



Australian Government

Department of Health

2018

DOCTORS IN FOCUS



Medical practitioners diagnose and treat physical and mental illnesses, disorders and injuries, recommend preventative action and refer patients to specialist medical practitioners, other health care workers, and social, welfare and support workers.

All medical practitioners must be registered with the Medical Board of Australia (MBA) and meet the MBA's registration standards in order to practise medicine in Australia. To gain registration, medical practitioners must complete a minimum four year program in a university medical school accredited by the Australian Medical Council.

International medical graduates (IMGs) whose medical qualifications are from a medical school outside of Australia or New Zealand must meet the requirements for one of the assessment pathways (competent authority pathway, standard pathway or specialist pathway) to gain medical registration in Australia.

CONTENTS

1	Workforce
2	Medical Students
3	Medical interns
4	All Provisional registrants
5	Hospital non-specialists
6	Vocational training
7	Specialist workforce
8	Registered medical practitioners not in the medical labour force
9	Non-practising registrants
10	Other useful Health Workforce links

The following analysis of the medical workforce is drawn from the number of medical practitioners with general, specialist or limited registration who were employed (98,395 in 2018) unless otherwise stated.



The 2018 Doctors in Focus provides information about Australia's medical practitioners and explores key workforce aspects to assist readers with research, workforce planning and career planning. This document provides insights at both a macro and detailed level.

Some high-level themes in this issue include:

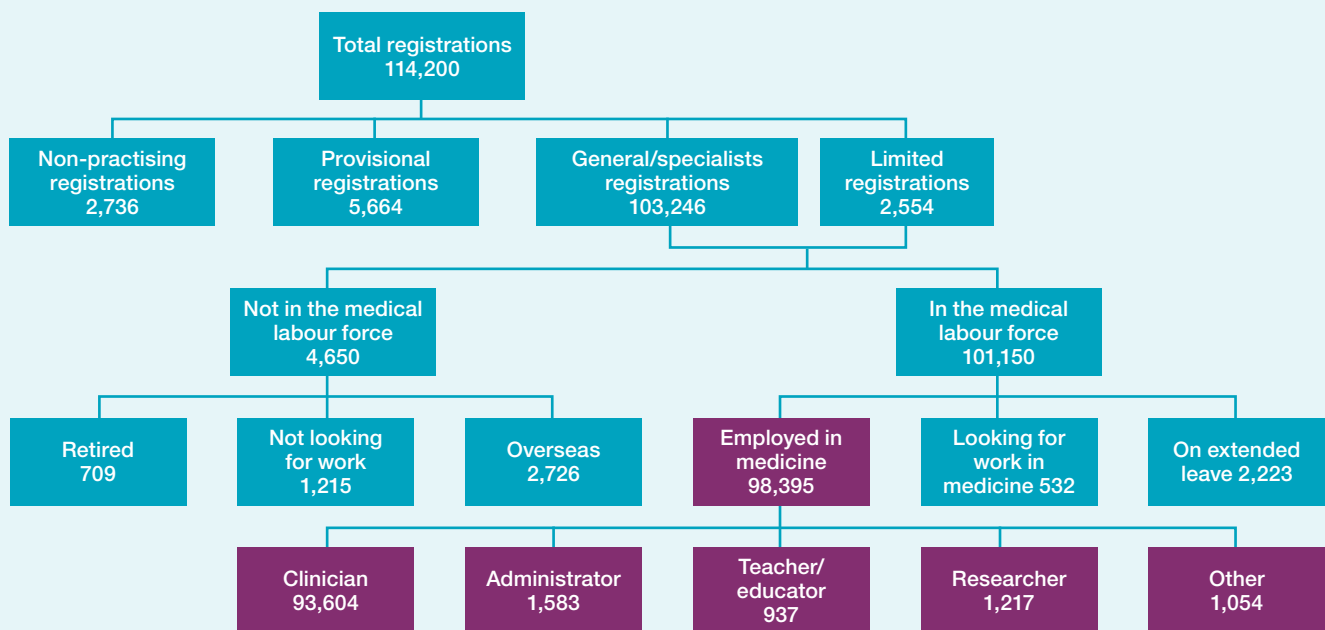
- The Australian medical workforce is growing at a rate that exceeds population growth. Most medical practitioners work in clinical roles and a small proportion work in non-clinical roles such as administration, education and research. The medical workforce is changing slightly over time with higher proportions of females entering the profession. Male practitioners tend to work longer hours than female and younger practitioners work longer hours than older.
- The Australian medical workforce is distributed relatively evenly across the private and public sector and the bulk of the workforce are in hospitals and group private practices. The number working in solo private practice is decreasing.
- The number of practitioners has increased across all Modified Monash Model areas across Australia since 2015, although MM 1 areas still have more practitioners per 100,000 people and MM 5 areas have the least.
- The majority of new medical students are Australian although the growth in international students is strong.
- The proportion of specialists (other than General Practice) has increased over time, with the top six non-GP specialties (Anaesthesia, Emergency Medicine, Paediatrics and Child Health, Physician, Psychiatry, Surgery) accounting for most of this growth.



