

HEALTH WORKFORCE 2040

STRATEGY

Shaping our workforce now and into the future

Department of Health

DRAFT



Tasmanian
Government

CONTENTS

HEALTH WORKFORCE 2040.....	1
Strategy.....	1
Executive summary	4
Key findings.....	5
Focus areas and actions.....	8
Profile of tasmania	15
Geography.....	15
Population	16
Focus area one: Shaping the health workforce.....	19
Workforce demographics.....	19
Workforce indicators	25
Actions.....	30
The distribution of the health workforce	31
Actions.....	34
The role of generalists	35
Actions.....	36
Focus area two: Education and training	37
Professional entry training	37
Post-graduate training.....	39
Using education to improve the distribution of the health workforce.....	39
Engagement in learning throughout the career lifespan.....	40
Supporting research	40
Actions.....	41
Focus area three: Fostering innovation.....	42
Workforce and service model reform	42
New technologies	43
Actions.....	47
Focus area four: Enhancing culture and wellbeing	48
Culture.....	48
Leadership.....	49
Wellbeing	50
Workforce inclusion	51
Actions.....	55
Focus area five: Recruitment and effective working arrangements	56
Attracting health professionals to work in Tasmania	56
Recruitment.....	56
Employment frameworks and industrial instruments	57
Registration and credentialing.....	57
Workforce management.....	58

Actions.....	59
Focus area six: Planning.....	60
Actions.....	61
Data and methodology	62
Data collected.....	62
Data treatment.....	62
Next steps.....	65
Finalising Health Workforce 2040 and developing an implementation plan.....	65
Regular review	65
Acknowledgments.....	66
Acronyms and glossary	67
Figures.....	70
Appendix.....	71
Appendix A: External consultation.....	71
Appendix B: Health professions Profiled in <i>Health Workforce 2040</i>	73

DRAFT

EXECUTIVE SUMMARY

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

Health Workforce 2040 is Tasmania's first comprehensive draft health workforce strategy. It comes at a time of increasing demand for health services in Tasmania driven by an ageing population, changing patterns of disease and increasing multi-morbidity, increasing patient expectations and emerging technologies. More recently the COVID-19 pandemic has demonstrated that health service priorities and demands can change rapidly.

Tasmania has for many years experienced challenges in attracting and retaining the health workforce required to support Tasmania's health system. This difficulty is particularly acute in regional and rural communities and in some areas of practice.

It is imperative we have a strategy to provide sustainable, high-quality health services for all Tasmanians into the future - including a health workforce strategy that supports a highly skilled, competent and flexible workforce of the right size and shape providing access to services across Tasmania.

The Tasmanian Government Fiscal Sustainability Report (2019)¹ indicates that projected health expenditure is the single most significant driver of the projected future fiscal challenges for the State.

Health expenditure is the single largest category of expenditure within the State Budget and has been growing at an average rate of 5.8 per cent per annum over the past decade. While there is no single source of information on the national cost of the health workforce, payments to health workers are estimated to make up around two thirds of health system costs.² This holds true for health system costs in Tasmania.

Building a health professional workforce that is of the right size and shape, delivering appropriate, effective and efficient health care services is a cornerstone not only for the sustainability of the health services in Tasmania but for the broader fiscal sustainability of Tasmania.

The Tasmanian Government committed to establishing a dedicated Health Workforce Planning Unit (HWPU). The unit was established in mid-2018 and has worked extensively with stakeholders to develop this draft workforce strategy.

The development of this strategy is aligned to the work of the Tasmanian Clinical Planning Taskforce and provides the start of an integrated approach linking health workforce priorities with clinical service priorities.

Many stakeholders have been enthusiastically involved in the development of this work, providing their expert views, discussing future trends and directions and advising on future actions in a collaborative effort to shape a health workforce equipped to deliver services to Tasmanians over the next 20 years (see Appendix I).

Health Workforce 2040: Strategy has three supporting documents; *Health Workforce 2040: Allied Health*, *Health Workforce 2040: Medicine* and *Health Workforce 2040: Nursing and Midwifery*. These provide a more detailed analysis of the individual professions, including workforce profiles at the profession (allied health), speciality (medicine) and division of registration or area of practice (nursing and midwifery).

¹ Tasmanian Government Fiscal Sustainability Report 2019, Department of Treasury and Finance, October 2019, viewed 24 July 2020 <<https://www.treasury.tas.gov.au/budget-and-financial-management/budget-reports/fiscal-sustainability-report-2019>>.

² Health Workforce Australia 2014, Australia's Future Health Workforce – Doctors report, Health Workforce Australia, Adelaide, SA, viewed 15 July 2019, <[https://www1.health.gov.au/internet/main/publishing.nsf/Content/F3F2910B39DF55FDCA257D94007862F9/\\$File/AFHW%20-%20Doctors%20report.pdf](https://www1.health.gov.au/internet/main/publishing.nsf/Content/F3F2910B39DF55FDCA257D94007862F9/$File/AFHW%20-%20Doctors%20report.pdf)>.

Health professionals included in *Health Workforce 2040*

The professions included in this report are the allied health, medical and nursing and midwifery professions subject to the National Registration and Accreditation Scheme (NRAS) administered by the Australian Health Practitioner Regulation Agency (AHPRA), except for the ambulance workforce. The ambulance workforce has only been a regulated workforce since December 2018 and will be a priority for health workforce planning when the relevant data is released.

Over 80 health workforce profiles have been developed as part of this report (see Appendix B). Aboriginal Health Practitioners, Chinese Medicine Practitioners, Osteopaths, Chiropractors, Occupational and Environmental Physicians, Sports and Exercise Medicine Physicians are all included in the report's data (as they are registered professions) however they are not profiled separately due to small workforce numbers or no public sector employees. A number of allied health professions that are not regulated under NRAS but do have a public sector workforce, are also profiled included in the report to better inform the allied health professional analysis.

While this report is focussed on those health professions that are regulated in the first instance, it is recognised that the assistant and support workforce play a vital role across the public and private sector and are increasingly important members of future health workforce teams.

KEY FINDINGS

Tasmania has a health professional workforce that is comparable in size per capita to other jurisdictions in Australia. Where they work and in what specialty areas of practice does not always match the health service need.

The number of health professionals in Tasmania per head of population is comparable to Australia as a whole. We are above the national average in nursing and midwifery, slightly above for medicine and below in the allied health professions. Recruitment of health professionals in some professions and to regional and rural areas remains difficult.

Considering the range and type of health services currently delivered in each region of Tasmania and the population, the health professional workforce is not equitably distributed. The North West has a lower density of allied health professionals, medical professionals and nurses and midwives. Within these professions, having reference to the clinical services profile of the health services in the region, only the enrolled nurse workforce, medical administrators, palliative medicine physicians, optometrists, podiatrists and radiation therapists have a distribution that is reflective of the population distribution.

High priority professions for planning

Based on an analysis of the 2018 workforce, health professions identified as high priority for future planning include:

- Occupational therapists
- Dermatologists
- Intensive care specialists
- Cardiologists
- Endocrinologists
- Infectious disease physicians
- Neurologists
- Rehabilitation physicians
- General surgeons
- Oral and maxillofacial surgeons

There have been some changes in a number of these workforces since that time, for example recruitment of additional neurologists in Launceston. Subsequent operational workforce planning will identify where further workforce planning may not be required and future analyses will demonstrate the impact of the changes.

While the Aged Care, Critical Care, Mental Health and Peri-Operative Nursing areas of practice are not identified in this methodology as a high priority for planning, consultation has consistently identified recruitment and retention difficulty in these areas. This will require consideration in the development of operational workforce plans.

It is noted that some self-regulated allied health professions may experience workforce issues, however due to the available data and methodology these were unable to be determined in this work.

Ensuring the sustainability of health services

The future health workforce needs to be equipped to manage the health service needs of a growing and ageing population, be adaptable to deal with increasing levels of technology in health and have the right mix of health professions working in teams to deliver the most effective healthcare.

Continued attention needs to be applied to supporting growth in new health professional entrants to the workforce and their pathways into practice as well as retaining the current workforce.

In addition, to ensure a sustainable health workforce, innovative and effective workforce models must be pursued, including multidisciplinary skill sharing and extended scope of practice, supported by technological solutions.

An ongoing focus on supporting generalist careers is required

Given the size and distribution of the population in Tasmania, generalist health professionals are a vital part of our health workforce that enable the sustainable local delivery of healthcare.

While there has been some improvement in the numbers of generalist medical practitioners, ongoing effort is required to ensure that the trend to increasing specialisation is kept in balance to provide the appropriate mix of generalists and specialists for the Tasmanian health environment.

A continued and increased focus needs to be applied to training and employment opportunities for generalist health professionals.

Education and training pathways

Education and training play an important role in addressing geographic distribution and over and undersupply of professional or specialty areas of practice.

It also plays 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 nurses with past experience or complementary skills in critical care/ ventilatory support. This requirement has demonstrated that off-site providers and on-line learning needs to be paired with supervised and supported on-site clinical experiential learning.

There are opportunities to strengthen and build education and training pathways into all health professions and to link these to ongoing professional development. To do this requires good relationships with education providers including the higher education sector, medical colleges and vocational training providers.

Aboriginal employment in the health workforce is too low

In the 2016 Census, 4.6 per cent of people living in Tasmania identified as Aboriginal and/or Torres Strait Islander³. Of registered Tasmanian health professionals in 2018, 0.7 per cent of medical practitioners, 2.4 per cent of nurses and midwives and 1.1 per cent of allied health practitioners identified as Aboriginal.

Actions to increase the number of Aboriginal health professionals in the Tasmanian health workforce, aligned with the Tasmanian State Service Aboriginal Employment Strategy⁴ and the Cultural Respect Framework⁵ are required.

The culture in healthcare organisations needs improving to support the work of health professionals

The health professional workforce is the backbone of the health system. Health professionals work around the clock in the most difficult of circumstances, supporting Tasmanians and their families in times of need.

In an already difficult environment, the wellbeing of the workforce is not always supported by the workplace culture. In addition, working in health care during a pandemic like COVID-19, adds additional stress on the health workforce. There will be fears of both personal wellbeing and the wellbeing of close family and friends. Clinical leadership development is required at all levels to build healthy and empowering cultures.

Improving culture and increasing the wellbeing of the workforce benefits not only individuals but the wider community with evidence suggesting good culture provides better health service outcomes for the community.

³ Australian Bureau of Statistics 2018, 2071.0 - *Aboriginal and Torres Strait Islander population, 2016*, Australian Government, Canberra, ACT, viewed 22 February 2019, <www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/2071.0~2016~Main%20Features~Aboriginal%20and%20Torres%20Strait%20Islander%20Population%20Article~12>.

⁴ Tasmanian State Service 2019, *Aboriginal Employment Strategy to 2022*, Tasmanian Government, Hobart, TAS, viewed 15 July 2019, <http://www.dpac.tas.gov.au/__data/assets/pdf_file/0010/463087/DPAC4456_Aboriginal_Employment_Strat_210_x_210_WEB.pdf>

⁵ Australian Health Ministers' Advisory Council 2016, *Cultural respect framework 2016-2026 for Aboriginal and Torres Strait Islander health*, Australian Health Ministers' Advisory Council, Canberra, ACT, viewed 4 April 2019, <http://www.coaghealthcouncil.gov.au/Portals/0/National%20Cultural%20Respect%20Framework%20for%20Aboriginal%20and%20Torres%20Strait%20Islander%20Health%202016_2026_2.pdf>.

FOCUS AREAS AND ACTIONS

The focus areas for *Health Workforce 2040* have been developed following a detailed analysis of the health professional workforce and an extensive consultation process across the Tasmanian Health system.

The focus areas include a range of actions that respond to the key findings and outline how we can better shape the health workforce in Tasmania to both our current needs and our future health needs.

It is important to recognise that there are numerous existing programs and projects aimed at providing improvements in the health workforce. This strategy aims to provide a framework through which these existing projects can be continued and supported where appropriate, and additional actions can be developed to address ongoing gaps.

Focus areas

1. Shaping the health workforce
2. Education and training
3. Fostering innovation
4. Enhancing culture and wellbeing
5. Recruitment and effective working arrangements
6. Planning

Within each of these focus areas there is a corresponding objective relating to where we want to be in 20 years. A range of actions have been identified that will assist in progressing toward this objective. In some circumstances, these actions will be relevant across professional groups, in others the actions will pertain to a particular health profession.

I. Shaping the health workforce

In 2040, Tasmania's health workforce will be better aligned with the needs of the community, with an appropriate mix of generalist and specialist services and a fair distribution of the workforce in the North West.

Workforce supply

- I.01 Develop operational workforce plans (statewide and regional) that are responsive to health service demands and align with the key findings and focus areas of *Health Workforce 2040*.
- I.02 Shape entry-level health workforce positions to meet changing patterns of demand.

Workforce distribution

- I.03 Review outcomes of the specialist medical practitioner North West 25 per cent market allowance trial.
- I.04 Grow professional development opportunities for health professionals working in rural and remote services.
- I.05 Support working arrangements at the statewide level to allow for and promote:
 - outreach service provision
 - integrated service models in rural and remote areas
 - training and service networks.
- I.06 Develop local North West career pathways into nursing and midwifery.
- I.07 Increase medical training opportunities and recruitment in the North West by optimising accredited training opportunities and developing end to end training pathways from early career to specialist practitioners.

Generalists

- I.08 Ensure that training positions support growth in the generalist workforce.
 - I.09 Support the ongoing development of rural pathways in medicine and allied health, including the development of the rural medical generalist workforce and the allied health rural generalist pathway.
 - I.10 Identify services that would benefit from rural generalists and develop employment opportunities.
 - I.11 Work with medical colleges to enhance rural selection into training programs and opportunities to provide more training in rural areas.
-

2. Education and training

In 2040, education and training will be aligned with identified workforce priorities and career pathways. The health workforce will be supported with training and education at all stages of their career and will engage in lifelong learning.

Create opportunities

- 2.01 Align education and training (including professional development) with workforce needs and organisational priorities.
- 2.02 Work with education providers to:
 - improve workforce supply through the development of training pathways
 - improve access to professional development opportunities
 - design placement plans to align with career opportunities and workforce priorities.
- 2.03 Develop training pathways to support career development, retraining and diversification to match service need.
- 2.04 Develop a statewide supervised practice framework for nurses and midwives returning to practice or seeking to change their context of practice.

Medical specialty training

- 2.05 Develop networked training programs in Tasmania to improve self-sufficiency and distribution in consultation with Colleges.
- 2.06 Statewide coordination of the Specialist Training Program.
- 2.07 Grow accredited medical training positions in specialties with identified workforce needs.
- 2.08 Work with the University of Tasmania's Rural and Regional Postgraduate Medical Training Hub to identify rural training models and to maximise rural training opportunities in medical specialties.

Research

- 2.09 Develop and implement a health workforce research skills and capacity framework.
-

3. Fostering innovation

In 2040, Tasmania will embrace new and innovative health workforce roles and models to respond to the changing needs of communities. The health workforce will be confidently using technology to drive innovation and harnessing the benefits to support health service delivery and quality.

Workforce models

- 3.01 Establish a health workforce reform network to progress innovative health workforce models aligned with health service needs and organisational priorities.
- 3.02 Develop integrated models of care and service models, including multidisciplinary models of care.
- 3.03 Support health professionals to work to their full scope of practice including podiatry and nurse and midwifery prescribing where appropriate.
- 3.04 Develop nurse and allied health led models of care utilising extended and advanced scope of practice initiatives to improve access to services in the community.
- 3.05 Grow the current enrolled nurse workforce to achieve the agreed industrial level of 25 per cent where clinically appropriate.
- 3.06 Grow midwifery continuity of care models including improved access via outreach services and greater integration of General Practice support.
- 3.07 Network with the private sector and with education providers to identify and progress new and innovative health workforce models.

Technology

- 3.08 Build service models that incorporate the best use of technology.
 - 3.09 Develop a workforce that confidently uses digital health technologies to deliver health and care.
 - 3.10 Implement electronic rostering systems across the public health sector.
-

4. Enhancing culture and wellbeing

In 2040, the Tasmanian public health sector will be a workplace of choice. A collaborative statewide working environment will recognise and celebrate success and encourage positive risk taking and sharing of learning. The importance of health leaders in driving a culture supportive of high-quality, safe, person centred service delivery will be recognised. Promoting and supporting the health and wellbeing of the health workforce will be a priority.

Enhance culture

- 4.01 Utilise feedback to better understand staff experiences and challenges and use outcomes as a basis for improvement.
- 4.02 Support health professional networks across services to provide collegial support and a planning platform.
- 4.03 Build shared governance models that enable health professional input at all levels of organisational decision making.
- 4.04 Deliver comprehensive orientation programs that respond to individual learning needs and clinical experiences to allow smooth transition to practice.
- 4.05 Recognise the value and requirements of health professionals of all age groups and stages of life.
- 4.06 Progress the major hospitals within the Tasmanian Health Service to Pathways to Excellence recognition.

Inclusion

- 4.07 Promote inclusive workplaces with zero tolerance for bullying and discrimination.
- 4.08 Contribute to the success of the Tasmanian State Service Aboriginal Employment Strategy to 2022 including by supporting increased Aboriginal workforce participation in the health sector.
- 4.09 Promote gender equality by removing gender-based barriers to employment and supporting career development.
- 4.10 Achieve and sustain gender equality in leadership.

Leadership development

- 4.11 Develop leadership capability by:
 - identifying clinical leaders across health professional groups
 - establishing strong mentoring programs
 - embedding leadership in health education, training and continuing professional development
 - promoting interprofessional leadership collaboration.

Cultural respect

- 4.12 Ensure health service staff at all levels have access to ongoing cultural respect training and embed completion of cultural respect training into performance management and/or professional development requirements.

5. Recruitment and effective working arrangements

In 2040, Tasmania's public health workforce will be supported by a framework for employment that is fit for purpose; with efficient and effective recruitment processes. The Tasmanian public health sector will be a workplace of choice.

Recruitment

- 5.01 Investigate challenges in recruitment processes in the public health workforce.
- 5.02 Support clinical leaders to recruit efficiently and effectively.
- 5.03 Align employment arrangements with training requirements of medical specialist trainees.
- 5.04 Leverage Tasmania's brand (Brand Tasmania) to attract health professionals to work in Tasmania.
- 5.05 Work with external bodies to identify and improve opportunities for shared recruitment and employment strategies.

Reform of employment and industrial frameworks

- 5.06 Improve the current structure and content of industrial instruments for simplicity, clarity, and ease of use.
 - 5.07 Reform the employment framework to most efficiently meet demand for services and facilitate the development of innovative health workforce models.
-

6. Planning

In 2040, Tasmania's public health sector will have accurate workforce data to inform evidence-based decision and policy making and to provide more effective and efficient procedures.

