas	6.0
South	5.9
North	6.4
North West	5.9

Sources: Executive Reporting System (FYI) Human Resources: Establishment 20 November 2019; ABS population data (2019)

## **DESCRIPTION**

Speech pathologists investigate, diagnose, and treat children and adults with communication difficulties or feeding and swallowing problems. They may use augmentative and alternative communication devices such as signing, picture charts, special computers, or devices in developing a management plan that best suits the person's needs.

# **TRAINING**

#### **PROGRAM SUMMARY**

Speech pathologists need to complete a bachelor or master degree in speech pathology or equivalent, as approved by the national peak body, Speech Pathology Australia.

#### **IN TASMANIA**

There are no accredited training programs for speech pathology in Tasmania.

## **REGULATION**

Speech pathology is a self-regulated profession. Speech pathologists can apply for membership with Speech Pathology Australia.

### **NOTES**



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