1

Workforce

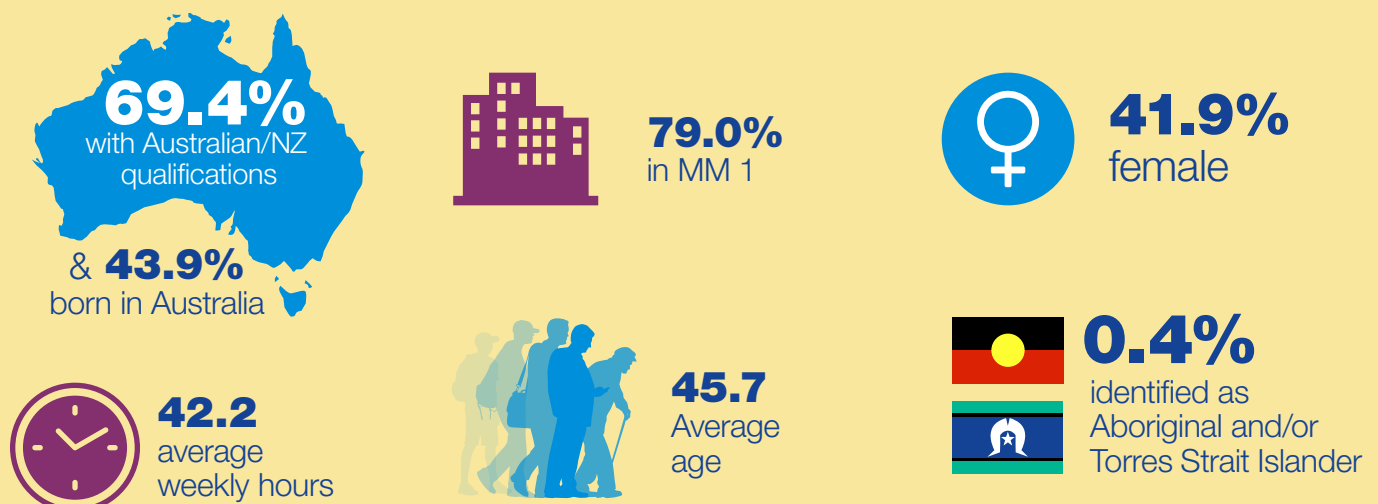
Figure 1: Medical registrations, 2018



Quick Facts – 2018

Australia's medical workforce is growing with the number of those who are registered, employed and clinicians all outpacing population growth.

Figure 2: Summary





In 2018, 114,200 medical practitioners were registered in Australia of which 5,664 were provisionally registered, 105,800 held general, specialist or limited registration, and a further 2,736 held non-practising registrations.

In 2018, 95.6% of those who held general, specialist or limited registration were in the medical labour force. There were 98,395 employed medical practitioners ("workforce") and the medical unemployment rate was 0.5% of the labour force.