Systems improvements

- 6.01 Develop system capability to automate data extraction from the National Health Workforce Data Set.
- 6.02 Develop and implement a system for capturing clinical placement activity across all health professions.
- 6.03 Support operational workforce planning by providing workforce data and delivering training in health workforce planning.
- 6.04 Build relationships with the education and private health sectors to share and improve health workforce data.
- 6.05 Update public sector human resources systems to identify the health profession of employees.

Workforce credentials

- 6.06 Implement automated registration verification for all registerable health professionals employed in the public health workforce.
-

PROFILE OF TASMANIA

Tasmania's population is dispersed across the island. For most policy and planning purposes, Tasmania has three main regions, the North, North West and South.

GEOGRAPHY

Tasmania lies to the south east of mainland Australia, with Melbourne being the closest major mainland city. The total estimated resident population of Tasmania in 2018 was 528,298⁶. Across the island, 29 local government areas in Tasmania belong to three main regions for the purpose of this report (and many other policy, planning and operational purposes), see Figure 1 and Figure 2.

Figure 1 Regions of Tasmania



Figure 2 Local government areas, Tasmania

South	North	North West
Brighton, Central Highlands, Clarence, Derwent Valley, Glamorgan/Spring Bay, Glenorchy, Hobart, Huon Valley, Kingborough, Sorell, Southern Midlands, Tasman.	Break O'Day, Dorset, Flinders, George Town, Launceston, Meander Valley, Northern Midlands, West Tamar.	Burnie, Central Coast, Circular Head, Devonport, Kentish, King Island, Latrobe, Waratah/Wynyard, West Coast.

The main population centres are Hobart – Tasmania's capital city – in the South, Launceston in the North, and Burnie and Devonport in the North West. There are major roads connecting these towns, with distances of approximately 200 km between Hobart and Launceston, 280 km between Hobart and Devonport, 325 km between Hobart to Burnie and 100 km between Launceston and Devonport. Many areas of Tasmania are not serviced with major road networks; and approximately one third of Tasmania is classified as national park and/or world heritage areas.

⁶ Australian Bureau of Statistics 2018, 3235.0 - Regional population by Age and Sex, Australian Government, Canberra, ACT, viewed 24 July 2020, <<https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3235.02017?OpenDocument>>.

POPULATION

DEMOGRAPHICS

Figure 3 tables some key Tasmanian population statistics from the 2016 Census, comparing them to national rates.

Figure 3 2016 Census, key Tasmanian statistics

	Tasmania	Australia
Population (persons count)	509,965	23,401,886
Male	48.9%	49.3%
Female	51.1%	50.7%
Median age	42 years	38 years
Aboriginal and/or Torres Strait Islander people	4.6%	2.8%
Educated to a bachelor's degree or above	16.2%	22.0%
Educated to advanced diploma and diploma level	7.5%	8.9%
Country of birth: Australia	80.7%	66.7%
Religion: No Religion, so described	37.8%	29.6%
Religion: Anglican	20.4%	13.3%
Languages other than English: Mandarin	0.8%	2.5%
Worked full-time	52.3%	57.7%
Median personal weekly income	\$573	\$662
Median family weekly income	\$1,399	\$1,734

Source: https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/6?opendocument

HEALTH

The **life expectancy** of Tasmanians at birth in 2015-17 was 78.7 years for males and 82.9 years for females, lower than the Australian life expectancy at birth of 80.5 years for males and 84.6 years for females and the second lowest of all states and territories. The **leading causes of death** in Tasmania include cancer, ischaemic heart disease and circulatory diseases.⁷

Obesity, smoking and poor mental health continue to be key challenges for the Tasmanian population. In 2017-18, Tasmania had a higher rate of adults who were daily smokers (16.4 per cent) compared with Australia (13.8 per cent) and a lower rate for those who have never smoked (48.9 per cent compared with 55.7 per cent). Over two thirds of Tasmanian (70.9 per cent) adults were overweight or obese.⁸

⁷ Australian Bureau of Statistics 2016, *Home is where the heart is for Tasmanians, Census reveals, Media Release 139/2017*, 23 October 2017, Australian Government, Canberra, ACT, viewed 19 July 2019, <<https://www.abs.gov.au/Ausstats/abs@.nsf/dd0ca10eed681f12ca2570ce0082655d/1ccbb053bd0aa548ca2581bf001f6a9c!OpenDocument>>. <<https://www.abs.gov.au/Ausstats/abs@.nsf/dd0ca10eed681f12ca2570ce0082655d/1ccbb053bd0aa548ca2581bf001f6a9c!OpenDocument>>.

⁸ Australian Bureau of Statistics 2018, *4364.0.55.001 - National Health Survey: First Results, 2017-18*, Australian Government, Canberra, ACT, viewed 3 July 2019, <<https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4364.0.55.001~2017-18~Main%20Features~Tasmania~10007>>. *Health Workforce 2040 | Strategy*

The key findings in the Report on the Tasmanian Population Health Survey 2019 (self-reported) include:

- In 2019, the health status and psychological distress of Aboriginal adults was significantly worse in comparison to all Tasmanian adults.
- Smoking has declined in the past ten years, with significant improvements since 2016. A high proportion of current smokers are within the most socio-economically disadvantaged communities and Aboriginal communities.
- Four in five Tasmanians participated in physical activity at a level adequate to support good health.
- Alcohol consumption at harm risking levels on single occasions declined in 2019.
- Less sugar was consumed compared to 2016 but insufficient fruit and vegetable intake continues.
- Overweight and obese BMI remains similar to 2016.
- Selected health literacy indicators suggest a generally good understanding of health information.
- High rates of chronic conditions continue, and chronic disease prevention has also improved with increases in screening for diabetes and blood pressure and cholesterol.
- Environmental health risk factors showed improvements, however smoked pollution from burn-offs and bushfires caused asthma related issues and 3 in 10 Tasmanians still use woodfires for heating.⁹

DRAFT

⁹ Department of Health, Tasmania 2020, *Report on the Tasmanian Population Health Survey 2019*, Hobart, viewed 28 July 2020
<<http://www.dhhs.tas.gov.au/publichealth/epidemiology>>
Health Workforce 2040 | Strategy

POPULATION PROJECTIONS

According to the Tasmanian Government's Department of Treasury and Finance, Tasmania's population is projected to be older in 2040 with more people in the older age cohorts¹⁰. Figure 4 shows the age profile of Tasmania in 2017 against the predicted 2040 age profile. Evident is the expected increase in the number of Tasmanian's who are over 65, with the highest growth in the 85+ group.

Figure 4 Tasmania's projected age pyramid for 2040, compared to 2017



Source: Department of Treasury and Finance, 2019 Population projections for Tasmania and its Local Government Areas.

¹⁰ Tasmanian Government - Department of Treasury and Finance (2019), 2019 Population projections for Tasmania and its Local Government Areas. Tasmanian Government / Department of Treasury and Finance/ Economy /Economic Data. Viewed 1 July 2019, <<https://www.treasury.tas.gov.au/economy/economic-data/2019-population-projections-for-tasmania-and-its-local-government-areas>>.

FOCUS AREA ONE: SHAPING THE HEALTH WORKFORCE

In 2040, Tasmania's health workforce will be better aligned with the needs of the community, with an appropriate mix of generalist and specialist services and an equitable distribution of the workforce in the North West.

The number of health professionals in Tasmania per head of population is broadly comparable to Australia as a whole. Tasmania has more than the national average number of nurses and midwives per 100,000 population, slightly more than the national average for medicine and fewer than the national average in the registered allied health professions. Allied health and medical workforces have grown more than the nursing and midwifery workforce between 2013 and 2018.

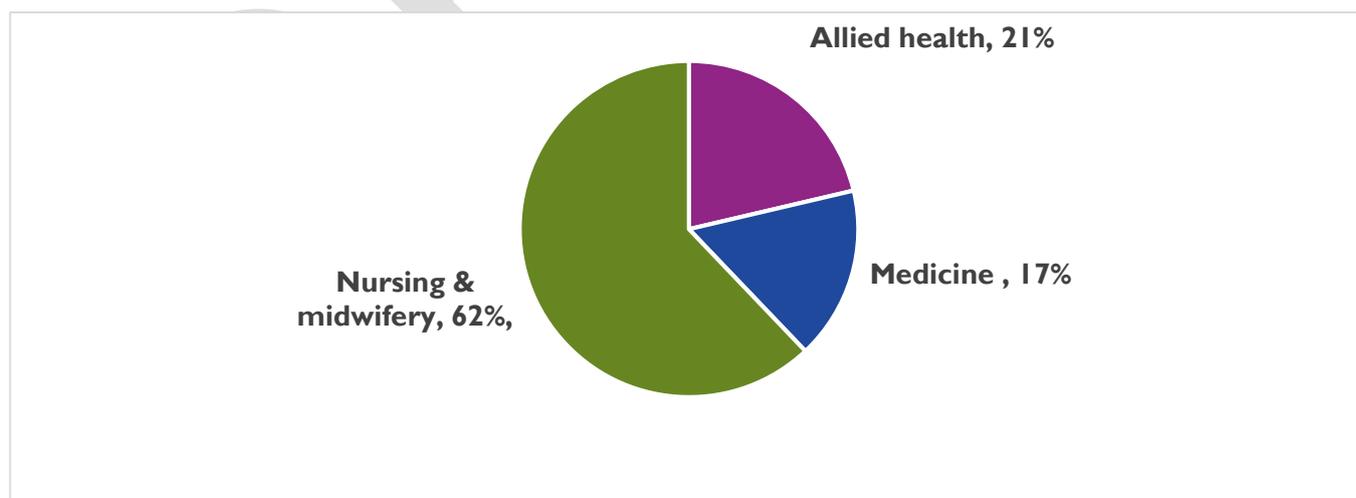
Recruitment of health professionals in some professions and to regional and rural areas remains difficult.

Considering the range and type of health services currently delivered in each region of Tasmania and the population, the health professional workforce is not equitably distributed. The North West has a lower density of allied health professionals, medical professionals and nurses and midwives.

WORKFORCE DEMOGRAPHICS

More than 30,000 Tasmanians nominated Health Care and Social Assistance as the industry they worked in in the 2016 census¹¹. *Health Workforce 2040* looks at a subset of this workforce that includes more than 13,000 registered and employed allied health professionals, doctors, nurses and midwives. The data is the latest available from the National Health Workforce Dataset which is 2018. This data includes registration information and responses to the re-registration workforce survey at the point of registration, the date of which varies by profession.

Figure 5 Tasmania's employed, registered health workforce, 2018



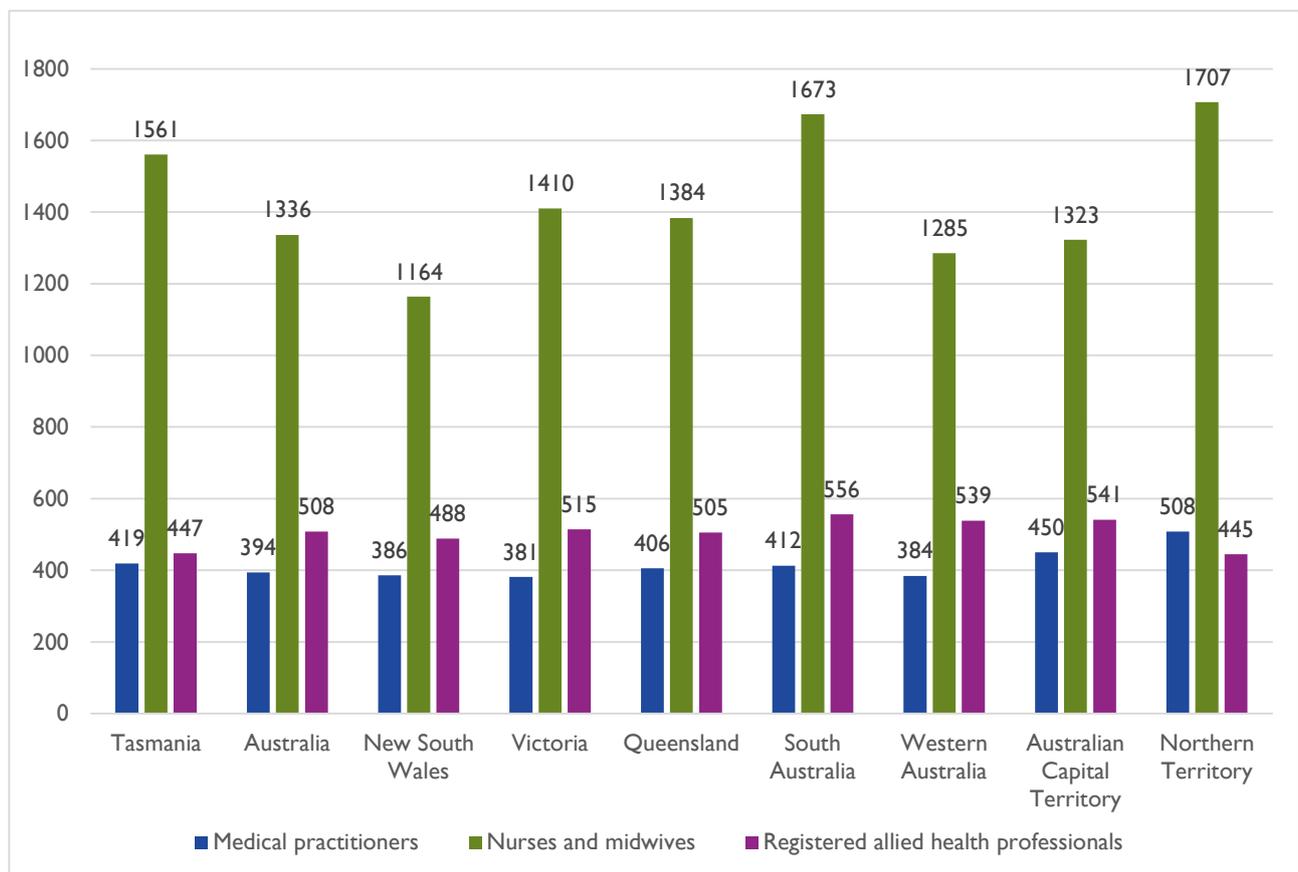
Source: National Health Workforce Data Set, 2018

¹¹ Australian Bureau of Statistics 2016, *Home is where the heart is for Tasmanians, Census reveals, Media Release 139/2017*, 23 October 2017, Australian Government, Canberra, ACT, viewed 19 July 2019, <<https://www.abs.gov.au/Ausstats/abs@.nsf/dd0ca10eed681f12ca2570ce0082655d/1ccbb053bd0aa548ca2581bf001f6a9c!OpenDocument>>. <<https://www.abs.gov.au/Ausstats/abs@.nsf/dd0ca10eed681f12ca2570ce0082655d/1ccbb053bd0aa548ca2581bf001f6a9c!OpenDocument>>.

The largest group, nursing and midwifery had 8,246 practitioners, there were 2,211 medical practitioners, and 2,831 other regulated health professionals from the allied health professional groups (Figure 5).

Compared to Australia, Tasmania had a higher number of nurses and midwives per capita in 2018, slightly more than the national average number of medical practitioners and less than the national average number of registered allied health professions. This is demonstrated in Figure 6.

Figure 6 Employed health practitioners per 100,000 population 2018, Tasmania, Australia and jurisdictions



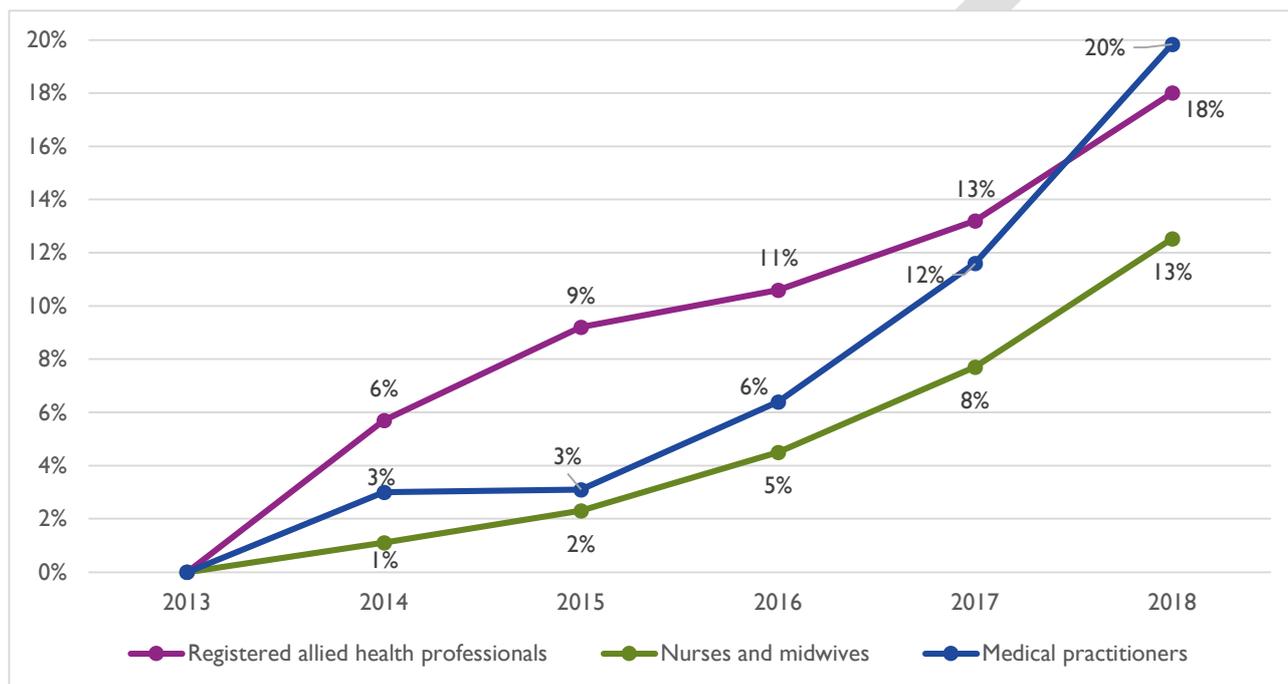
Source: National Health Workforce Data Set (2018); ABS Population Statistics Catalogue 3235.0 Regional Population (2018)

WORKFORCE GROWTH

Australia has experienced a recent period of significant growth in the health workforce, beyond expected population growth alone. The number of doctors per capita has increased by 47 per cent between 2000 and 2018¹² and the number of nurses by 29 per cent from 2001 to 2018¹³.

In Tasmania, between 2013 and 2018, the headcount of registered allied health professionals grew 18 per cent, the medical workforce grew by 20 per cent and the nursing and midwifery grew by 13 per cent (Figure 7). This compares to a growth in the population of 2.98 per cent over the same period.