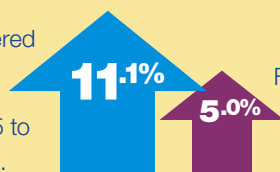
Table 1: Medical Workforce, 2015–2018

	2015	2016	2017	2018	Average annual growth
Registered	102,805	106,634	110,376	114,200	3.6%
Employed	87,999	91,341	95,194	98,395	3.8%
Clinicians	83,490	86,550	90,417	93,604	3.9%

Source: NHWDS Medical Practitioner 2015–2018

Replacement rate

The number of registered medical practitioners increased from **102,805** in 2015 to **114,200** in 2018.



First time registrants ('new entrants') over the same period, increased from **6,204** to **6,513**.



There are more than **twice as many new entrants** compared to exits

The number of newly registered medical practitioners outnumbers those who do not renew their registration.

The number of registered medical practitioners increased by 11.1% from 102,805 in 2015 to 114,200 in 2018. First time registrants ('new entrants') over the same period, increased by 5.0% from 6,204 to 6,513.

The replacement rate calculates the ratio between the number of new entrants each year and the number of medical practitioners who did not renew their registration from the previous year.

Between 2015 and 2018, the replacement rate has remained above two, indicating that on average, there are more than twice as many new entrants compared to exits, resulting in a 3.6% average annual growth of registered medical practitioners between 2015 and 2018.

Table 2: Replacement rate, 2015–2018

	2015	2016	2017	2018
New entrants	6,204	6,272	6,293	6,513
Exits	2,530	2,750	2,937	3,079
Replacement Rate	2.5	2.3	2.1	2.1

Source: NHWDS Medical Practitioner 2015–2018

Between 2015 and 2018, the growth of registered medical practitioners (3.6% average annual) and the medical workforce (3.8% average annual) was more than two times the Australian population growth of 1.6% per annum on average.



Demographics



41.9%

female



an increase
from 40.0% in 2015



42.7

Average age
of females



48.0

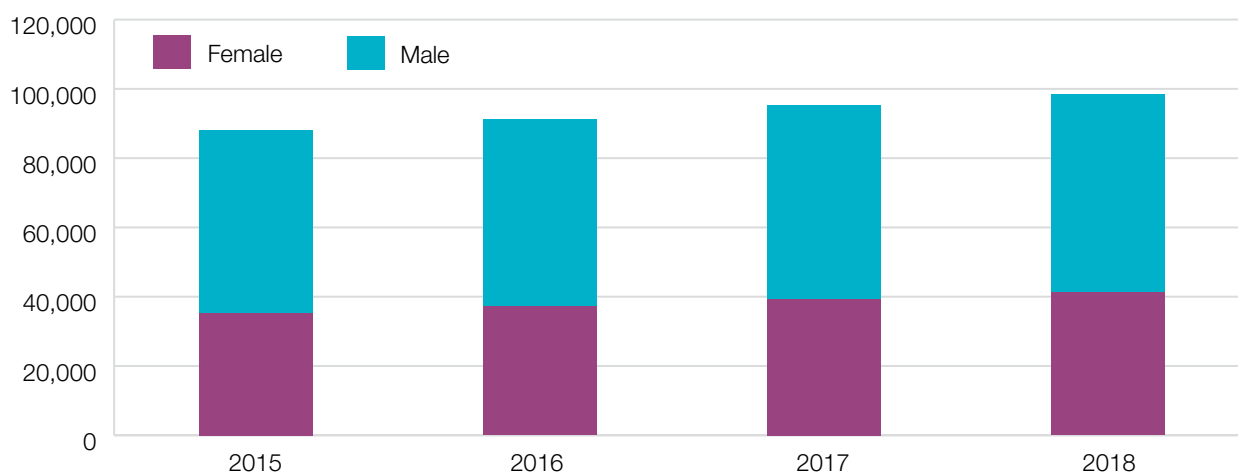
Average age
of males



Over time, the proportion of female practitioners in Australia is slowly increasing, although male practitioners comprise the majority of the medical workforce. Overall, female practitioners tend to be younger than their male counterparts.

In 2018, female medical practitioners comprised 41.9% of the workforce, an increase from 40.0% in 2015.

Figure 3: Gender distribution, 2015–2018



Source: NHWDS Medical Practitioners 2015–2018

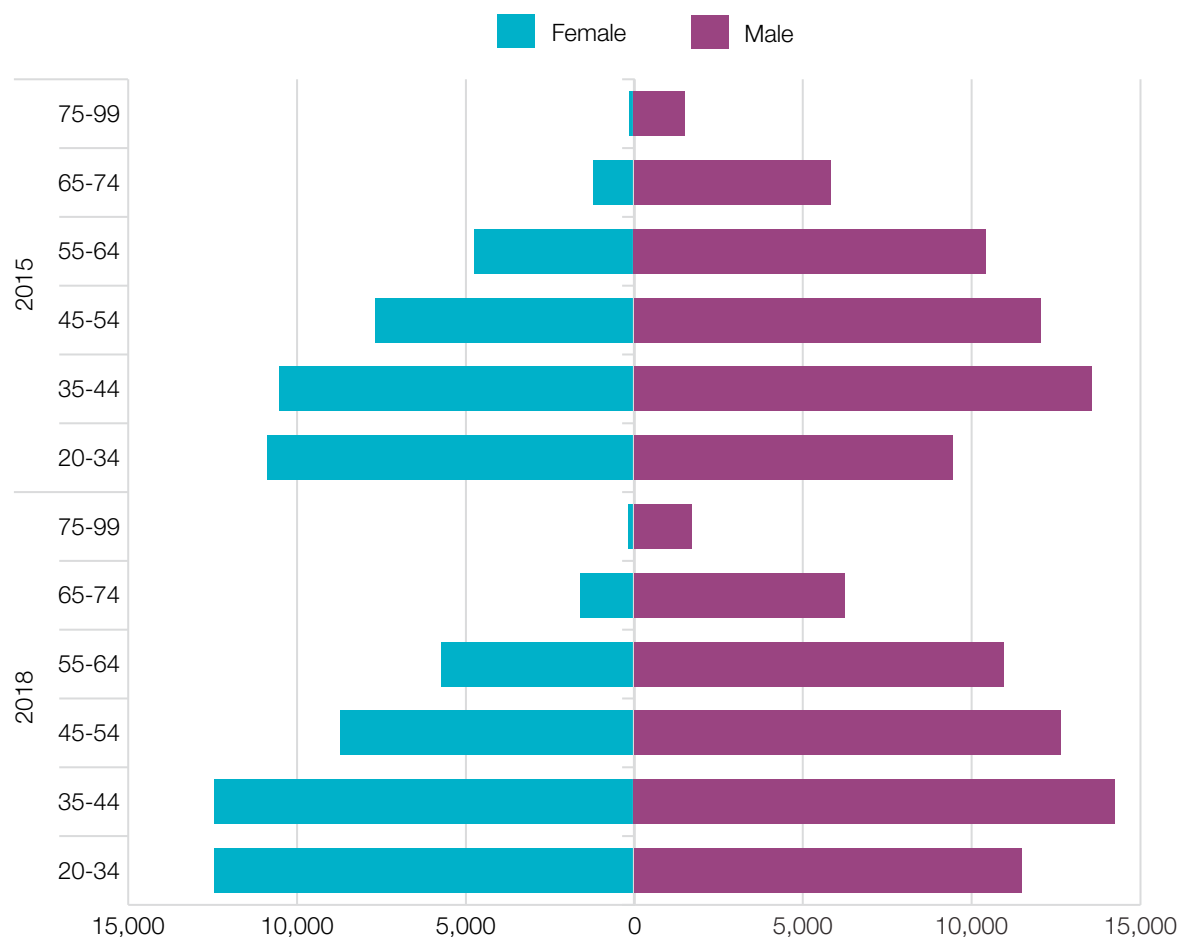
In 2018, the average age of the medical workforce was 45.7 years. The average age of males was 48.0, with 33.0% aged over 55 years and 13.9% aged over 65 years. The average age of females was 42.7, with 18.3% aged over 55 years and 4.4% aged over 65 years.