Figure 7 Change in employed headcount (%) Tasmania's health workforce 2013-18



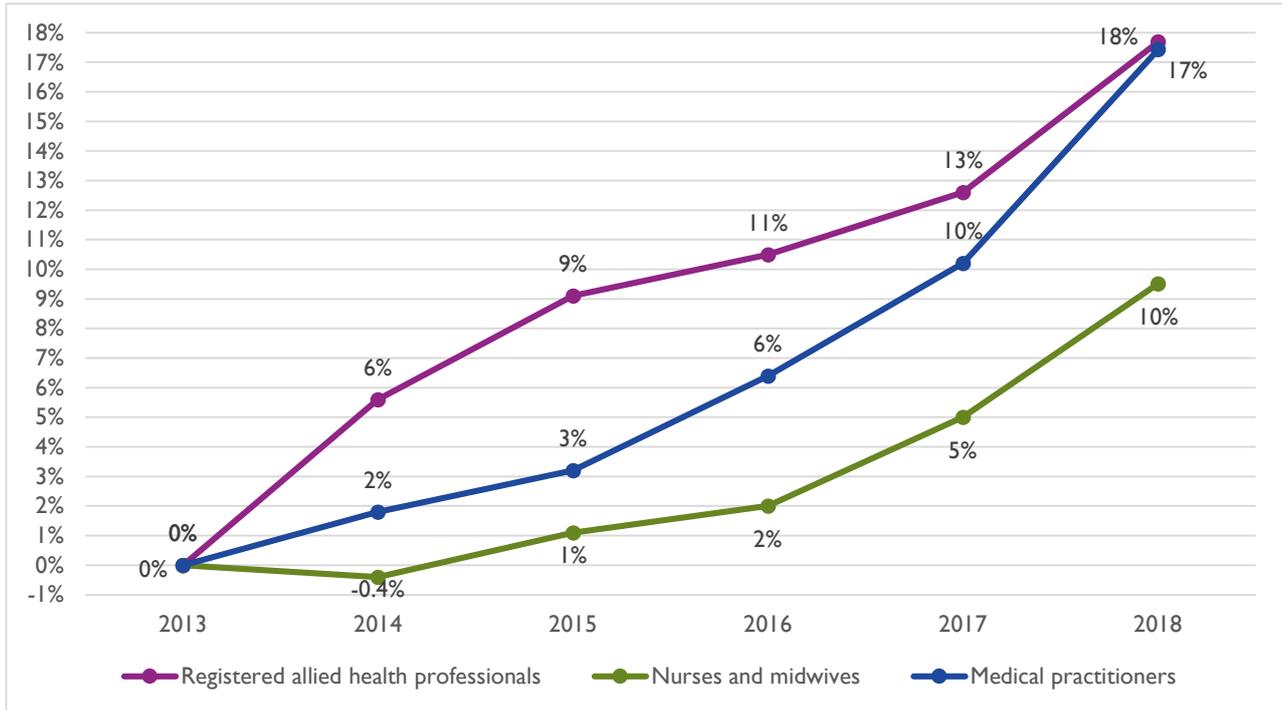
Source: National Health Workforce Data Set

The full-time equivalent (FTE) growth is slightly less than the headcount growth reflecting a decrease in the average hours worked (Figure 8).

¹² The World Bank 2020, *Physicians (per 1,000 people)*, World Health Organization's Global Health Workforce Statistics, Geneva, Switzerland, viewed 24 July 2020, <<https://data.worldbank.org/indicator/SH.MED.NUMW.P3?locations=AU>>.

¹³ The World Bank 2020, *Nurses and midwives (per 1,000 people)*, World Health Organization's Global Health Workforce Statistics, Geneva, Switzerland, viewed 24 July 2020, <<https://data.worldbank.org/indicator/SH.MED.NUMW.P3?locations=AU>>.

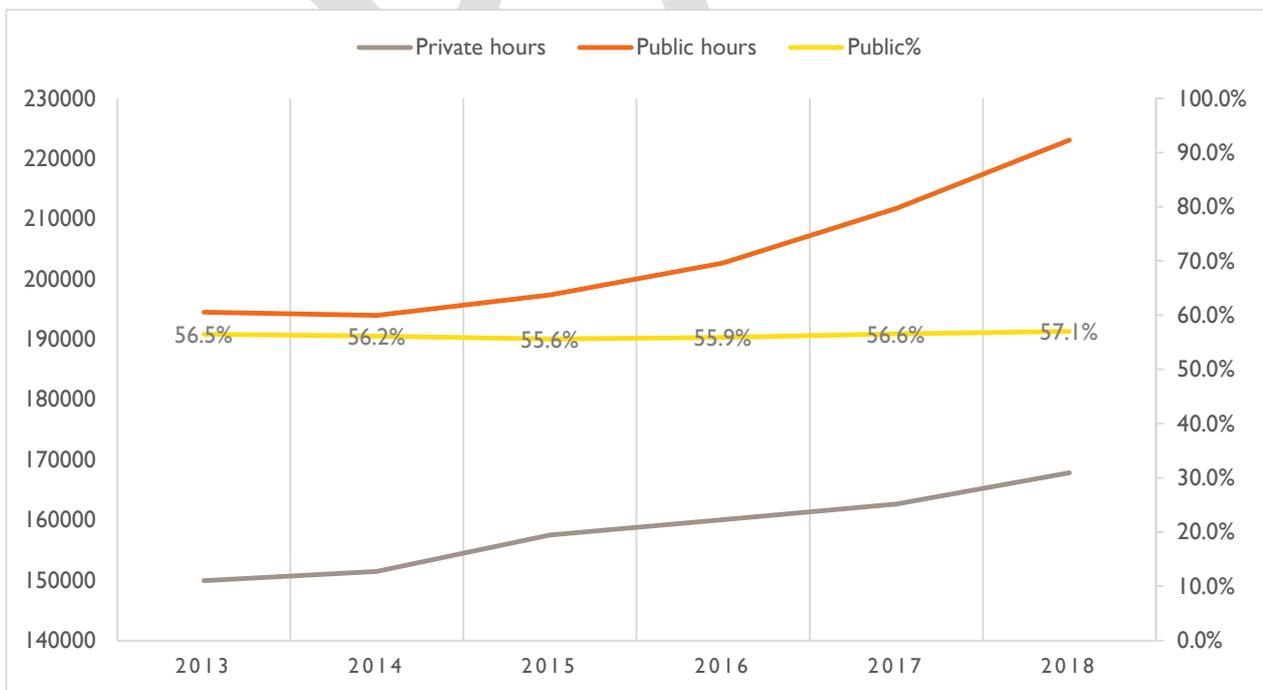
Figure 8 Change in employed FTE (%), Tasmania's health workforce, 2013-18



Source: National Health Workforce Data Set

Growth rates have also varied between the public sector and the private sector. Figure 9 illustrates that between 2013 and 2018 the number of clinical hours worked in both sectors increased. The proportion of work undertaken in the public sector remained steady at around 57 per cent.

Figure 9 Change in clinical hours worked in the private and public sectors, and proportion of public sector hours, Tasmania's health workforce 2013-18



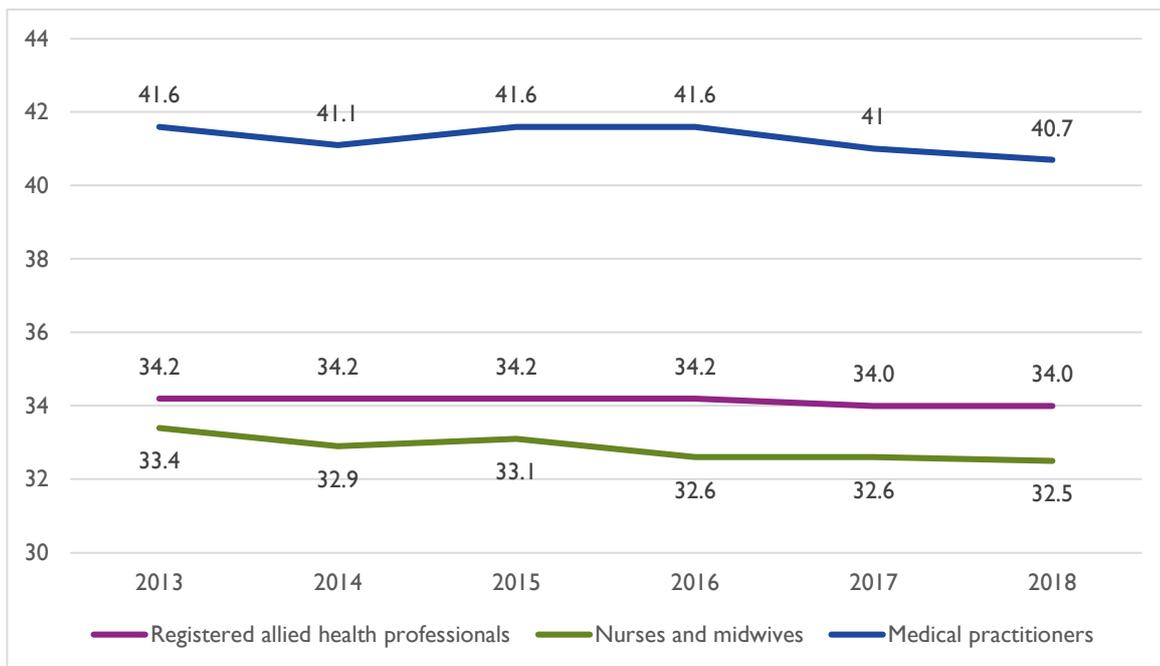
Source: National Health Workforce Data Set

HOURS WORKED

The average number of hours that employed health professionals reported working in Tasmania has gradually decreased by 2 per cent over the period 2013 to 2018, as shown in Figure 10.

The average hours worked by medical practitioners declined from 41.6 in 2013 to 40.7 in 2018. For allied health the average hours fell slightly to 34.0 per week, and for nursing and midwifery, the average hours fell from 33.4 in 2013 to 32.5 in 2018.

Figure 10 Average hours worked, Tasmania's health workforce 2013-18

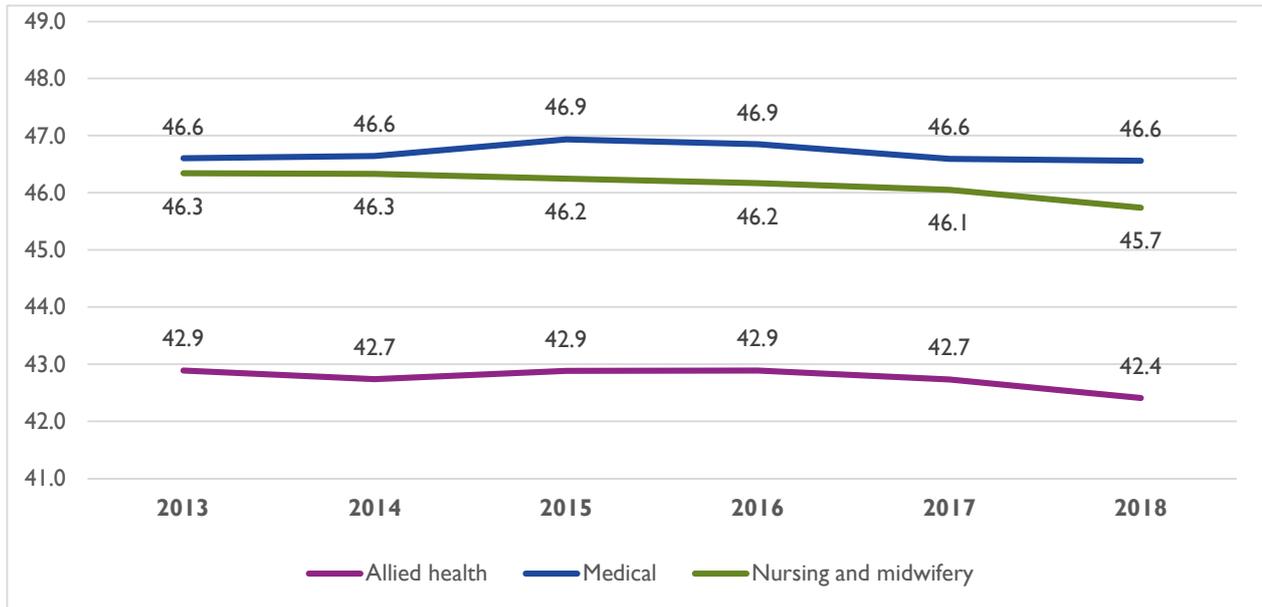


Source: National Health Workforce Data Set

AVERAGE AGE

The average age of the health professional workforce varies from 42.4 years for allied health professionals to 46.6 years for the medical profession.

Figure 11 Comparison of workforce average age (years), from 2013-18



Source: National Health Workforce Data Set

As Figure 11 shows, the medical workforce age has remained fairly consistent from 2013 to 2018, whereas the allied health and nursing and midwifery workforce average age has declined by 1 percent over this period. There is significant variation within the professional groups, for example dental therapists have an average age of 52 while oral health therapists have an average age of 30 and both nuclear medicine technologists and hospital non-specialists have an average age of 34.

WORKFORCE INDICATORS

Figure 12, Figure 13 and Figure 14, demonstrate a series of ‘workforce indicators’ that have been developed using relevant workforce metrics, to compare professions and help identify areas of concern and planning priorities. The workforce indicator metrics are:

- proportion of workforce over 60 years of age
- training availability in Tasmania (refers to specialty training for the medical specialties)
- proportion of the professional group with the first specialty qualification gained overseas (for medical specialties only)
- headcount of professionals in Tasmania and its regions per 100,000, compared to the Australian rate
- the workforce size, in headcount.

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

The workforce indicators are largely drawn from the National Health Workforce Data Set (2018) and includes 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.

Figure 12 Allied health professions with selected workforce indicators

Registered allied health profession	Over 60 years old	Training in Tas	Headcount of professionals per 100,000 population				Workforce size
			TAS	S	N	NW	
Dentists	18%	No	47.3	53.4	44.1	36.6	250
Dental prosthetists	14%	No	8.0	8.5	6.9	8.0	42
Dental therapists*	6%	No	15.7	14.0	17.2	17.9	83
Medical radiation practitioners**	12%	No	55.7	59.7	55.2	46.5	294
Occupational therapists	6%	No	52.8	62.3	49.6	33.9	279
Optometrists	8%	No	19.7	22.1	16.5	17.9	104
Pharmacists	8%	Yes	118.9	136.7	106.2	92.0	628
Physiotherapists	9%	No	84.0	98.0	77.9	58.1	444
Podiatrists	5%	No	20.3	21.0	19.3	19.7	107
Psychologists	17%	Yes	88.8	116.5	58.6	60.7	469

* Includes dental hygienists, dental therapists and oral health therapists

** Includes diagnostic radiographers, nuclear medicine technologists, and radiation therapists

Key

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

Figure 13 Medical specialties with selected workforce indicators

Medical profession	Over 60 years old	First specialty qualification gained overseas	Specialty training in Tas	Headcount of professionals per 100,000 population				Workforce size
				Tas	S	N	NW	
Addiction medicine specialists	50%	50%	Yes	0.4				3 or less
Anaesthetists	7%	13%	Yes	21.2	25.4	20.7	11.6	112
Dermatologists	20%	20%	No	0.9	1.1	1.4	0.0	5
Emergency physicians	6%	18%	Yes	9.7	12.5	4.1	9.8	51
General practitioners	27%	10%	Yes	119.4	139.7	99.3	96.5	631
Intensive care specialists	0%	18%	Yes	2.1	1.8	3.4	0.9	11
Medical administrators	50%	0%	Yes	1.1	1.1	1.4	0.9	6
Obstetricians and gynaecologists	8%	21%	Yes	7.4	9.2	6.2	4.5	39
Ophthalmologists	15%	35%	Some	3.8	4.4	4.1	1.8	20
Paediatricians and child health specialists	11%	33%	Some	6.8	8.8	4.1	5.4	36
Pain medicine specialists	60%	60%	Yes	0.9	1.8	0.0		5
Palliative medicine specialists	30%	10%	Yes	1.9	2.2	1.4	1.8	10
Pathologists	31%	22%	Yes	6.1				32
Cardiologists	37%	41%	Some	5.1	5.5	4.7		27
Endocrinologists	20%	10%	Some	1.9	2.6	2.1	0.0	10
Gastroenterologists	13%	20%	Some	2.8	3.3	2.1	2.7	15
General physicians	24%	33%	Yes	6.2	4.8	7.6	8.0	33
Geriatricians	17%	17%	Some	2.3	3.3	1.2		12
Haematologists	14%	29%	Some	2.7	2.2	3.1		14
Immunology and allergy physicians	0%	0%	No	0.4				3 or less
Infectious disease physicians	0%	20%	Yes	0.9	1.1	0.8		5
Medical oncologists	9%	18%	Yes	2.1	1.8	2.3		11
Nephrologists	8%	17%	Yes	2.3	2.2	2.3		12
Neurologists	0%	22%	Yes	1.7	2.9	0.4		9
Nuclear medicine physicians	17%	17%	Some	1.1	1.5	0.8		6
Respiratory and sleep medicine specialists	36%	9%	Some	2.1	2.6	1.6		11
Rheumatologists	0%	11%	Some	1.7	2.9	0.4		9
Psychiatrists	36%	26%	Yes	15.9	22.1	9.7	8.9	84
Public health physicians	40%	0%	Yes	0.9				5
Radiation oncologists	29%	0%	Some	1.3	1.1	2.1	0.9	7
Radiologists	24%	42%	Yes	7.2	10.3	4.8	2.7	38
Rehabilitation physicians	20%	0%	Some	0.9	1.8	0.0		5
Sexual health physicians	0%	50%	Some	0.4	0.7	0.0		3 or less
Cardiothoracic surgeons	0%	33%	Some	0.6				3 or less
General surgeons	38%	31%	Some	6.1	6.6	6.2	4.5	32
Neurosurgeons	29%	29%	Some	1.3				7
Oral and maxillofacial surgeons	0%	0%	Some	0.4				3 or less
Orthopaedic surgeons	26%	19%	Yes	5.1	5.2	5.5	4.5	27
Otolaryngology - head and neck surgeons	60%	20%	Some	1.9	1.8	2.8	0.9	10
Paediatric surgeons	33%	67%	Some	0.6				3 or less
Plastic surgeons	20%	60%	Some	1.9	2.2	1.6		10
Urologists	33%	50%	Some	2.3	2.2	2.3		12
Vascular surgeons	25%	25%	Some	0.8				4

Key

Over 60 years old	0-10%	11-24%	25% plus
Specialty training available in Tasmania	Yes	Some	No
Headcount of professionals per 100,000 population compared to Aus rate	At or above	Below	Significantly below (by 25% or more)
Workforce size (using headcount)	More than 10		10 or less
First specialty qualification gained overseas	0-15%	16-29%	30% plus

Figure 14 Nursing and midwifery professions and selected areas of practice with selected workforce indicators

Nursing profession	Over 60 years old	Training in Tas	Headcount of professionals per 100,000 population				Workforce size
			Tas	S	N	NW	
All Enrolled Nurses	11%	Yes	271.2	254.3	304.7	268.9	1433
All Registered Nurses	12%	Yes	1296.6	1359.4	1428.4	973.7	6850
All Midwives	12%	Yes	105.1	112.1	116.5	73.3	555
Nurse Practitioners	5%	No	7.4	9.2	6.9	3.6	39
Area of practice: Aged care	18%	Yes	242.3	225.2	270.2	247.5	1280
Area of practice: Critical care	6%	Yes	76.1	89.9	74.5	44.7	402
Area of practice: Emergency	3%	Yes	96.3	90.3	102.0	103.6	509
Area of practice: Maternity Care Grouped	12%	Yes	65.9	68.2	73.1	50.9	348
Area of practice: Mental health	24%	Yes	95.4	122.0	65.5	69.7	504
Area of practice: Peri-operative	12%	Yes	135.0	154.1	135.1	88.4	713
Area of practice: Practice nursing	13%	Yes	75.5	74.8	75.8	76.8	399

Key

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

Proportion of the workforce over 60

The workforce that is over 60 years of age is at higher risk of exiting the workforce within the next few years. These workforces require planning to ensure future workforce sustainability.