Between 2015 and 2018 there was little variation in the age distribution by age group.

In 2018, the 35–44 age group had the largest representation, with a headcount of 26,690 (27.1% of the workforce).



Figure 4: Age and gender distribution, 2015 and 2018



Source: NHWDS Medical Practitioner 2015–2018

There were 1,038 registered and employed medical practitioners aged 25 years and under in 2018. Almost all were working as clinicians and Hospital Non-Specialists (HNS), Specialists in Training or Other clinicians.

In 2018, the number of females aged 34 and under was 10.2% greater than males, with females increasing from a headcount of 10,893 in 2015 to 12,464 in 2018. In 2018, for all other age groups, males made up a greater proportion of the workforce than females. The largest differences occurred within the older age groups of 65–74 years and 75–99 years, where males made up 74.0% and 88.4% of the workforce respectively.



Hours Worked



From 2015 to 2018,
42.4 decreased to
42.2 hours per week
average hours worked



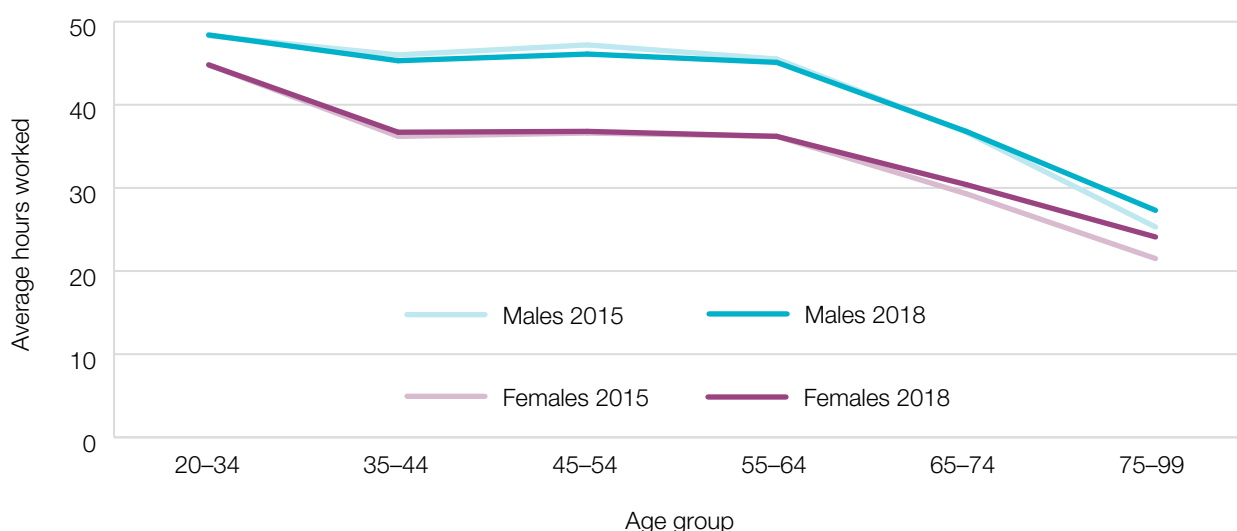
+5.8 HOURS
per week
worked on average by male
compared to female practitioners



Over time, male practitioner average working time is decreasing slightly while female practitioner working time is slightly increasing. In 2018, male medical practitioners are working an average of 5.8 hours more per week than females.

There was a slight decline in average hours worked from 2015 to 2018, from 42.4 hours per week to 42.2 hours per week. Males had a slight decline from 45.0 to 44.6 average hours per week and females had a slight increase from 38.7 to 38.8 average hours per week in this same period.