The allied health professions (Figure 12) and nursing and midwifery professions (Figure 14), score reasonably well across this measure, however we can see that 18 medical specialties have a high proportion (25 per cent or more) of their workforce over 60 years old (Figure 13). Pain medicine specialists and otolaryngologists have the highest proportion in the over 60 category, at 60 per cent.

Training availability in Tasmania

There are links between the availability of training in Tasmania and recruitment. This indicator is used in allied health and nursing to identify training availability for professional entry. In medicine, the indicator is used to identify the availability of specialty (or vocational) training. Where there are both Basic and Advanced components to the training pathway, it refers to the Advanced component.

It is important to note that in medicine, training availability can change due to the funding for training posts being available, supervisory availability and accreditation.

Figure 12 illustrates the lack of Tasmanian training across allied health professions, with only pharmacy and psychology having training available locally.

Proportion of the professional group with the first specialty qualification gained overseas

This is provided for the medical specialties and is an indicator on the reliance of immigration for workforce supply. This metric may be impacted in future years by the changes in migration patterns globally as a result of COVID-19. As shown in Figure 13, 13 specialties have 30 per cent or more of their workforce with their first specialty gained overseas, with paediatric surgeons (67 per cent), plastic surgeons (60 per cent) and pain medicine specialist (60 per cent) having the highest reliance on overseas training.

Headcount of professionals per 100,000 population

The workforce density indicators do not provide an assessment of how many is the right number of practitioners per population, rather they provide an observational assessment of supply relative to the national average.

There 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.

In the medical specialties, the density of medical practitioners across the regions has been undertaken with reference to the Tasmanian Role Delineation Framework (TRDF) and the Clinical Services Profile (CSP).

The TRDF and the CSP provide an indicator of the core medical specialties you would expect to find in each region. The regional densities presented in the profiles are determined by this for example, the profile for cardiothoracic surgery which is a statewide service includes a single statewide density, urology which has a service profile in the South and the North (which also services the North West) has a Southern and Northern density provided and anaesthetics which has a service in each region has a density provided for Tasmania, the South, North and North West.

The region of work is self-reported by the health professional. In a number of cases, the region is not known. This means that in some instances the density of practitioners to population will be under-represented.

Figure 12, Figure 13 and Figure 14 all show that the South has the most professions with a headcount of professionals per 100,000 population at or above the Australian rate. The North West is regularly the region with the lowest density across allied health, medicine and nursing and midwifery.

Workforce size

The workforce size is provided as an indicator to serve as a reminder that even small movements in the workforce like a retirement, leave or resignation can have a significant impact on the availability of a health profession and service.

In Tasmania in 2019, there were no allied health or nursing and midwifery professions with ten or less workers (headcount), however there were 22 medical specialties (Figure 14).

HIGH PRIORITY PROFESSIONS FOR PLANNING

Some of the workforce indicator metrics in Figure 12, Figure 13 and Figure 14, have been used to determine which professions are a high priority for planning.

Workforce	Each profession assigned a score based on
Allied health	<ul style="list-style-type: none"> • proportion of the workforce over 60 years of age • availability of entry-level training in Tasmania • Tasmanian headcount of professionals per 100,000 population. <p>In addition, any profession where Tasmania's professional headcount per 100,000 population was lower than the national rate by at least 25 per cent, was automatically deemed a priority profession.</p>
Medicine	<ul style="list-style-type: none"> • proportion of the workforce over 60 years of age • proportion of the workforce with first specialty qualification gained overseas • Tasmanian headcount of professionals per 100,000 population. <p>In addition, any profession where Tasmania's professional headcount per 100,000 population was lower than the national rate by at least 25 per cent, was automatically deemed a priority profession.</p>
Nursing and midwifery	<ul style="list-style-type: none"> • proportion of the workforce over 60 years of age • availability of entry-level training in Tasmania • Tasmanian headcount of professionals per 100,000 population. <p>In addition, any profession where Tasmania's professional headcount per 100,000 population was lower than the national rate by at least 25 per cent, was automatically deemed a priority profession.</p>

Further details on the methodology for determining the high priority professions for planning can be found in the *Data and methodology* chapter.

Using this scoring system, the following health professionals have been identified as a high priority for workforce planning:

- Occupational therapists
- Dermatologists
- Intensive care specialists
- Cardiologists
- Endocrinologists
- Infectious disease physicians
- Neurologists
- Rehabilitation physicians
- General surgeons
- Oral and maxillofacial surgeons

There have been some changes in a number of these workforces since that time, for example recruitment of additional neurologists in Launceston. Subsequent operational workforce planning will identify where further workforce planning may not be required and future analyses will demonstrate the impact of the changes.

While the Aged Care, Critical Care, Mental Health and Peri-Operative Nursing are not identified in this methodology as a high priority for planning, consultation has consistently identified recruitment and retention difficulty in these areas. This will require consideration in the development of operational workforce plans.

It is noted that some self-regulated allied health professions may experience workforce issues, however due to the available data and methodology these were unable to be determined in this work.

ACTIONS

Workforce supply

- 1.01 Develop operational workforce plans (statewide and regional) that are responsive to health service demands and align with the key findings and focus areas of *Health Workforce 2040*.
 - 1.02 Shape entry-level health workforce positions to meet changing patterns of demand.
-

DRAFT

THE DISTRIBUTION OF THE HEALTH WORKFORCE

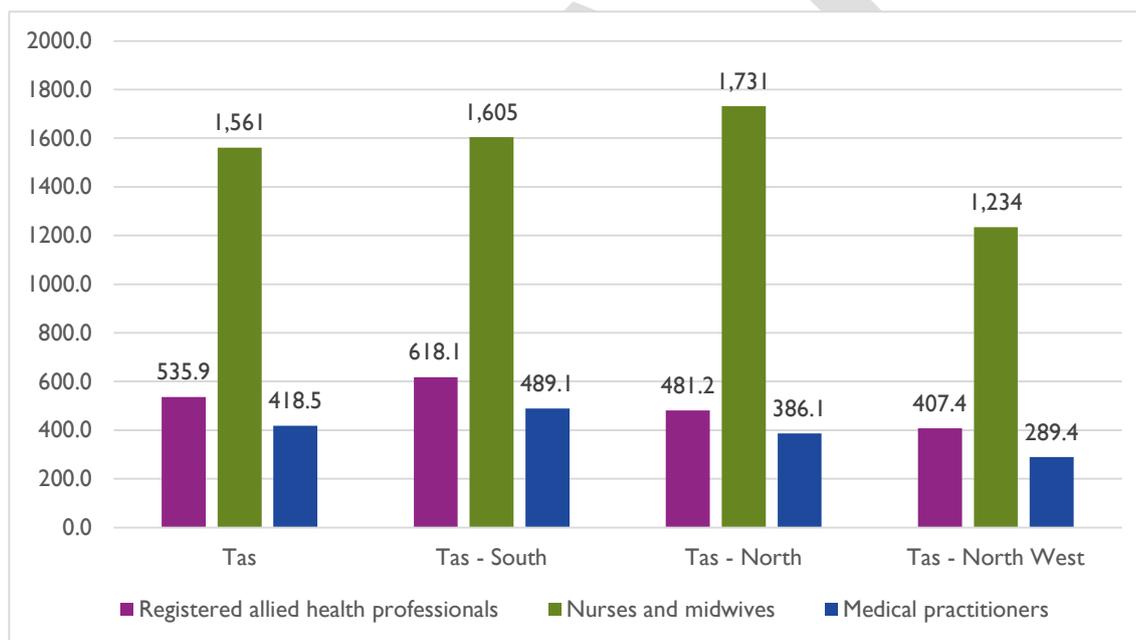
In Tasmania, the health workforce is not distributed evenly. The North West has the lowest density of health professionals to population in all health professional groups.

Having local access to health professionals is a key element of providing universal healthcare. This does not mean having every type of subspecialist in every local town, it means having access to the appropriate range of health professional for the size and location of the population, with links to centres with a higher level of service for highly specialised services.

Rural/urban imbalances in the health workforce are a matter of concern for nearly all countries, including Australia. Where there are overall shortages of health workers, this tends to be exacerbated by urban-rural maldistribution and internal migration of the workforce. This can be evidenced by lower availability of health workers and higher turnover rates of staff within regional health services.

In Tasmania, the health professional workforce is not distributed evenly. The North West has the lowest density in all health professional groups, the North has the highest number of nurses and midwives while the South has the highest number of medical practitioners and registered allied health professionals (Figure 15).

Figure 15 Employed health practitioners per 100,000 population, 2018, Tasmanian regions



Source: National Health Workforce Data Set; ABS Population Statistics Catalogue 3235.0 Regional Population

When we go further into the workforce to look at individual professions, specialties or divisions of registration, we can see that the distribution of almost every part of the health workforce, including the generalist professions, have lower headcounts per head of population in the North West of Tasmania than other regions of Tasmania. The exceptions to this in the registered health professions are the enrolled nurse workforce, medical administrators, palliative medicine physicians, optometrists, podiatrists and radiation therapists.

Some variation in supply is expected as not all specialty services are provided in all locations. This would suggest that a higher overall supply would be found in the South where the tertiary hospital facility is located, followed by the North and then the North West.

However, in line with the Tasmanian Role Delineation Framework (TRDF), we expect to see comparatively similar levels of the “core” health professions to support the role delineation of services in the North West. This includes nursing and midwifery, physiotherapists, occupational therapists, dental practitioners, psychologists, general practitioners, emergency medicine physicians, general physicians and surgeons, psychiatrists, orthopaedic surgeons, paediatricians, obstetricians and gynaecologists.

What we do see and is outlined in the workforce indicators (Figure 12, Figure 13 and Figure 14), is an almost universal distribution in these specialties that favours the South and the North.

IMPROVING THE GEOGRAPHIC DISTRIBUTION OF THE HEALTH WORKFORCE

The challenge of recruiting and retaining a health workforce in regional and rural Tasmania has been one which both state and commonwealth governments have worked to address.

COVID-19 has had a significant impact on the ability to recruit and use locum medical practitioners and interstate agency nurses due to border closures. This has highlighted this challenge and ongoing fragility of the workforce in regional areas.

The World Health Organisation has looked at evidence-based recommendations to improve the attraction and recruitment of health workers in remote and rural areas¹⁴. They have identified a range of interventions with some level of impact that provides a useful matrix to look at where existing efforts lie and where future efforts might be directed. These are outlined in the first two columns of Figure 16 with the third column highlighting some of the existing initiatives in Tasmania aimed at improving the geographic distribution of the workforce.

A range of actions are proposed to progress Tasmania toward a more equitable distribution of the workforce in the North West. These focus on building education and training opportunities within the NW region and aligning contracts and incentives to better support recruitment.

While the actions proposed are focussed on the public sector, it is acknowledged that many health professionals work in primary and community care and in specialty practice in a private capacity or for non-government organisations.

¹⁴ World Health Organisation 2010, *Increasing access to health workers in remote and rural areas through improved retention: global policy recommendations*, World Health Organisation, Geneva, Switzerland, viewed 3 July 2019, <<https://www.who.int/hrh/retention/guidelines/en/>>. *Health Workforce 2040 | Strategy*

Figure 16 Categories of interventions used to improve attraction, recruitment and retention of health workers in remote and rural areas

Category	Examples	Existing initiatives in Tasmania
Education	Students from rural backgrounds	Rural quotas in medical school Rural Application Process and Tasmanian Medical Student Rural Application Process Funding Scheme Grant
	Health professional schools outside of major cities	University of Tasmania School of Nursing - Launceston University of Tasmania Launceston Clinical School University of Tasmania Rural Clinical School - Burnie University Department of Rural Health Postgraduate Rural and Regional Training Hub - Burnie
	Clinical rotations in rural areas	Clinical placements across allied health, medicine and nursing Integrated Rural training Pathway - STP positions Rural Junior Doctor Training Innovation Fund
	Curricula that reflect rural health issues	
	Continuous professional development for rural health workers	Award entitlements for CPD, however do not preference rural health workers
Regulatory	Enhanced scope of practice	Allied Health Rural Generalist- skill sharing
	Different types of health workers	
	Compulsory service	
	Subsidised education for return of service	Bonded Medical Placements Scheme
Financial incentives	Appropriate financial incentives	North West incentive for medical practitioners in the public sector
		Rural bulk billing incentives (MBS)
		General practice rural incentive payments
		Rural and remote, district and Bass Strait Islands allowances for nurses and midwives
		Rural and Remote Professional Development Package
Professional and personal support	Better living conditions	Accommodation support for rural placements
	Safe and supportive working environment	
	Outreach support	Clinical networks and upskilling programs
	Career development programs	Tasmanian Rural Generalist Pathway Centre of Antarctic Remote & Maritime Medicine (CARMM)
	Professional networks	Mentorship program for rural interns Rustica (Rural Health Student Network) Rural Doctors Association of Tasmania
	Public recognition measures	

ACTIONS

Workforce distribution

- 1.03 Review outcomes of the specialist medical practitioner North West 25 per cent market allowance trial.
 - 1.04 Grow professional development opportunities for health professionals working in rural and remote services.
 - 1.05 Support working arrangements at the statewide level to allow for and promote:
 - outreach service provision
 - integrated service models in rural and remote areas
 - training and service networks.
 - 1.06 Develop local North West career pathways into nursing and midwifery.
 - 1.07 Increase medical training opportunities and recruitment in the North West by optimising accredited training opportunities and developing end to end training pathways from early career to specialist practitioners.
-

DRAFT

THE ROLE OF GENERALISTS

Generalists are health professionals whose scope of practice is across multiple conditions and multiple organ systems (medicine) or across a full spectrum of the profession. They often have a scope of practice that overlaps with many specialised areas of practice. Examples of generalists in the workforce are generalist physiotherapists, general practitioners, rural generalists, general physicians and surgeons and registered nurses and allied health practitioners with a broad scope of practice.

There is a need for both generalists and specialists across the health workforce with the balance being increasingly important for smaller communities where a broad range of health conditions need to be managed by smaller numbers of health professionals.

Concerns have been raised about the decline of health professionals with generalist skills, in particular in medicine and allied health, and the impacts this may have including;

- Increasing fragmentation of healthcare, particularly for those with chronic and complex health care needs,
- Increasing costs of healthcare,
- Increasing inflexibility of the health workforce, and
- Sustainability of health services, in particular in regional and rural areas.

At the same time, Tasmania experiences difficulty in recruiting some specialist workforces, for example mental health nurses, intensive care nurses, endocrinologists and neurologists. This highlights the complexity of this issue where we seek to get the right balance of generalists and specialists to meet the service needs of a particular community. That balance will be different depending on the size of the population being served by the health service and the ability to maintain a sustainable workforce in each service area.

Support of a generalist workforce also requires the active and deliberate provision of support networks whereby generalists can seek advice from their subspecialist colleagues and be provided with it in a timely fashion.

In the public sector, the Tasmanian Role Delineation Framework and the Clinical Services Profile of the health services helps to define the workforce requirements of the clinical services at each of Tasmania's four acute hospitals. This helps to identify where a more generalist workforce is more appropriate to meet the service needs. For example, the North West Regional Hospital is designated Level 4 for Cardiology services. This provides for an inpatient and outpatient cardiology service; however, the workforce requirements are for an on-site medical specialist with experience in cardiology with outreach services provided by visiting cardiologists. The on-site medical specialist could be a general physician. In contrast, a Level 5 service such as the Launceston general Hospital requires a specialist cardiology workforce on-site.

In Tasmania, there has been a recent focus on developing training pathways for rural generalists in medicine and allied health to enable rural communities' better access to health services and to provide greater stability to the rural health workforce. More information on this can be found in the Medical and Allied Health Volumes of *Health Workforce 2040*.

While there has been some improvement in the numbers of generalist medical practitioners, ongoing effort is required to ensure that the trend to increasing specialisation is kept in balance to provide the appropriate mix of generalists and specialists for the Tasmanian health environment.

ACTIONS

Generalists

- 1.08 Ensure that training positions support growth in the generalist workforce.
 - 1.09 Support the ongoing development of rural pathways in medicine and allied health, including the development of the rural medical generalist workforce and the allied health rural generalist pathway.
 - 1.10 Identify services that would benefit from rural generalists and develop employment opportunities.
 - 1.11 Work with medical colleges to enhance rural selection into training programs and opportunities to provide more training in rural areas.
-

DRAFT

FOCUS AREA TWO: EDUCATION AND TRAINING

In 2040, education and training will be aligned with identified workforce priorities and career pathways. The health workforce will be supported with training and education at all stages of their career and will engage in lifelong learning.

PROFESSIONAL ENTRY TRAINING

Health workforce education and training, across the career lifespan, should be aligned with both individual and community needs and identified health workforce priorities.

The training of the health workforce occurs in both the vocational education and training (VET) and tertiary education sectors.

While many health professionals, including medical practitioners, registered nurses and allied health professionals, are educated within the university sector, other important health professionals such as enrolled nurses, and Aboriginal health practitioners gain their qualifications through VET courses, ranging from certificate to diploma level.

Responsibility for, and influence over, health education and training are shared across a range of players, including Commonwealth and state/territory governments, universities and other tertiary education providers, registration and accreditation boards, and professional colleges.