Figure 5: Average hours per week by gender and age group, 2015 and 2018



Source: NHWDS Medical Practitioner 2015 and 2018

Principal role



Most employed medical practitioners work as clinicians. The proportion of those in non-clinical roles is reducing slightly over time.

In 2018, 95.1% of medical practitioners worked as clinicians in their principal role – a slight increase from 94.9% in 2015. Non-clinicians made up 4.9% comprising administrators, teachers or educators, researchers and other.

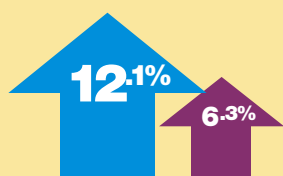


Table 3: Principal role, 2018

Job role	Headcount	Average age	Average hrs worked
Clinician	93,604	45.4	42.4
Administrator	1,583	53.6	40.5
Teacher/ educator	937	54.4	32.0
Researcher	1,217	49.6	41.1
Other	1,054	54.8	33.5

Source: NHWDS Medical Practitioner 2018

Principal area



Between 2015 and 2018, the total number of **clinicians** increased by 12.1% to 93,604 (FTE by 11.4% to 99,239). Over this same period, the number of **non-clinicians** increased by 6.3% to 4,791 (FTE by 4.7% to 4,486).

Table 4: Principal area headcount, 2015 and 2018

		2015	2018	Change 2015–18
Clinicians	General Practitioner	27,519	30,066	2,547
	Hospital non-specialist	9,755	10,759	1,004
	Specialist	29,416	33,303	3,887
	Specialist-in-training	14,965	16,916	1,951
	Other clinician	1,835	2,560	725
Non-clinicians		4,509	4,791	282
Headcount Total		87,999	98,395	10,396

Source: NHWDS Medical Practitioner 2015 and 2018

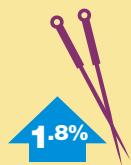
Table 5: Principal area full time equivalent (FTE), 2015 and 2018

		2015	2018	Change 2015–18
Clinicians	General Practitioner	26,362.7	28,390.3	2,027.6
	Hospital non-specialist	11,475.1	12,802.5	1,327.4
	Specialist	32,147.3	35,971.9	3,824.6
	Specialist-in-training	17,373.8	19,655.7	2,282.0
	Other clinician	1,711.7	2,418.5	706.8
Non-clinicians		4,285.0	4,486.0	200.6
FTE Total		93,356.0	103,724.9	10,368.9

Source: NHWDS Medical Practitioner 2015 and 2018



Endorsements



The number of medical practitioners with an acupuncture endorsement has increased by **1.8%** from **556** in 2015 to **566** in 2018. In 2018, **67.7%** were located in NSW (**160**) and VIC (**223**).



70.5% of medical practitioners with an acupuncture endorsement were male.

Job sector

Australia's (Full-time Equivalent (FTE)) medical workforce is distributed relatively evenly across the private and public sectors.

PUBLICSECTOR

PRIVATESECTOR

In 2018, Australia's medical workforce (FTE) worked **50.3%** in the public sector and **49.7%** in the private sector. The proportion of the medical workforce working in the public sector increased **1.0%** (FTE of **5,669**) between 2015 and 2018.

Table 6: Job sector (FTE), 2015 and 2018

Work sector	2015	2018	Change 2015–18
Public sector	40,757	46,427	5,669
Proportion (%)	49.3%	50.3%	1.0%
Private sector	41,876	45,813	3,937
Proportion (%)	50.7%	49.7%	-1.0%
Total	82,634	92,240	9,607

Source: NHWDS Medical Practitioner 2015 and 2018



Work Setting

The majority of Australia's medical workforce works in hospitals and group private practices and the number of practitioners in solo private practice is reducing a little over time. While remaining a small proportion of the workforce overall, the number of practitioners in outpatient services, Aboriginal Health Services, residential aged care, Defence forces and community mental health services is growing.