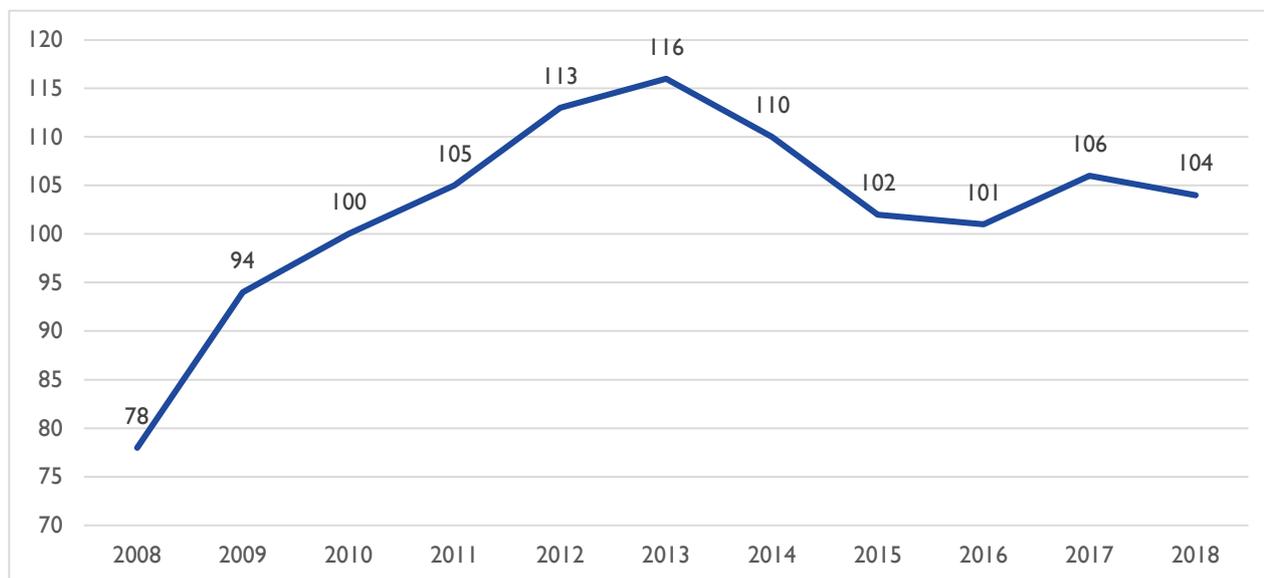
The Commonwealth provides funding for university-delivered health education and while the Commonwealth also contributes funding to the VET sector, the allocation of funding is the responsibility of state and territory governments.

Currently, apart from in medicine, the number of places that can be offered by Universities is uncapped. Meaning that where there is a demand for a course and a university wants to and is accredited to provide it, that university will be able to source funding through the Commonwealth Supported Places scheme. This, along with the increase in medical student places, has correlated with a significant increase in the number of medical, nursing and allied health students across Australia.

Clinical training placements are a key constraint on professional entry training numbers. The majority of clinical placements across disciplines are provided in public health systems. Training the next generation of health professionals is and should be a key part of the public health system, however this requires the development of safe training environments for students and patients and needs to be supported by adequate investment in supervisors, educators and mentors.

In Tasmania, the growth in medical graduates between 2008 and 2018 was approximately 35 per cent (Figure 17). This is significantly lower than the national growth of 73 per cent over the same period¹⁵.

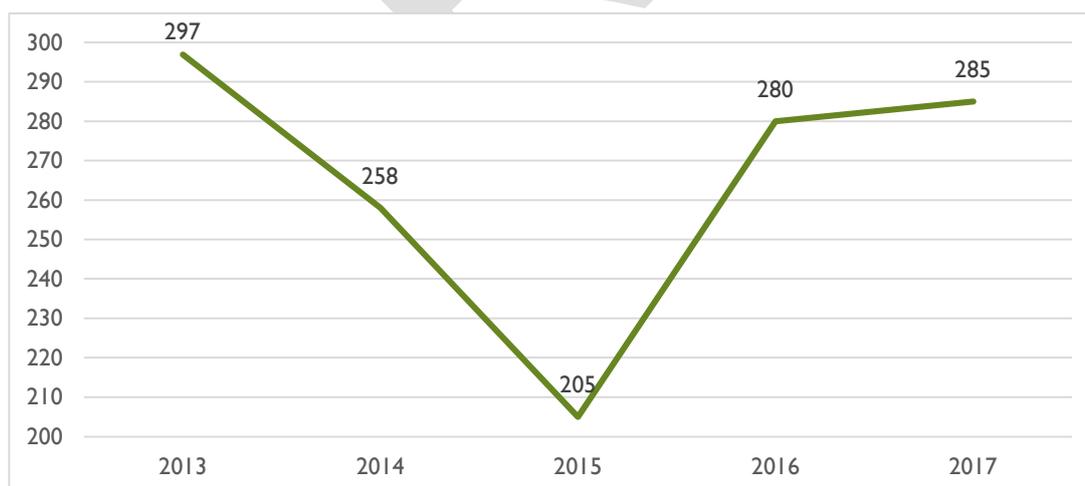
Figure 17 Number of medical graduates, Tasmania, 2008 - 2018



Source: MTRP Reports 13th- 19th, MET data sets 2016-2017

While there was some variation in numbers the overall number of registered nursing graduates in Tasmania remained steady between the years 2013 and 2018 (Figure 18). These numbers represent the outflow of students from the University of Tasmania and is not a direct comparison with graduates employed in the public and private sectors. While not a direct comparator, this is well below the 48 per cent growth in the number of nursing students registered in the period 2013-2017.

Figure 18 Number of nursing graduates, Tasmania, 2013-17



Source: University of Tasmania

¹⁵ Medical Deans Australia and New Zealand, *Student Statistics Tables*, viewed 23 July 2018, https://medicaldeans.org.au/data/?md_year=2008&data_type=Graduates&country=AU&students=total&preview=Health Workforce 2040 | Strategy

Many of the allied health professions do not have local training providers, however partnerships with higher education institutions in other states and territories have enabled Tasmania to provide a range of clinical placements within the public health sector.

Innovative models have also been established, for example: Midwifery education is undertaken in an agreed partnership model with the theoretical component led by an interstate higher education provider and the clinical/residential school component led by the Department of Health and Tasmanian maternity services.

This approach ensures that there is a pipeline of new health professionals that have experienced working in the Tasmanian health system - improving the ability to recruit locally.

POST-GRADUATE TRAINING

Most allied health professionals are educated to a bachelor's degree level. Psychology and pharmacy are the only nationally registered professions with a compulsory postgraduate requirement, resulting in longer training times.

In medicine, after graduating from a university professional entry course, there is a training pipeline through internship, the junior medical years and vocational training, leading to a fellowship of a specialty college.

In nursing and midwifery, there are a range of post-graduate training pathways leading to areas of specialised practice in nursing, midwifery practice and recognised advanced practice roles including the endorsed nurse practitioner.

The availability and type of training does not always align to where the workforce need is. This can be exacerbated in a smaller jurisdiction like Tasmania that, in many cases, cannot support training locally, making it more difficult to sustain some health workforces.

Further discussion on post-graduate training and training pipelines can be found in the accompanying volumes on Allied Health, Medicine and Nursing and Midwifery.

USING EDUCATION TO IMPROVE THE DISTRIBUTION OF THE HEALTH WORKFORCE

Education plays a key role in addressing issues with distribution. Some of the factors that have been shown to assist include:

- selecting students from rural backgrounds
- providing health professional training outside of major cities
- providing clinical rotations in rural areas
- developing curricula that reflect rural health issues
- supporting continuous professional development for rural health workers.

Providing a pathway into health-related employment that can be entered from school completion can improve the participation of young people in the health workforce. This should be supported by programs that articulate into health professional training where appropriate. This is another important mechanism to facilitate local recruitment into regional and rural health services.

While there is already effort being made, distribution issues persist; necessitating a continued and renewed focus on these measures.

ENGAGEMENT IN LEARNING THROUGHOUT THE CAREER LIFESPAN

All health professionals should engage in lifelong learning to ensure that their knowledge and expertise remains current, refreshed and is able to respond to changes to health system demand. The necessity of this responsiveness has been highlighted during the response to the COVID-19 pandemic. For example, upskilling and providing refresher training in critical care to the existing nursing workforce has been an important part of developing a surge workforce capacity for intensive care.

Continuing professional development (CPD) is also a requirement of the NRAS.

Supporting access to CPD is particularly important for the rural health workforce. Rural health professionals tend to work in smaller teams, have higher on-call requirements, work in relative isolation from their peers and have to travel to access education programs.

SUPPORTING RESEARCH

Building a health professional workforce that is committed to research, innovation and evidence-based practice is more important than ever as we continue to work to provide safe and high-quality healthcare services to the community. Building research capacity in the health professional workforce can support health services to develop innovative and effective change. Research has shown that clinicians and clinical research staff who undertake clinical research may have better training and specialisation range as well as being a more highly skilled workforce to conduct clinical trials. When health professionals are engaged in clinical research they are also exposed to the frontline of clinical research and future standard of care. They can help embed evidence-based findings into clinical practice (Figure 19). Researchers who participate in industry funded clinical research often have a strong sense of improving care, bring Australian research outcomes to a wider global audience, bring in additional funds for academic research, and assist in retaining researchers within the Australian health and hospital system.¹⁶

Figure 19 Embedding research in healthcare



Source: Australian Commission on Quality and Safety in Health Care. <https://www.safetyandquality.gov.au/our-work/clinical-trials/>

¹⁶ Clinical Oncological Society of Australia and Cancer Council Australia 2011, *Joint Submission to the Clinical Trials Action Group: Enhancing Australia's position as a preferred destination for clinical trials*. p. 7, Clinical Oncological Society of Australia, Sydney, NSW, viewed 19 July 2019, <https://www.cosa.org.au/media/1082/cosa_submission_cca_aust-preferred-destination-for-ct_feb2010.pdf>.

Research has also shown that sites with dedicated clinical trial offices with clinical research staff are more successful in recruiting patients to participate in research who in turn get early access to new interventions and medicines. In Australia in 2015, there were an estimated 2,200 clinical staff supporting clinical trials programs. This is only an estimate as many clinical staff only work part-time at most in the clinical trials space compared to their clinical roles.¹⁷

Hospitals can retain high-quality staff by supporting clinical research through a 'pro-research' culture, providing appropriate infrastructure, providing protected time for research and related activities, and ensuring clear career pathways.¹⁸

In Tasmania, there is an opportunity to build a culture of research and innovation through ongoing education and training initiatives. This will require the development of clear leadership and governance structures.

ACTIONS

Create opportunities

- 2.01 Align education and training (including professional development) with workforce needs and organisational priorities.
- 2.02 Work with education providers to:
 - improve workforce supply through the development of training pathways
 - improve access to professional development opportunities
 - design placement plans to align with career opportunities and workforce priorities.
- 2.03 Develop training pathways to support career development, retraining and diversification to match service need.
- 2.04 Develop a statewide supervised practice framework for nurses and midwives returning to practice or seeking to change their context of practice.

Medical specialty training

- 2.05 Develop networked training programs in Tasmania to improve self-sufficiency and distribution in consultation with Colleges.
- 2.06 Statewide coordination of the Specialist Training Program.
- 2.07 Grow accredited medical training positions in specialties with identified workforce needs.
- 2.08 Work with the University of Tasmania's Rural and Regional Postgraduate Medical Training Hub to identify rural training models and to maximise rural training opportunities in medical specialties.

Research

- 2.09 Develop and implement a health workforce research skills and capacity framework.
-

¹⁷ MTPConnect 2017, *Clinical Trials in Australia: The economic profile and competitive advantage of the sector*, viewed 19 July 2019, <<https://www.mtpconnect.org.au/images/MTPConnect%202017%20Clinical%20Trials%20in%20Australia%20Report.pdf.pdf>>.

¹⁸ Clinical Oncological Society of Australia and Cancer Council Australia 2011, *Joint Submission to the Clinical Trials Action Group: Enhancing Australia's position as a preferred destination for clinical trials*, p. 13, Clinical Oncological Society of Australia, Sydney, NSW, viewed 19 July 2019, <https://www.cosa.org.au/media/1082/cosa_submission_cca_-aust-preferred-destination-for-ct_feb2010.pdf>.

FOCUS AREA THREE: FOSTERING INNOVATION

In 2040, Tasmania will have new and innovative health workforce roles and models that respond to the changing needs of communities. The health workforce will be confidently using technology to drive innovation and harnessing the benefits to support health service delivery and quality.

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

Service and workforce reforms encompass changing models of care, adjustments to skill mix, health professionals working to their full or expanded scope of practice and changes in the way technology contributes to health services and is used by health professionals. Health workforce reforms should not be constrained by professional boundaries - they should be pursued across health professional streams to build workforce models that provide safe, effective and appropriate care.

Reforms should be targeted toward achieving outcomes where there are existing or emerging problems. For example, in providing health services in regional and rural communities, addressing waiting times for endoscopies by looking at who else can provide them, ensuring the health workforce mix provides the best outcome for patients and is also sustainable into the future.

Health workforce planning work undertaken by Health Workforce Australia indicated that service and workforce reforms had a significant downward impact on the future requirement for health professionals.

The recent experience with the COVID-19 pandemic has demonstrated that both the workforce and the community is able to 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. For example, in May 2020 32.7% of MBS services were delivered by telehealth, with 90.9% of these by telephone and 9.1% by videoconference.¹⁹

WORKFORCE AND SERVICE MODEL REFORM

Health workforce change is required. This necessitates a critical look at what health professionals do, how they are paid and where they work.²⁰

Many health professionals spend time doing work that other people can do. This can increase the overall cost of the health workforce, resulting in valuable resources not being available for increasing services, and exacerbate workforce shortages.

Looking at the roles of each health professional group and enabling health professionals to work to a full or expanded scope of practice, improving collaboration between health professional groups can help to ensure that the health workforce is maximally utilised.

Some examples of workforce reform designed to improve access to health services include;

- The development of new workforce roles such as rural medical generalists,
- Better use of the assistant workforces, for example allied health assistants, and
- Getting a better balance between the generalist and the specialist workforces.

¹⁹ University of Queensland, Centre for Online Health, <https://coh.centre.uq.edu.au/telehealth-and-coronavirus-medicare-benefits-schedule-mbs-activity-australia>, viewed 9 August 2020.

²⁰ Duckett, S. 2016, *Three challenges facing health workforce reform*, Grattan Institute, Carlton, VIC, viewed 18 July 2019, <<https://grattan.edu.au/news/three-challenges-facing-health-workforce-reform/>>.

There are a number of barriers to workforce reform within the complex health system environment. This means that reform efforts are often slow to develop and to implement.

Changes in the way health services are structured and operate have the potential to lead to changes in health workforce requirements.

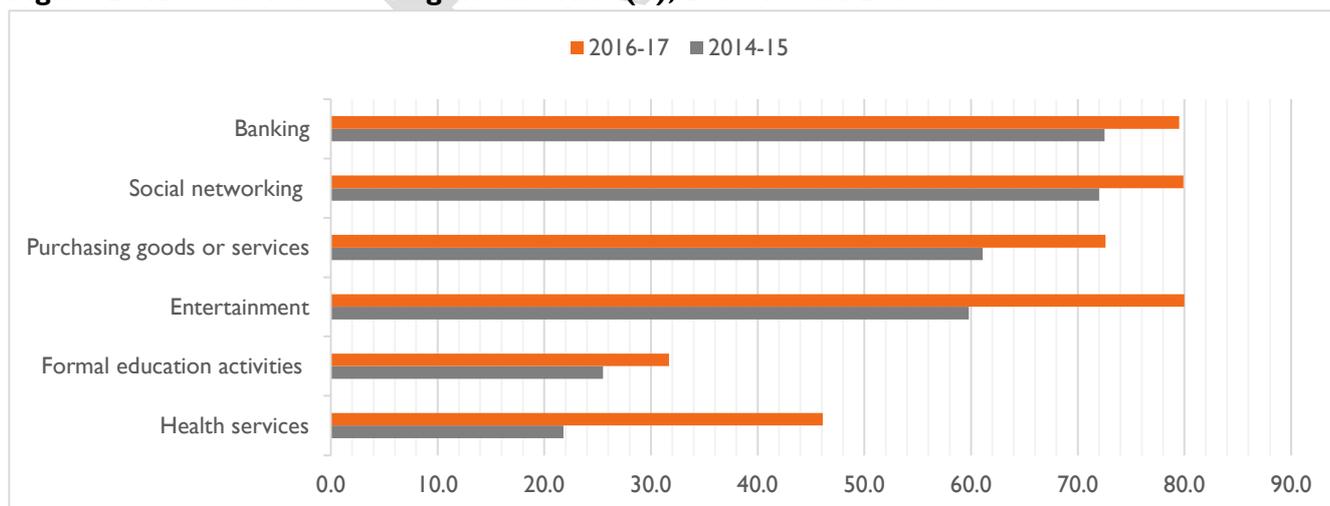
The Community Rapid Response Service (ComRRS) is a hospital avoidance program providing care outside of the hospital setting. It aims to keep people out of emergency departments. A survey of GPs found 96 per cent agreed the patients referred would otherwise have needed to go to the emergency department for intervention or hospitalisation, which indicates the service is fulfilling its intended purpose. This type of service model can therefore support nurses working in this community program to work to their full scope of practice, while decreasing the requirements for the range of staff in emergency departments and hospital admissions.

Shifting the balance in the health system away from the acute sector and toward primary care and prevention has also shown to not only provide better health outcomes but to also reduce demand for higher cost acute care.

NEW TECHNOLOGIES

The majority of Australians are digitally connected. According to the Australian Bureau of Statistics, 87 per cent of Australians were internet users (people aged at least 15 years old who accessed the internet in the last three months). As shown in Figure 20, the three most common reasons for accessing the internet in 2016-17 were entertainment, social networking and banking. The activity with the biggest growth from 2014-15 to 2016-17, however, was health services; growing from 21.8 per cent in 2014-15 to 46.1 per cent in 2016-17.²¹ New technologies have the potential to improve outcomes for patients and the health workforce; however, they need to be designed with the end user in mind and be implemented thoughtfully with ongoing monitoring and evaluation.

Figure 20 Reasons for accessing the internet (%), 2014-15 and 2016-17



Source: Australian Bureau of Statistics (2018) 8146.0 - Household Use of Information Technology, Australia, 2016-17, Canberra, viewed 3 July 2019,

<https://www.abs.gov.au/AUSSTATS/abs@.nsf/second+level+view?ReadForm&prodno=8146.0&viewtitle=Household%20Use%20of%20Information%20Technology,%20Australia-2016-17-Latest-28/03/2018&&tabname=Past%20Future%20Issues&prodno=8146.0&issue=2016-17&num=&view=&>

²¹ Australian Bureau of Statistics 2018, 8146.0 - Household Use of Information Technology, Australia 2016-17, Australian Government, Canberra, ACT, viewed 3 July 2019, <<https://www.abs.gov.au/ausstats/abs@.nsf/mf/8146.0>>.

Automation

Robotics and artificial intelligence (AI) are already infiltrating workplaces and, according to McKinsey and Company, between 25 per cent and 45 per cent of current work activities in Australia could be automated by 2030²².

It is expected that automation will continue to replace or improve routine, predictable and physical activities meaning that jobs that are made up of routine, predictable and physical tasks are at risk, and demand will increase for workers in unpredictable and interactive roles²³.

This change in skills is already starting; in recent years there has been a decline in the share of Australians employed in routine manual jobs and a significant increase in healthcare and social assistance related employment (that are made up primarily of non-routine work).²⁴

One example of AI in healthcare was the CSIRO's development of a test to detect diabetic retinopathy. The condition, affecting one third of Australians living with diabetes, can lead to blindness if left untreated. The new screening technique is done by taking a photo of the patient's retina – usually by a nurse at a GP clinic – and then AI technology analyses the image. The results are returned in less than a minute, compared to a six to eight week wait to see an ophthalmologist in some regions.²⁵ This example reflects the automation of routine manual jobs as well as a job change, rather than a job replacement – there is still human input required.