In 2018, **40.4%** of medical practitioners worked in hospitals and **46.1%** of

medical practitioners worked in some form of private practice setting (group, solo or locum).



Between 2015 and 2018, the majority of work settings' average weekly hours decreased. The greatest decreases in weekly average hours worked were in schools and community drug and alcohol services by **4.4** and **3.0** hours per week respectively.

In 2018, Medical practitioners working in hospitals reported the highest average weekly hours (**46.3**) and those in schools reported the lowest average weekly hours (**29.8**).

Table 7: Principal work setting, 2015 and 2018

Principal work setting	2015		2018	
	Head count	Avg. hours	Head count	Avg. hours
Hospital	34,793	46.4	39,753	46.3
Group private practice	30,795	39.0	34,442	38.6
Solo private practice	10,352	43.3	10,249	42.8
Outpatient service	3,485	40.3	4,431	39.7
Tertiary educational facility	1,680	41.9	1,737	42.1
Other	1,562	37.5	2,024	37.8
Community mental health service	1,153	40.3	1,359	40.0
Locum private practice	747	37.1	689	38.6
Aboriginal health service	704	37.9	809	37.4
Other community health care service	694	35.3	804	35.0
Other government department or agency	684	36.6	716	36.6
Commercial/business service	334	35.6	311	34.9
Defence forces	334	40.7	350	39.1
Residential aged care facility	162	32.5	180	34.6
Community drug and alcohol service	157	37.5	159	34.5
Other educational facility	148	34.3	140	33.4
Correctional service	122	36.7	163	36.8
Residential mental health care service	85	40.0	73	37.7
School	8	34.3	6	29.8
All	87,999	42.4	98,395	42.2

Source: NHWDS Medical Practitioner 2015–2018



State and Territory distribution



The number of registered and employed medical practitioners across states and territories continues to reflect population size, with more than half (**56.4%**) of the Workforce located in NSW and VIC in 2018. In terms of FTE medical practitioners per 100,000 population, NT and ACT had the highest number at **568.3** and **484.6** per 100,000 respectively and VIC had the lowest at **397.3**.

Australia-wide, between 2015 and 2018, the overall FTE per 100,000 population increased by **23.6** (6.0%), the largest increase was in NT by **71.8** (14.5%) and the lowest was in ACT by **9.8** (2.1%). VIC had the lowest rate in 2018 at **397.3**, its growth rate of **4.2%** was lower than the national growth rate of **6.0%**.



In 2018, the average total hours worked ranged between the highest in NT at **44.8** and lowest in TAS at **40.7** hours per week.

Table 8: Distribution by state/territory – 2018

State/Territory	Head-count	Total FTE	Average hrs worked per week	FTE Rate per 100,000 population
NSW	30,809	32,842.5	42.6	411.1
VIC	24,641	25,671.3	41.7	397.3
QLD	20,334	21,555.4	42.4	430.1
SA	7,161	7,474.9	41.8	430.5
WA	9,974	10,362.7	41.6	399.3
TAS	2,211	2,251.9	40.7	426.3
ACT	1,893	2,039.8	43.1	484.6
NT	1,256	1,405.5	44.8	568.3
Total	98,395.0	103,725.0	42.2	415.0

Note: Not stated/Unknown and Other Territories have been excluded from the table but are included in the total

Source: NHWDS Medical Practitioner 2018. Australia Bureau of Statistics, 3218.0 Regional Population Growth, Australia, 2018



Modified Monash Model (MMM 2019)



The Modified Monash Model (MMM) is a geographical classification system using up-to-date population data to determine the access and need for health care services across Australia. The link (below) for DoctorConnect provides an overview of the MMM categories, which range from MM 1 (All areas categorised ASGS-RA1 (major cities)) to MM 7 (ASGS-RA 5 and all other remote island areas more than 5kms offshore).

In 2018, on the basis of an FTE rate (FTE medical practitioners per 100,000 population), MM 1 had the highest FTE rate at **454.5** and MM 5 had the lowest FTE rate at **119.9**. The highest FTE rate increase was in MM 6 (**48.6**) however this was partly due to the population in MM 5 decreasing.