New and changed jobs will require higher skill levels and, just as importantly, will require users to commit to ongoing learning as technologies continue to improve and adapt. It is integral to train employees to operate technology safely and to create a culture of life-long learning. Innovation should be promoted across all health professions and in all regions to ensure the advantages and any disadvantages of new technologies are shared.

'Past experience of new technologies in treatments suggests that new technology can have an expansionary effect; innovations are often added to the current suite of treatments rather than replacing less effective therapies, increasing costs and workload rather than efficiencies.' – National Scoping Study of Jurisdictional Initiatives²⁶

Reducing geographic boundaries

Digital technology has the potential to provide greater access to health information and healthcare; regardless of a patient's geographic location. In turn, decreasing the gap in healthcare services in rural and remote areas and improving health outcomes for the people living in those areas.

Telehealth is an example of this. Telehealth refers to health services delivered through communication technologies such as videoconferencing. Improving access to telehealth services, particularly for people with

²² McKinsey & Company 2019, *Australia's automation opportunity: Reigniting productivity and inclusive income growth*, New York, NY, USA, viewed 3 July 2019, <<https://www.mckinsey.com/featured-insights/future-of-work/australias-automation-opportunity-reigniting-productivity-and-inclusive-income-growth>>.

²³ McKinsey & Company 2019, *Australia's automation opportunity: Reigniting productivity and inclusive income growth*, New York, NY, USA, viewed 3 July 2019, <<https://www.mckinsey.com/featured-insights/future-of-work/australias-automation-opportunity-reigniting-productivity-and-inclusive-income-growth>>.

²⁴ Reserve Bank of Australia 2016, *The Changing Nature of the Australian Workforce*, Reserve Bank of Australia, Brisbane, QLD, viewed 3 July 2019, <<https://www.rba.gov.au/speeches/2016/sp-so-2016-09-21.html>>.

²⁵ Engineers Australia 2017, *AI software developed for eye-screening tests*, Engineers Australia, 1 November 2017, Barton, ACT, viewed 22 July 2019, <<https://portal.engineersaustralia.org.au/news/ai-software-developed-eye-screening-tests>>.

²⁶ Urbis 2019, *National Scoping Study of Jurisdictional Initiatives: Developments in Technologies and Treatments and the Impact on Health Workforces*, NSW. (Not publicly released to date).

disabilities and chronic and mental conditions, is a priority for Australia and its state and territories²⁷. Telehealth can be beneficial in rural and remote regions and has the capacity to encourage self-managed care and leverage the support workforce.

There are barriers to telehealth though, including digital literacy of patients and healthcare professionals, internet access, technology upgrades, apprehension to change and having staff to support patients through the process. Without the right people in place, technologies like telehealth cannot reach their potential.

Digital inclusion

While the concept of digital inclusion is complicated, its core themes could be described as: Access, affordability, key online activities and digital literacy²⁸. As services, education, information, healthcare and social opportunities are increasingly being delivered in a digital format, digital exclusion can have negative social and economic consequences for both individuals and the community. According to the Australian Bureau of Statistics, 40 per cent of the lowest income households in Australia are not connected to the internet, only 46 per cent of people aged 65 or over are internet users and one million people living with disability do not have access to the internet at home²⁹. Digital inclusion is a key consideration when implementing health technologies; as well as the digital literacy of the workforce.

“If digital technologies are to be sustained and integrated into health systems, they must be able to demonstrate long-term improvements over the traditional ways of delivering health services.”- Dr Soumya Swaminathan, Chief Scientist, WHO

Digital health technologies and the workforce

While many technological advances in health are aimed at the patient, the impact on the workforce is significant. It is usually the workforce that is responsible for using the technology and, potentially even creating and developing the technologies. In Tasmania, 16 per cent of the medical workforce and 14 per cent of the nursing and midwifery workforce were over 60 years of age in 2018; meaning that a significant proportion of these workforces likely completed their initial clinical training before the beginning of the digital age. For a workforce to be confidently using digital health technologies to deliver health and care, ongoing learning must be embedded, and change management must be effective.

National Digital Health Strategy

The Australian Government’s Digital Health Agency was set up in 2016 – with support from the Tasmanian government and other states and territories – to develop a National Digital Health Strategy.

‘Digital information can transform the quality and sustainability of health and care. Used effectively, it can help save lives, improve health and wellbeing and support a sustainable health system that delivers safe, high quality and effective health services for all Australians’³⁰ – The Australian Digital Health Agency

²⁷ 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, <<https://www.AIHW.gov.au/getmedia/832c1e17-a3eb-4bb2-bd81-1a572e22a726/AIHW-aus-221-chapter-7-5.pdf.aspx>>.

²⁸ Swinburne Institute for Social Research, Centre for Social Impact, Telstra Corporation Ltd 2015, *Australian Digital Inclusion Index: Discussion Paper*, Melbourne, VIC, viewed 3 July 2019, <https://digitalinclusionindex.org.au/wp-content/uploads/2015/08/ADII_DiscussionPaper-Sep15_webV2.pdf>.

²⁹ Australian Bureau of Statistics 2018, *8146.0 - Household Use of Information Technology, Australia 2016-17*, Australian Government, Canberra, ACT, viewed 3 July 2019, <<https://www.abs.gov.au/ausstats/abs@.nsf/mf/8146.0>>.

³⁰ Australian Digital Health Agency 2017, *Australian National Digital Health Strategy*, Australian Digital Health Agency, Canberra, ACT, viewed 3 July 2019, <https://conversation.digitalhealth.gov.au/sites/default/files/adha-strategy-doc-2ndaug_0_1.pdf>.

The seven priorities identified in the National Digital Health Strategy are:

1. Health information that is available whenever and wherever it is needed
2. Health information that can be exchanged securely
3. High-quality data with a commonly understood meaning that can be used with confidence
4. Better availability and access to prescriptions and medicines information
5. Digitally enabled models of care that improve accessibility, quality, safety and efficiency
6. A workforce confidently using digital health technologies to deliver health and care
7. A thriving digital health industry delivering world-class innovation.³¹

The Commonwealth, state and territory governments and private sector, are already recognising and prioritising advancements in digital health technology and separately have achieved numerous outcomes.

*'Given the progress that is being made within geographic areas, individual health services or within a health sector, there is a risk that uncoordinated investment in technology that does not meet a common set of standards will exacerbate siloing in the health system, with each service or sector using a different system.'*³²

For health technologies to work, they need to be patient centric and developed in collaboration with all of the touchpoints. Ultimately, it is important for Tasmania to prioritise health innovations and it is integral to use a holistic approach, with national and broad collaboration.

³¹ Australian Digital Health Agency 2017, *Australian National Digital Health Strategy*, Australian Digital Health Agency, Canberra, ACT, viewed 3 July 2019, <https://conversation.digitalhealth.gov.au/sites/default/files/adha-strategy-doc-2ndaug_0_1.pdf>.

³² Australian Digital Health Agency 2017, *Australian National Digital Health Strategy*, Australian Digital Health Agency, Canberra, ACT, viewed 3 July 2019, <https://conversation.digitalhealth.gov.au/sites/default/files/adha-strategy-doc-2ndaug_0_1.pdf>.

ACTIONS

Workforce models

- 3.01 Establish a health workforce reform network to progress innovative health workforce models aligned with health service needs and organisational priorities.
- 3.02 Develop integrated models of care and service models, including multidisciplinary models of care.
- 3.03 Support health professionals to work to their full scope of practice including podiatry and nurse and midwifery prescribing where appropriate.
- 3.04 Develop nurse and allied health led models of care utilising extended and advanced scope of practice initiatives to improve access to services in the community.
- 3.05 Grow the current enrolled nurse workforce to achieve the agreed industrial level of 25 per cent where clinically appropriate.
- 3.06 Grow midwifery continuity of care models including improved access via outreach services and greater integration of General Practice support.
- 3.07 Network with the private sector and with education providers to identify and progress new and innovative health workforce models.

Technology

- 3.08 Build service models that incorporate the best use of technology.
 - 3.09 Develop a workforce that confidently uses digital health technologies to deliver health and care.
 - 3.10 Implement electronic rostering systems across the public health sector.
-

FOCUS AREA FOUR: ENHANCING CULTURE AND WELLBEING

In 2040, the Tasmanian public health sector will be a workplace of choice. A collaborative statewide working environment will recognise and celebrate success and encourage positive risk taking and sharing of learnings. The importance of health leaders in driving a culture supportive of high-quality, safe, person centred service delivery will be recognised. Promoting and supporting the health and wellbeing of the health workforce will be a priority.

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.

The 2018 Tasmania State Service employee survey found that the top three most rewarding things about working in the Tasmanian Health Service were:

1. Serving the Tasmanian community and making a difference to it
2. Working in a good team environment
3. Using their skills.

In contrast the top three areas for improvement were:

1. Focus on positive work behaviours/cultures
2. Management/leadership
3. Training and development opportunities.

Having a strong focus on developing leadership within the health services and building a high-performance culture is an important step in supporting the health workforce to have satisfying and rewarding work and in increasing the performance of the service.

CULTURE

Organisational culture emerges from shared beliefs, values and norms of behaviour - the 'way things are done around here', as well as the way things are understood, judged and valued.³³ Organisational culture:

- Is about how things are done within the workplace
- Is the way things are done within teams and is heavily influenced by unwritten rules
- Reflects what has worked well in the past.³⁴

Healthy organisations typically have a culture that promotes trust, openness and engagement and enables continuous learning and improvement. There is a 'can do' culture, supported by effective working processes.

³³ Davies, HTO, Nutley, SM, & Mannion R 2000, Organisational culture and quality of health care. *BMJ Quality and Safety*, Vol. 9: pp. 111-119, London, UK, viewed 25 July 2019, <<https://qualitysafety.bmj.com/content/qhc/9/2/111.full.pdf>>.

³⁴ NHS Institute for Innovation and Improvement 2005, *Improvement leaders' guide: building and nurturing an improvement culture*, Personal and organisational development, Coventry, UK, viewed 19 July 2019, <<https://www.england.nhs.uk/improvement-hub/wp-content/uploads/sites/44/2017/11/ILG-3.3-Building-and-Nurturing-an-Improvement-Culture.pdf>>.

“Organisational culture represents the shared ways of thinking, feeling and behaving in healthcare organisations.”³⁵

Poor culture is often identified as the culprit in healthcare scandals and reviews of poor healthcare system performance. Flowing from this, prescriptions for cultural improvement are often identified as the way to improve performance.³⁶ For example, the recent Report of the Auditor General into the performance of Tasmania’s emergency department services identifies that a range of reviews have highlighted ingrained cultural challenges and recommends that the Tasmanian Health Service (THS) and Department of Health urgently implement a culture improvement program and initiatives with clearly defined goals, accountabilities and timeframes.³⁷

Similarly, the Royal Hobart Hospital Access Solutions Action Plan that aims to improve patient flow and maximise emergency department efficiency, has an action that is focussed on cultural improvement. Specifically, this is aimed at supporting departments and staff to work collaboratively, to prioritise the interests of patients and eliminate silos.

Increasingly, evidence suggests that culture is linked to the quality of healthcare service provision across multiple settings.

There are four fundamental elements of a culture for innovative and high-quality healthcare:

1. Inspiring vision and strategy
2. Positive inclusion and participation
3. Enthusiastic team and cross-boundary working
4. Support and autonomy for staff to innovate.³⁸

Fostering these elements within an organisation and creating an environment for developing high-quality healthcare requires leadership.

LEADERSHIP

Leadership is the most influential factor in shaping organisational culture, so ensuring the necessary leadership behaviours, strategies and qualities are developed is fundamental.³⁹ Leaders affect those around them, their satisfaction and happiness at work, trust in management and the health system, individual and team effectiveness and the culture of healthcare organisations.

EVERY LEADER
CASTS A SHADOW
ACROSS THEIR
ORGANISATION
THAT IMPACTS ITS
CULTURE

³⁵ Mannion, R & Davies, H 2018 ‘Understanding organisational culture for healthcare quality improvement’, *BMJ* Vol. 363, pp. k4907, London, UK, viewed 23 July 2019, <[https://risweb.st-andrews.ac.uk/portal/en/researchoutput/understanding-organisational-culture-for-healthcare-quality-improvement\(a79882bd-9b34-49db-ba32-45b8ad617fc2\)/export.html](https://risweb.st-andrews.ac.uk/portal/en/researchoutput/understanding-organisational-culture-for-healthcare-quality-improvement(a79882bd-9b34-49db-ba32-45b8ad617fc2)/export.html)>.

³⁶ Mannion, R & Davies, H 2018 ‘Understanding organisational culture for healthcare quality improvement’, *BMJ* Vol. 363, pp. k4907, London, UK, viewed 23 July 2019, <[https://risweb.st-andrews.ac.uk/portal/en/researchoutput/understanding-organisational-culture-for-healthcare-quality-improvement\(a79882bd-9b34-49db-ba32-45b8ad617fc2\)/export.html](https://risweb.st-andrews.ac.uk/portal/en/researchoutput/understanding-organisational-culture-for-healthcare-quality-improvement(a79882bd-9b34-49db-ba32-45b8ad617fc2)/export.html)>.

³⁷ Tasmanian Audit Office 2019, *Report of the Auditor- General No.11 of 2018-19: Performance of Tasmania’s four major hospitals in the delivery of Emergency Department services*, 2019, Parliament of Tasmania, Hobart, TAS, viewed 19 July 2019, <<https://www.audit.tas.gov.au/wp-content/uploads/Report-No11-Emergency-Department-Services-Full-Report.pdf>>.

³⁸ West M, Eckert R, Collins B, Chowla R 2017, *Caring to Change: How compassionate leadership can stimulate innovation in healthcare*. The King’s Fund, London, UK, viewed 19 July 2019, <https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/Caring_to_change_Kings_Fund_May_2017.pdf>.

³⁹ West, M, Armit, K, Loewenthal, L, Eckert, R, West, T, & Lee, A 2015, *Leadership and Leadership Development in Health Care: The Evidence Base*. Faculty of Medical Leadership and Management, Center for Creative Leadership, The King’s Fund, London, UK, viewed 25 July 2019, <https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/leadership-leadership-development-health-care-feb-2015.pdf>.

The Commission on the Delivery of Health Services in Tasmania (2014) noted that there were problems with leadership at all levels of Tasmania's health system. They further pointed out that a well-lead health system is one characterised by mutual respect, a willingness to listen and a shared common purpose.⁴⁰

The quality of health leadership directly and indirectly affects the quality of patient care and is an important factor supporting best practice.

Three key principles of leadership in health are relevant to the Tasmanian healthcare system:

1. Everyone owns leadership.
2. Developing capable leaders builds health leadership capacity.
3. The person you are is the leader you are.⁴¹

Leadership development within the Tasmanian healthcare sector needs to be recognised and supported as an important measure to enhance culture, employee wellbeing and most importantly improving quality of care for Tasmanians.

To do this, we need to:

- Link and strengthen health leadership training and development opportunities
- Embed leadership in health education, training and continuing professional development
- Promote inter-professional leadership collaboration
- Recognise leadership positions in health that could be undertaken by any health professional.

WELLBEING

Health services can be satisfying and empowering places to work. Being a part of the health professional workforce is a privilege. It allows individuals to work with patients and their families to provide treatment and care in recovery.

On the other side, working in complex healthcare teams and with individuals and families at times of illness and loss is difficult. There are high emotions, life and death issues and ongoing service demands to be met.

Long hours, unpredictable workloads, on-call requirements, distressed and angry patients and families, long training times, increasing competition for health professional training, hierarchical systems, bullying and a loss of empowerment to effect change are all experiences within health services that have been raised in consultation.

In addition, working in health care during a pandemic like COVID-19, adds additional stress on the health workforce. There will be fears of both personal wellbeing and the wellbeing of close family and friends.

Racial discrimination has also been found throughout Australia's health system. While the number of indigenous survey respondents was low, the Beyond Blue *National Mental Health Survey of Doctors and Medical Students* showed that Indigenous doctors reported bullying as a source of major stress at 5.5 times and racism at nearly 10 times the rate of their non-Indigenous counterparts. The same report also showed that 27 per cent of Indigenous students reported being very stressed by racism.⁴²

⁴⁰ Department of Health 2014, *The Commission on the Delivery of Health Services in Tasmania*, Australian Government, Canberra, ACT, viewed 23 July 2019, <<https://www.tasmaniahealthcommission.gov.au/>>.

⁴¹ Health Workforce Australia 2013, *Health LEADS Australia: the Australian Health Leadership Framework*, Health Workforce Australia, Adelaide, SA, viewed 22 July 2019, <<https://www.aims.org.au/documents/item/352>>.

⁴² Beyond Blue 2013, *National Mental Health Survey of Doctors and Medical Students*, Beyond Blue, Hawthorn, VIC, viewed 24 July 2019, <<https://www.beyondblue.org.au/about-us/our-work-in-improving-workplace-mental-health/health-services-program/national-mental-health-survey-of-doctors-and-medical-students>>.

These findings are supported by a report commissioned by the Royal Australasian College of Surgeons, which confirmed that discrimination, including racial discrimination, bullying and sexual harassment, are far more widespread and common throughout the health system than anticipated.⁴³

This means that in health, we need to focus on fostering a safe and healthy culture to improve the wellbeing of the workforce.

The 2018 Tasmania State Service employee survey found that only 56 per cent of respondents in the THS indicated that they had both the opportunity and resources at work to support their health and wellbeing. While this is a broad statement and there are many factors at play, it is hoped that this metric would improve over time with the implementation of the Actions identified in the workforce strategy.

Less sick leave, lower staff turnover/better staff retention, lower incidence of work-place stress, and workplace injury are all positive outcomes of a happier and healthier health workforce.

WORKFORCE INCLUSION

ABORIGINAL EMPLOYMENT IN THE HEALTH PROFESSIONAL WORKFORCE

Providing culturally respectful healthcare and increasing the number of the Aboriginal health workforce is a fundamental step towards improving health outcomes for Aboriginal people and closing the gap in Aboriginal life expectancy⁴⁴.

As a population group, Aboriginal people in Tasmania have worse health outcomes than the non-Aboriginal population. For example,

- 37 per cent of Aboriginal people report excellent or very good health, compared with 51 per cent of the whole population
- 70 per cent of Aboriginal people report having a long-term health condition, compared with 52 per cent of the whole population
- 27 per cent of Aboriginal people report experiencing high or very high rates of psychological distress, compared with 13 per cent of the whole population.

Many Aboriginal people in Tasmania have reported reluctance accessing government and other mainstream health services.⁴⁵

Aboriginal people's poorer health outcomes are a direct result of invasion, dispossession and oppression, and the historical social, economic and racist legacies that have, and continue to disadvantage Aboriginal people.

Evidence shows Aboriginal people are more likely to access health services where Aboriginal people are part of the healthcare team and service providers; communicate respectfully, build good relationships, have an awareness of the underlying social issues and local culture.⁴⁶

Aboriginal people working in healthcare professions can bring new perspectives and strengths to the workforce and support the provision of culturally respectful services.

⁴³ Expert Advisory Group on discrimination, bullying and sexual harassment 2015, Report to the Royal Australasian College of Surgeons, viewed 24 July 2019, <<https://umbraco.surgeons.org/media/1018/eag-report-to-racs-final-28-september-2015.pdf>>.

⁴⁴ Australian Government 2014, *Aboriginal and Torres Strait Islander Health Performance Framework Report*. Department of Prime Minister and Cabinet, Canberra, viewed 18 July 2019, <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>.

⁴⁵ Department of Health 2018, *Aboriginal Cultural Respect in Tasmania's Health Services – Community Consultation Report*, Tasmanian Government, Hobart, TAS, viewed 11 July 2019, <www.dhhs.tas.gov.au/__data/assets/pdf_file/0004/349465/CRF_Community_Consultation_Report_FINAL.pdf>.

⁴⁶ Australian Health Ministers' Advisory Council 2016, *Cultural respect framework 2016-2026 for Aboriginal and Torres Strait Islander health*, Australian Health Ministers' Advisory Council, Canberra, ACT, viewed 4 April 2019, <http://www.coaghealthcouncil.gov.au/Portals/0/National%20Cultural%20Respect%20Framework%20for%20Aboriginal%20and%20Torres%20Strait%20Islander%20Health%202016_2026_2.pdf>.

Aboriginal participation in the Tasmanian health workforce

In the 2016 Census, 4.6 per cent of people living in Tasmania identified as Aboriginal and/or Torres Strait Islander.⁴⁷

It is estimated that Aboriginal people make up around 2.9 per cent of the Tasmanian State Service. However, in 2018 in the public and private sectors, only 0.7 per cent of registered medical practitioners, 2.4 per cent of registered nurses and midwives and 1.1 per cent of registered allied health practitioners identified as Aboriginal.

Aboriginal Health Workers and Health Practitioners

Nationally, Aboriginal Health Workers and Health Practitioners make a valuable contribution to both specialised Aboriginal health service delivery and in a wide range of mainstream healthcare services. Their roles may include enhancing the amount and quality of clinical services provided to Aboriginal people, facilitating communication and practice administration and management.

Aboriginal Health Practitioners are registered health professionals requiring a minimum 12-month certificate IV program of study approved by the Aboriginal and Torres Strait Islander Health Practice Board of Australia.

Aboriginal Health Workers have similar roles and responsibilities and must have completed an Aboriginal and Torres Strait Islander Primary Health course, however they are not registered health practitioners and will not show up in registration-based data.

In Tasmania, Aboriginal Health Practitioners and Workers are employed by Aboriginal community-controlled health organisations. There are no Aboriginal Health Workers/Practitioners employed in the Tasmanian Government health sector.

The Tasmanian Government Aboriginal Employment Strategy to 2022

Through the *Tasmanian Government Aboriginal Employment Strategy to 2022* (2019), the Tasmanian Government aims to build a capable and versatile Aboriginal workforce across all levels and classifications of the Tasmanian State Service and increase the number of Aboriginal employees in the State Service to 3.5 per cent by 2022.⁴⁸

Overcoming the barriers to recruiting and retaining Aboriginal healthcare workers is an important part of that strategy.

The national agenda

Tasmania is developing a Tasmanian Implementation Plan for *Cultural Respect Framework for Aboriginal and Torres Strait Islander Health 2016-2026*.⁴⁹ Domain 3 of the CRF is 'Workforce Development and Training', which includes a focus on increasing the Aboriginal health workforce.

The *National Aboriginal and Torres Strait Islander Health Workforce Strategic Framework 2016-2023* outlines six key strategies that aim to contribute to the achievement of equitable health outcomes for Aboriginal and Torres Strait Islander people through building a strong and supported health workforce that has

⁴⁷ Australian Bureau of Statistics 2018, *2071.0 - Aboriginal and Torres Strait Islander population, 2016*, Australian Government, Canberra, ACT, viewed 22 February 2019, <www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/2071.0~2016~Main%20Features~Aboriginal%20and%20Torres%20Strait%20Islander%20Population%20Article~12>.

⁴⁸ Tasmanian State Service 2019, *Aboriginal Employment Strategy to 2022*. Tasmanian Government, Hobart, TAS, viewed 15 July 2019, <http://www.dpac.tas.gov.au/__data/assets/pdf_file/0010/463087/DPAC4456_Aboriginal_Employment_Strat_210_x_210_WEB.pdf>.

⁴⁹ Australian Health Ministers' Advisory Council 2016, *Cultural respect framework 2016-2026 for Aboriginal and Torres Strait Islander health*, Australian Health Ministers' Advisory Council, Canberra, ACT, viewed 4 April 2019, <http://www.coaghealthcouncil.gov.au/Portals/0/National%20Cultural%20Respect%20Framework%20for%20Aboriginal%20and%20Torres%20Strait%20Islander%20Health%202016_2026_2.pdf>.

appropriate clinical and non-clinical skills to provide culturally-safe and responsive healthcare.⁵⁰ The development of a National Aboriginal and Torres Strait Islander Health Workforce Plan, due for completion in early 2021, will be a key part of progressing this. The Tasmanian Department of Health is actively contributing to this plan.

SUPPORTING AN AGEING WORKFORCE

Tasmania is ageing faster than other states and territories of Australia with 19.4 per cent of the population over 65 in 2016⁵¹. Interstate migration has been identified as a major reason for the ageing Tasmanian population with young people traditionally leaving the state for further education, career opportunities and travel, while older people choosing to move to Tasmania for family reasons, the quieter lifestyle and milder weather.

While the average age of the health workforce in Tasmania has decreased slightly, with 14 per cent of the workforce over 60, it is still important to recognise and support older workers in the health professional workforce.

Supporting an ageing workforce brings many potential benefits to health services. These include:

- workforce stability
- succession planning
- retention of industry knowledge and experience
- mentoring of younger or less experienced workers.

In order to harness these benefits, health services can promote flexible work options, ensure workplace health and safety systems recognise and reduce the increased risk of injury, provide support for continuing professional development and undertake succession planning to ensure continuity of service provision when retirements occur.

GENDER

While significant progress has been made towards gender equality, the gap between men and women in the Australian workforce is still prevalent. Women continue to earn less than men, are less likely to advance their careers and accumulate less retirement or superannuation savings.

The aim of gender equality in the workplace is to achieve broadly equal opportunities and outcomes.

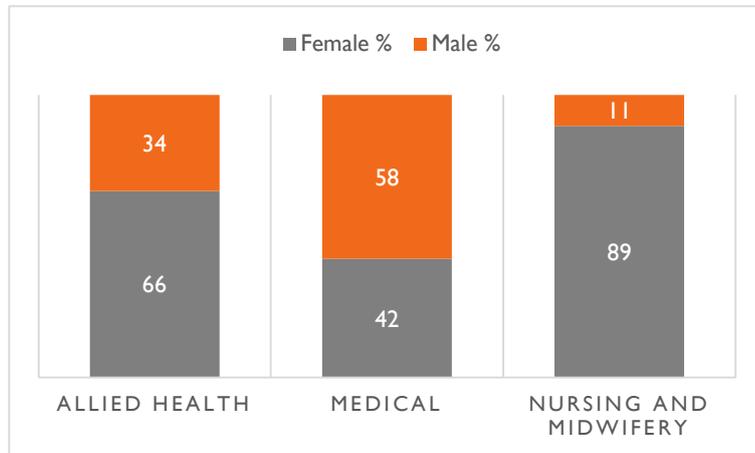
Achieving this requires the provision of equal pay for work of equal or comparable value, removal of barriers to the full and equal participation of all members of the workforce, access to all occupations and industries, including leadership roles, regardless of gender; and elimination of discrimination on the basis of gender, particularly in relation to family and caring responsibilities.

⁵⁰ Australian Health Ministers' Advisory Council 2016, *Cultural respect framework 2016-2026 for Aboriginal and Torres Strait Islander health*, Australian Health Ministers' Advisory Council, Canberra, ACT, viewed 4 April 2019, <http://www.coaghealthcouncil.gov.au/Portals/0/National%20Cultural%20Respect%20Framework%20for%20Aboriginal%20and%20Torres%20Strait%20Islander%20Health%202016_2026_2.pdf>.

⁵¹ Council Of The Ageing Tasmania 2018, *Tasmania's ageing profile part 1: Embracing the future*, COTA, Hobart, TAS, viewed 10 April 2019, <<https://www.cotatas.org.au/policy-advocacy/cota-reports/embracing-the-future/tasmanias-ageing-profile-part-i/>>.

Women comprise seven out of ten (closer to three out of four, at 76%) health professional workers in Tasmania. This is higher in nursing at nine out of ten and lowest for medicine at four out of ten (see Figure 21).

Figure 21 Gender of allied health, medical and nursing and midwifery workforces, TAS 2018



Source: National Health Workforce Data Set

Within the public sector, efforts to foster gender equality in our workplaces are informed by the *Tasmanian Women’s Strategy 2018-2021* and the *Gender Diversity in the State Service* strategies. Actions under these strategies include removing outdated employment processes – such as updating leave provisions to support non-birth parents in raising families; acting against violence against women as well as supporting inclusive employment practices – such as working to increase access to flexible work provisions.

Alongside the focus on fostering equality between men and women, we are conscious that gender diversity is also about acknowledging and respecting that there are many people who identify outside of the binary male and female⁵².

In our workplaces, we know we need to do more to ensure gender inclusiveness, and – while this work is emerging - our LGBTI Working Group has been working on activities to improve the inclusiveness of health services. For example, provision of LGBTI awareness training to staff to ensure staff-to-staff and staff-to-client interactions are respectful, ensuring our workers use appropriate pronouns and language and working to remove outdated process barriers – such as providing alternative gender/sex options on paperwork (outside the standard male/female) and providing toilet facilities suitable for all people.

Following changes to the *Justice & Related Legislation (Marriage and Gender Amendments) Act 2019* (the JRL Act) in April 2019, the Department of Health and the Tasmanian Health Service have committed to moving toward more inclusive data collection in relation to sex and gender information.

⁵² Newman, C 2014, ‘Time to address gender discrimination and inequality in the health workforce’, *Human Resource for Health*, Vol. 12, no. 25, pp. 12-25, viewed 9 April 2019, <<https://human-resources-health.biomedcentral.com/articles/10.1186/1478-4491-12-25>>.

ACTIONS

Enhance culture

- 4.01 Utilise feedback to better understand staff experiences and challenges and use outcomes as a basis for improvement.
- 4.02 Support health professional networks across services to provide collegial support and a planning platform.
- 4.03 Build shared governance models that enable health professional input at all levels of organisational decision making.
- 4.04 Deliver comprehensive orientation programs that respond to individual learning needs and clinical experiences to allow smooth transition to practice.
- 4.05 Recognise the value and requirements of health professionals of all age groups and stages of life.
- 4.06 Progress the major hospitals within the Tasmanian Health Service to Pathways to Excellence recognition.

Inclusion

- 4.07 Promote inclusive workplaces with zero tolerance for bullying and discrimination.
- 4.08 Contribute to the success of the Tasmanian State Service Aboriginal Employment Strategy to 2022 including by supporting increased Aboriginal workforce participation in the health sector.
- 4.09 Promote gender equality by removing gender-based barriers to employment and supporting career development.
- 4.10 Achieve and sustain gender equality in leadership.

Leadership development

- 4.11 Develop leadership capability by:
 - identifying clinical leaders across health professional groups
 - establishing strong mentoring programs
 - embedding leadership in health education, training and continuing professional development
 - promoting interprofessional leadership collaboration.

Cultural respect

- 4.12 Ensure health service staff at all levels have access to ongoing cultural respect training and embed completion of cultural respect training into performance management and/or professional development requirements.
-

FOCUS AREA FIVE: RECRUITMENT AND EFFECTIVE WORKING ARRANGEMENTS

In 2040, Tasmania's public health workforce will be supported by a framework for employment that is fit for purpose; with efficient and effective recruitment processes. The Tasmanian public health sector will be a workplace of choice.

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.

The health workforce profiles and workforce analysis in the *Health Workforce 2040* look at the Tasmanian health professional workforce data and information at the whole of state level.

This chapter focusses on the Tasmanian public sector health workforce and the processes around attracting, recruiting, employing and managing the health professional workforce.

ATTRACTING HEALTH PROFESSIONALS TO WORK IN TASMANIA

Tasmania has for many years experienced significant difficulty attracting and maintaining the health workforce required to support Tasmania's health system, this difficulty is particularly acute in our regional and rural communities and in some areas of specialty practice. There are numerous reasons for this including an ageing workforce, long training times, limited or no availability of training in Tasmania for many health professions and long lead times associated with end-to-end recruitment processes.

While the lifestyle that Tasmania can offer is a strong incentive and lever for recruitment, ongoing negative discourse about the health service and frequent structural change provide a disincentive. There is opportunity to work with Brand Tasmania to better coordinate and market Tasmania as a destination to live and to pursue a career in health.

Tasmania has a small and dispersed population. Supporting mechanisms that allow people to work across public and private settings and to undertake a diverse spectrum of work including research and teaching, can assist in the recruitment and the retention task. It provides both personal career satisfaction as well as contributes to health service provision across sectors.

There is opportunity to work with education providers and the private sector to build better opportunities and processes to achieve this.

RECRUITMENT

It is important to have efficient and 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.

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

In addition, there are high volumes of recruitment due both to the size of the workforce creating expected exits, and due to turnover, which has many causative factors including; dissatisfaction with the work or workplace, burnout, movement to pursue career or training opportunities and professionals moving through training pathways toward specialised areas of practice.

Often, the recruitment task falls to clinical leaders who through consultation, expressed concern about the complexity of the recruitment process, the time required to do it and the long times it takes to fill vacancies.

The outcomes of this include;

- Service gaps that are filled with overtime or double shifts or high cost agency or locum staff
- Applicants seeking and accepting other employment opportunities while waiting for the outcomes of our processes.

EMPLOYMENT FRAMEWORKS AND INDUSTRIAL INSTRUMENTS

The current statutory and subordinate frameworks governing employment in Tasmania's public health sector have structural inefficiencies and inflexibilities that do not promote easy alignment of health staffing with community demand for high-quality health services.

State Service employment frameworks are largely designed to cater for government organisations with relatively static service delivery demands rather than dynamic, patient and client driven demand factors.

It is desirable to render more flexible and efficient employment frameworks for the public health sector including employment relationships that involve external employers.

Similarly, the structure of Awards and Agreements covering the disparate health workforce is confusing, contradictory, and inconsistent. Currently the authority to conduct industrial work concerning the nature of Awards and Agreements resides outside the Department. It is desirable to address the unnecessarily complex disposition of the industrial instruments governing wages and conditions for the health workforce.

REGISTRATION AND CREDENTIALING

It is important to ensure that the health professionals are appropriately registered and credentialed to work in health services. There are fifteen professions that are regulated in Australia through profession specific boards, supported by the Australian Health Practitioner Regulation Agency (AHPRA).

Health professionals in these groups are obliged to maintain their registration in order to practice and to comply with continuing education requirements.

There are opportunities for the Tasmanian public health service to develop systems to provide regular registration status checks beyond those conducted at the time of employment.

Credentialing is a formal process that is used to verify the qualifications, experience, and professional standing of doctors for the purposes of evaluating their competence, performance and professional suitability to provide high-quality healthcare for patients. Credentialing is also used for allied health and nursing and midwifery in certain circumstances e.g. podiatry prescribing.

Credentialing is health service specific and defines the scope of practice of individual health professionals having reference to both the credentialing and the role delineation, or clinical service profile of the service. For example, a neurosurgeon may have the qualifications, experience and competence to undertake neurosurgery, however if the employing facility does not have the relevant support services and infrastructure to undertake neurosurgical procedures and care for patients post-operatively, then the scope of practice of that individual in that facility will not include operative neurosurgery.

By modernising and updating the HR information system, there are opportunities for the Tasmanian public health service to develop systems to provide regular registration status checks beyond those conducted at the time of employment. In addition, there are opportunities to better link the credentialing processes with

the HR information systems to reduce duplication, enhance information capture and monitoring of the credentialing status of the workforce that is subject to credentialing.

WORKFORCE MANAGEMENT

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

Clinical managers are found at many levels in the health system. This includes at the ward level, the service or clinical stream level, the level of the health service facility and at the health system management level. Some examples of nursing managers found within the Tasmanian public health system include Chief Nursing and Midwifery Officer, Executive Directors of Nursing, Nursing Directors, Assistant Directors of Nursing, Nurse Unit Managers and Associate Nurse Unit Managers. Key functions of clinical managers include:

- Providing professional and strategic direction
- Managing teams, including recruitment
- Managing staffing of operational units and rostering
- Supporting career planning and development
- Building supportive practice environments
- Being part of quality and patient safety teams
- Promoting a pro-research culture
- Working as part of a broader shared governance of the health services.

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 are going to be good clinical managers.

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

ACTIONS

Recruitment

- 5.01 Investigate challenges in recruitment processes in the public health workforce.
- 5.02 Support clinical leaders to recruit efficiently and effectively.
- 5.03 Align employment arrangements with training requirements of medical specialist trainees.
- 5.04 Leverage Tasmania's brand (Brand Tasmania) to attract health professionals to work in Tasmania.
- 5.05 Work with external bodies to identify and improve opportunities for shared recruitment and employment strategies.

Reform of employment and industrial frameworks

- 5.06 Improve the current structure and content of industrial instruments for simplicity, clarity, and ease of use.
 - 5.07 Reform the employment framework to most efficiently meet demand for services and facilitate the development of innovative health workforce models.
-

DRAFT

FOCUS AREA SIX: PLANNING

In 2040, Tasmania will have accurate and timely workforce data to improve evidence-based decision and policy making and to provide more effective and efficient procedures.

There is significant opportunity to improve the Tasmanian Department of Health's capacity to store, access and share workforce data for the purpose of planning.

A significant amount of the data used to form this report was taken from the Australian Government's National Health Workforce Data Set. This is a mixture of registration and survey data collected from the registration renewal process for registered health practitioners.⁵³

The 2018 data is the most recent data available for analysis. Because it is taken at registration renewal, first time registrants are not captured.

This workforce strategy has used a detailed analysis of this data set. There are opportunities to develop system capability to automate some of this analysis, making it both less resource intensive and more widely available across the system to support workforce planning and decisions. The Queensland Department of Health's Workforce Strategy Branch, for example, has developed a workforce analytics tool that provides reliable and timely data access and significantly reduces the need for manual processing.

Additional data sources are needed to:

- Consider burden of disease and ageing population effects on health service utilisation.
- Determine the impact of health service models and models of care on the demand for health professions and occupations.
- Understand the amount and type of clinical placement activity for health professional students and postgraduate training places and investment.

Partnerships with the Commonwealth Government, non-government organisations and educational institutions can improve the breadth and depth of the health workforce data. This in turn will improve decisions and actions that impact on the health workforce.

There is significant opportunity to improve the Tasmanian Department of Health's capacity to store, access and share workforce data for the purpose of workforce planning. This includes updating systems to ensure that the health profession of employees is identified in the human resource systems to ensure that the appropriate qualifications and/ or registration is held, but also to assist in operational workforce planning.

The ongoing monitoring of Tasmania's health workforce through data analysis is a core component of growing and distributing the workforce to the community equitably. This makes it important to invest in system and human resource capability to support health workforce planning.

⁵³ Australian Institute of Health and Welfare 2017, *National Health Workforce Data Set*, Australian Institute of Health and Welfare, Canberra, ACT, viewed 22 July 2019, <<https://www.aihw.gov.au/about-our-data/our-data-collections/national-health-workforce-dataset>>.

ACTIONS

Systems improvements

- 6.01 Develop system capability to automate data extraction from the National Health Workforce Data Set.
- 6.02 Develop and implement a system for capturing clinical placement activity across all health professions.
- 6.03 Support operational workforce planning by providing workforce data and delivering training in health workforce planning.
- 6.04 Build relationships with the education and private health sectors to share and improve health workforce data.
- 6.05 Update public sector human resources systems to identify the health profession of employees.

Workforce credentials

- 6.06 Implement automated registration verification for all registerable health professionals employed in the public health workforce.
-

DRAFT

DATA AND METHODOLOGY

DATA COLLECTED

The data used to inform this report includes:

- Australian Bureau of Statistics population statistics and 2016 Census data
- Australian Health Practitioner Regulation Agency Registration Statistics (2013-2018)
- Department of Home Affairs Migration Program Statistics (Visa Statistics).
- Hospital activity data (separations) Tasmania
- Medicare Broad Type of Services utilisation reporting
- Medical Education and Training Reports: MTRP data prior to 2015/ MET dataset after 2015
- National Health Workforce Data Set – Re-registration survey responses (2013-2018)
- Public Sector Establishment and Payroll Data (June 30, 2018)
- Student numbers from education providers
- Tasmanian Government Department of Treasury and Finance 2019 Population Projections for Tasmania and its Local Government Areas
- Tasmanian unit record data – Re-registration survey responses (2013-2018).

The National Health Workforce Data Set (NHWDS) is derived from the registration and survey process that all regulated health professionals undertake on an annual basis.

DATA TREATMENT

Data collected from the Australian Health Practitioner Regulation Agency Registration Statistics and re-registration survey responses in the Tasmanian Unit Record subset of the National Health Workforce Data Set (NHWDS) (2013-2018) were filtered to only include people who are employed and working in Tasmania. This includes respondents on leave for up to three months.

Registered health professions are: nurse, midwife, chiropractor, dental practitioner, medical practitioner, osteopath, optometrist, pharmacist, physiotherapist, podiatrist, psychologist, occupational therapist, medical radiation practitioner, Chinese medicine practitioner, and Aboriginal and Torres Strait Islander health practitioner.

Aboriginal and Torres Strait Islander health practitioners, Chinese medicine practitioners, chiropractors and osteopaths are not profiled in this report because they are not employed in the Tasmanian State Service (but are included in allied health totals).

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 (June 30, 2018).

References to **employed headcount**, **employed FTE**, **change in FTE 2013-18**, **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 (2013-18). This is a subset of the National Health Workforce Data Set. The National Health Workforce Data Set is publicly available but cannot be viewed at the unit record

level, and some comparisons are not possible because of the aggregation and reporting methods used in the National Health Workforce Data Set tool online.⁵⁴

Age and **gender** related measures come from registration information included in the Tasmanian Unit Record Data (2018). These data relate to the whole of Tasmania including both public and private sectors.

References to **employed headcount per 100,000 population** for Tasmania and its regions draw headcount from the Tasmanian Unit Record Data (2018) and the NHWDS for the national comparison. Both public and private sectors are included in the numerator headcount. 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 (2018), 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 a number of 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.

HIGH PRIORITY PROFESSIONS FOR PLANNING

Allied health professions

Some of the workforce indicator metrics in Figure 12 have been used to determine which professions are a high priority for planning. For allied health, the following metrics were used:

- proportion of the workforce over 60 years of age
- availability of all entry-level training in Tasmania
- Tasmanian headcount of professionals per 100,000 population.

Where 25 percent or more of the profession workforce was over 60, a score of two was given and where 11-24 percent of the workforce was over 60, a score of one was given. Where entry-level training was not available in Tasmania, a score of two was given. Where Tasmania’s professional headcount per 100,000 population was at least 25 percent lower than the national rate, a score of two was given and where Tasmania’s professional headcount per 100,000 population was up to 24 percent lower than the national rate, a score of one was given. All professions with a combined score of five or more were deemed priority professions. In addition, any profession where Tasmania’s professional headcount per 100,000 population was at least 25 percent lower than the national rate was automatically deemed a priority profession.

Medical specialties

Some of the workforce indicator metrics in Figure 13 have been used to determine which professions are a high priority for planning. For medicine, the following metrics were used:

- proportion of the workforce over 60 years of age
- proportion of the workforce with first specialty qualification gained overseas
- Tasmanian headcount of professionals per 100,000 population.

⁵⁴ Department of Health 2019, *National Health Workforce Data Set: Health Workforce Data*, Australian Government, Canberra, ACT, viewed 12 July 2019, <<https://hwd.health.gov.au/webapi/jsf/login.xhtml>>. *Health Workforce 2040 | Strategy*

Where 25 per cent or more of the specialty workforce was over 60, a score of two was given and where 11-24 per cent of the specialty workforce was over 60, a score of one was given. Where 30 per cent or more of the specialty workforce gained their first specialty qualification overseas, a score of two was given and where 16-29 per cent of the specialty workforce gained their first specialty overseas, a score of one was given. Where Tasmania's professional headcount per 100,000 population was at least 25 per cent lower than the national rate, a score of two was given and where Tasmania's professional headcount per 100,000 population was up to 24 per cent lower than the national rate, a score of one was given.

All specialties with a combined score of five or more were deemed priority professions. In addition, any specialty where Tasmania's professional headcount per 100,000 population was at least 25 per cent lower than the national rate was automatically deemed a priority profession.

Nursing professions and areas of practice

Some of the workforce indicator metrics in Figure 14 have been used to determine which professions are a high priority for planning. For nursing and midwifery, each profession was assigned a score based on:

- proportion of the workforce over 60 years of age
- availability of entry-level training in Tasmania
- Tasmanian headcount of professionals per 100,000 population.

Where 25 per cent or more of the division workforce was over 60, a score of two was given and where 11-24 per cent of the workforce was over 60, a score of one was given. Where entry-level training was not available in Tasmania, a score of two was given. Where Tasmania's professional headcount per 100,000 population was at least 25 per cent lower than the national rate, a score of two was given and where Tasmania's professional headcount per 100,000 population was up to 24 per cent lower than the national rate, a score of one was given.

Any division or area of practice with a combined score of five or more was deemed a priority profession. In addition, any division or area of practice where Tasmania's professional headcount per 100,000 population was at least 25 per cent lower than the national rate was automatically deemed a priority profession (no nursing and midwifery professions met these criteria).

NEXT STEPS

FINALISING HEALTH WORKFORCE 2040 AND DEVELOPING AN IMPLEMENTATION PLAN

The next step is to consult widely on this draft health workforce strategy through inviting written submissions and face to face consultations.

The document will then be finalised alongside an implementation plan that identifies:

- who is required to implement each of these actions and who will be responsible for the implementation
- timeframes associated with the actions and
- the resourcing required to implement the actions.

The coordination of monitoring of the implementation of the strategies outlined in this document will be undertaken by the Department of Health.

REGULAR REVIEW

Health Workforce 2040 is not intended to be a static document with actions and implementation plans outlined for the next 20 years.

The visioning of the system and workforce requirements are based on what we are experiencing in Tasmania now.

Over time, the environment will change, and likely impact the health workforce. For this reason, the strategy will need to be reviewed and updated regularly to ensure that the strategy remains relevant and reflective of current workforce challenges.

ACKNOWLEDGMENTS

The Department of Health is grateful to everyone who has taken the time to engage and contribute to Tasmania's first health workforce strategy.

The Health Workforce Planning Unit appreciates the assistance and guidance provided by the health professional leads in the Department of Health and the Tasmanian Health Service and the Commonwealth Department of Health, Workforce Division.

The project used data from a number of collections held outside of the Department of Health and publicly available sources. We thank the Commonwealth Department of Health, TasTAFE, the University of Tasmania and a number of medical colleges for sharing data and information relevant to the development of the health workforce strategy.

The Health Workforce Planning unit acknowledges the support by staff from the Department of Health and the Tasmanian Health Service who have contributed to the discussions and outputs of *Health Workforce 2040* to date and we look forward to further engagement as the strategy is finalised and an implementation plan developed.

DRAFT

ACRONYMS AND GLOSSARY

AASW	Australian Association of Social Workers
ABS	Australian Bureau of Statistics
ACD	Australasian College of Dermatologists
ACEM	Australasian College of Emergency Medicine
ACN	Australian College of Nursing
ACPSEM	Australian College of Physical Scientists and Engineers in Medicine
ACRRM	Australian College of Rural and Remote Medicine
AGPT	Australian General Practice Training
AHP	Allied Health Professions
AHPRA	Australian Health Practitioner Regulation Agency - implements the national registration of health professionals and the accreditation of training and education providers and courses
AHRG	Allied health Rural Generalist
AI	Artificial Intelligence
AMA	Australian Medical Association
ANMAC	Australian Nursing and Midwifery Accreditation Council – independent accrediting body for nursing and midwifery education, training and assessment
ANMF	Australian Nursing and Midwifery Federation– nursing & midwifery industrial body
ANZCA	Australasian College of Anaesthetists
AOPA	Australian Orthotic Prosthetic Association
APNA	Australian Primary healthcare Nurses Association
AT	Ambulance Tasmania
CARMM	Centre of Antarctic Remote & Maritime Medicine
CATSINaM	Congress of Aboriginal and Torres Strait Islander Nurses and Midwives
CICM	College of Intensive Care Medicine
CommRRS	Community Rapid Response Service
CPD	Continuous Professional Development
CPI	Consumer Price Index
CRF	Cultural Respect Framework
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CSP	Clinical Services Profile
DAA	Dietitians Association of Australia
DoE	Department of Education
DoH	Department of Health Tasmania (Inclusive of the Tasmanian Health Service)
ED	Emergency Department
EHA	Environmental Health Australia
EN	Enrolled Nurse
EN - RN	Enrolled Nurse – Registered Nurse (dual registrant)
FACEM	Fellow of the Australasian College for Emergency Medicine
FTE	Full Time Equivalent - The ratio of the total number of paid hours during a period (part-time, full-time, contracted) by the number of working hours in that period. One FTE is equivalent to one employee working full-time.

FYI	For Your Information (Executive Report System - Department of Health Tasmanian)
GP	General Practitioner
IRTP - STP	Integrated Rural Training Program – Specialist Training Program
ITP	Integrated Training Program
LAP	Locum Assistance Program – Rural. Referred to as Rural LAP.
LGBTI	Lesbian Gay Bisexual Transgender Intersex
LGH	Launceston General Hospital
MBS	Medicare Benefits Schedule
MET	Medical Education and Training – MET online data collections report on annual changes in Australian medical education and training
MTRP	Medical Training Review Panel – replaced by MET
NDIS	National Disability Insurance Scheme
NHWDS	National Health Workforce Dataset
NMBA	Nursing and Midwifery Board of Australia
NMCS	Nursing and Midwifery Career Structure
NP	Nurse Practitioner
NRAS	National Registration and Accreditation Scheme – established for health practitioners
NWRH	North West Regional Hospital
OCNMO	Office of the Chief Nurse and Midwifery Officer
OECD	Organisation for Economic Co-operation and Development
PNIP	Practice Nurse Incentive Program
RACDS	Royal Australasian College of Dental Surgeons
RACGP	Royal Australian College of General Practitioners
RACMA	Royal Australasian College of Medical Administrators
RACP	Royal Australasian College of Physicians
RACS	Royal Australasian College of Surgeons
RANZCO	Royal Australian and New Zealand College of Ophthalmologists
RANZCOG	Royal Australian and New Zealand College of Obstetricians and Gynaecologists
RANZCP	Royal Australian and New Zealand College of Psychiatrists
RANZCR	Royal Australasian and New Zealand College of Radiologists
RCPA	Royal College of Pathologists of Australasia
RHH	Royal Hobart Hospital
RM	Registered Midwife
RN	Registered Nurse
RN - Midwives	Registered Nurse – Registered Midwife (dual registrant)
RN - RM	Registered Nurse – Registered Midwife (dual registrant)
RTO	Registered Training Organisation
Rural LAP	Rural Locum Assistance Program
SEN	Specialist Enrolled Nurse
SET	Surgical Education and Training
SIG	Surgery In General
STP	Specialist Training Program
TATP	Tasmanian Anaesthetic Training Program
THS	Tasmanian Health Service

TtP	Transition to Practice Program
UTAS	University of Tasmania
VET	Vocational Education Training
WHO	World Health Organisation

DRAFT

FIGURES

Figure 1 Regions of Tasmania.....	15
Figure 2 Local government areas, Tasmania.....	15
Figure 3 2016 Census, key Tasmanian statistics.....	16
Figure 4 Tasmania's projected age pyramid for 2040, compared to 2017.....	18
Figure 5 Tasmania's employed, registered health workforce, 2018.....	19
Figure 6 Employed health practitioners per 100,000 population 2018, Tasmania, Australia and jurisdictions	20
Figure 7 Change in employed headcount (%) Tasmania's health workforce 2013-18.....	21
Figure 8 Change in employed FTE (%), Tasmania's health workforce, 2013-18.....	22
Figure 9 Change in clinical hours worked in the private and private sectors, and proportion of public sector hours, Tasmania's health workforce 2013-18.....	22
Figure 10 Average hours worked, Tasmania's health workforce 2013-18.....	23
Figure 11 Comparison of workforce average age (years), from 2013-18.....	24
Figure 12 Allied health professions with selected workforce indicators.....	25
Figure 13 Medical specialties with selected workforce indicators.....	26
Figure 14 Nursing and midwifery professions and selected areas of practice with selected workforce indicators.....	27
Figure 15 Employed health practitioners per 100,000 population, 2018, Tasmanian regions.....	31
Figure 16 Categories of interventions used to improve attraction, recruitment and retention of health workers in remote and rural areas.....	33
Figure 17 Number of medical graduates, Tasmania, 2008 - 2018.....	38
Figure 18 Number of nursing graduates, Tasmania, 2013-17.....	38
Figure 19 Embedding research in healthcare.....	40
Figure 20 Reasons for accessing the internet (%), 2014-15 and 2016-17.....	43
Figure 21 Gender of allied health, medical and nursing and midwifery workforces, TAS 2018.....	54

APPENDIX

APPENDIX A: EXTERNAL CONSULTATION

The following external organisations were consulted during the development of *Health Workforce 2040*. Their contributions are sincerely appreciated and have informed the development of this work.

Allied Health Professionals (AHP)

Australasian College for Emergency Medicine (ACEM)

Australasian College of Dermatologists (ACD)

Australian and New Zealand College of Anaesthetists (ANZCA)

Australian College of Rural and Remote Medicine (ACRRM)

Australian College of Sport and Exercise Physicians (ACSEP)

Australian Health Practitioner Regulation Agency (AHPRA)

Australian Medical Council (AMC)

Australian Medical Association (AMA)

Australian Nursing and Midwifery Accreditation Council (ANMAC)

Australian Nursing and Midwifery Federation (ANMF)

Calvary

College of Intensive Care Medicine of Australia and New Zealand (CICM)

Commonwealth Department of Health - Workforce Division

Cradle Coast Authority

Department of Health and Human Services Victoria - Workforce Unit

Department of Premier and Cabinet (DPAC)

Health and Community Service Union (HACSU)

Hobart Private & St Helens Private Hospitals

HR+

Jurisdictional Workforce Planners Community of Practice

Northwest Private Hospital

Postgraduate Medical Council of Tasmania (PMCT)

Primary Health Tasmania (PHT)

Royal Australasian College of Medical Administrators (RACMA)

Royal Australasian College of Obstetricians and Gynaecologists (RANZCOG)

Royal Australasian College of Physicians (RACP)

Royal Australasian College of Surgeons (RACS)

Royal Australian and New Zealand College of Ophthalmologists (RANZCO)

Royal Australian and New Zealand College of Psychiatrists (RANZCP)

Royal Australian and New Zealand College of Radiologists (RANZCR)

Royal Australian College of General Practitioners (RACGP)

Royal College of Pathologists of Australasia (RCPA)

Royal Flying Doctors Service of Australia (RFDS)

Rural Doctors Association Australia (Tasmania) (RDAT)

Tasmanian Health Service (THS)

TasTAFE

Tasmanian University Medical Students' Society (TUMSS)

The Hobart Clinic

University of Tasmania (UTAS)

DRAFT

APPENDIX B: HEALTH PROFESSIONS PROFILED IN *HEALTH WORKFORCE 2040*

Medicine	Allied health	Nursing and midwifery
Addiction medicine specialists	Audiologists	Enrolled nurses
Anaesthetists	Cardiac physiologists/ Echocardiographer	Midwives
Cardiologists	Counsellors	Nurse practitioners
Cardiothoracic surgeons	Dental hygienists	Registered nurses
Dermatologists	Dental prosthetists	
Emergency physicians	Dental therapists	Areas of Practice:
Endocrinologists	Dentists	Aged care nursing
Gastroenterologists	Diagnostic radiographers	Critical care nursing
General physicians	Dietitians/ Nutritionists	Emergency nursing
General practitioners	Environmental/ Public Health Officers	Maternity care nursing
General surgeons	Epidemiologists	Mental health nursing
Geriatricians	Genetic counsellors	Peri-operative nursing
Haematologists	Mammographic technologists	Practice nursing
Immunology and allergy physicians	Medical physicists	
Infectious disease physicians	Medical scientists	
Intensive care specialists	Microbiologists	
Medical administrators	Nuclear medicine technologist	
Medical oncologists	Occupational therapists	
Nephrologists	Optometrists	
Neurologists	Oral health therapists	
Neurosurgeons	Orthotists and prosthetists	
Nuclear medicine physicians	Perfusionists	
Obstetricians and gynaecologists	Pharmacists	
Ophthalmologists	Physiotherapists	
Oral maxillofacial surgeons	Podiatrists	
Orthopaedic surgeons	Psychologists	
Otolaryngologists	Radiation therapists	
Paediatric surgeons	Social workers	
Paediatricians and child health specialists	Sonographers	
Pain medicine specialists	Speech pathologists	
Palliative medicine specialists		
Pathologists		
Plastic surgeons		
Psychiatrists		
Public health specialists		
Radiation oncologists		
Radiologists		
Rehabilitation specialists		
Respiratory and sleep medicine physicians		
Rheumatologists		
Sexual health physicians		
Urologists		