Between 2015 and 2018, the greatest headcount increases were in MM 1 by **8,077** and MM 2 by **1,177**, and the proportional growth was greatest in MM 2 increasing by **15.2%** and MM 6 by **12.3%**.

* Further information on the Modified Monash Model is available at doctorconnect.gov.au

Table 9: Distribution by Modified Monash Model (MMM) – 2018

MMM	Description	Headcount	Avg. total hours	Total FTE	Population	² FTE per 100,000 population
MM 1	Metropolitan areas: Major cities accounting for 70% of Australia's population	77,781	42.1	81,827.6	18,003,544	454.5
MM 2	Regional centres: Inner (ASGS-RA 2) and Outer Regional (ASGS-RA 3) areas that are in, or within a 20km drive of a town with over 50,000 residents	8,910	42.5	9,462.0	2,215,430	427.1
MM 3	Large rural towns: Inner (ASGS-RA 2) and Outer Regional (ASGS-RA 3) areas that are not MM 2 and are in, or within a 15km drive of a town between 15,000 to 50,000 residents	6,072	42.3	6,419.1	1,575,836	407.3
MM 4	Medium rural towns: Inner (ASGS-RA 2) and Outer Regional (ASGS-RA 3) areas that are not MM 2 or MM 3, and are in, or within a 10km drive of a town with between 5,000 to 15,000 residents	2,174	41.9	2,279.7	962,453	236.9
MM 5	Small rural towns: All remaining Inner (ASGS-RA 2) and Outer Regional (ASGS-RA 3) areas. Islands that have an MM 5 classification with a population of less than 1,000 without bridges to the mainland will now be classified as MM 6	2,018	41.4	2,087.5	1,740,415	119.9
MM 6	Remote communities: Remote mainland areas (ASGS-RA 4) AND remote islands less than 5kms offshore. Islands that have an MM 5 classification with a population of less than 1,000 without bridges to the mainland will now be classified as MM 6	868	45.9	996.2	282,646	352.5
MM 7	Very remote communities: Very remote areas (ASGS-RA 5) and all other remote island areas more than 5kms offshore.	468	46.6	545.0	212,536	256.4
Total		98,395	42.2	103,725.0	24,992,860	415.0

Note: Based on MMM2019.

Not stated/Unknown are excluded from the table but are included in the total

Source: NHWDS Medical Practitioners 2017.

Australia Bureau of Statistics, 3222.0 Regional Population Growth, Australia, 2018



Tele-Health

The workforce survey asks medical practitioners to report their hours practised via Tele-Health (telemedicine, medical education and health education over a distance) in the previous year.

Tele-Health services
are provided by



11.4% (11,237) of Australia's
medical practitioners.*



On average, these respondents
practised via Tele-Health for
5.1 hours per week



67.4%
of Tele-Health services were provided
by medical practitioners in major cities.

*Note: Tele-health is the use of telecommunication techniques for the purpose of providing telemedicine, medical education, and health education over a distance.
A total of 11,237 medical practitioners (11.4%) answering the 2018 workforce survey indicated they provided Tele-Health services.

Table 10: Tele-Health medical practitioners by Modified Monash Model (MMM), 2018

MMM Description	2016	2017	2018
MM 1	66.2%	67.8%	67.4%
MM 2	12.4%	12.2%	12.3%
MM 3	8.8%	8.7%	9.1%
MM 4	4.8%	4.7%	4.1%
MM 5	4.1%	3.2%	3.4%
MM 6	2.0%	2.1%	2.2%
MM 7	1.6%	1.3%	1.5%
Total	100.0%	100.0%	100.0%

Note: Based on MMM2019.

Remoteness location refers to the location of the Tele-Health practitioner, not the location of the person receiving the service.

Not stated/Unknown are excluded from the table but are included in the total

Source: NHWDS Medical Practitioners 2018.



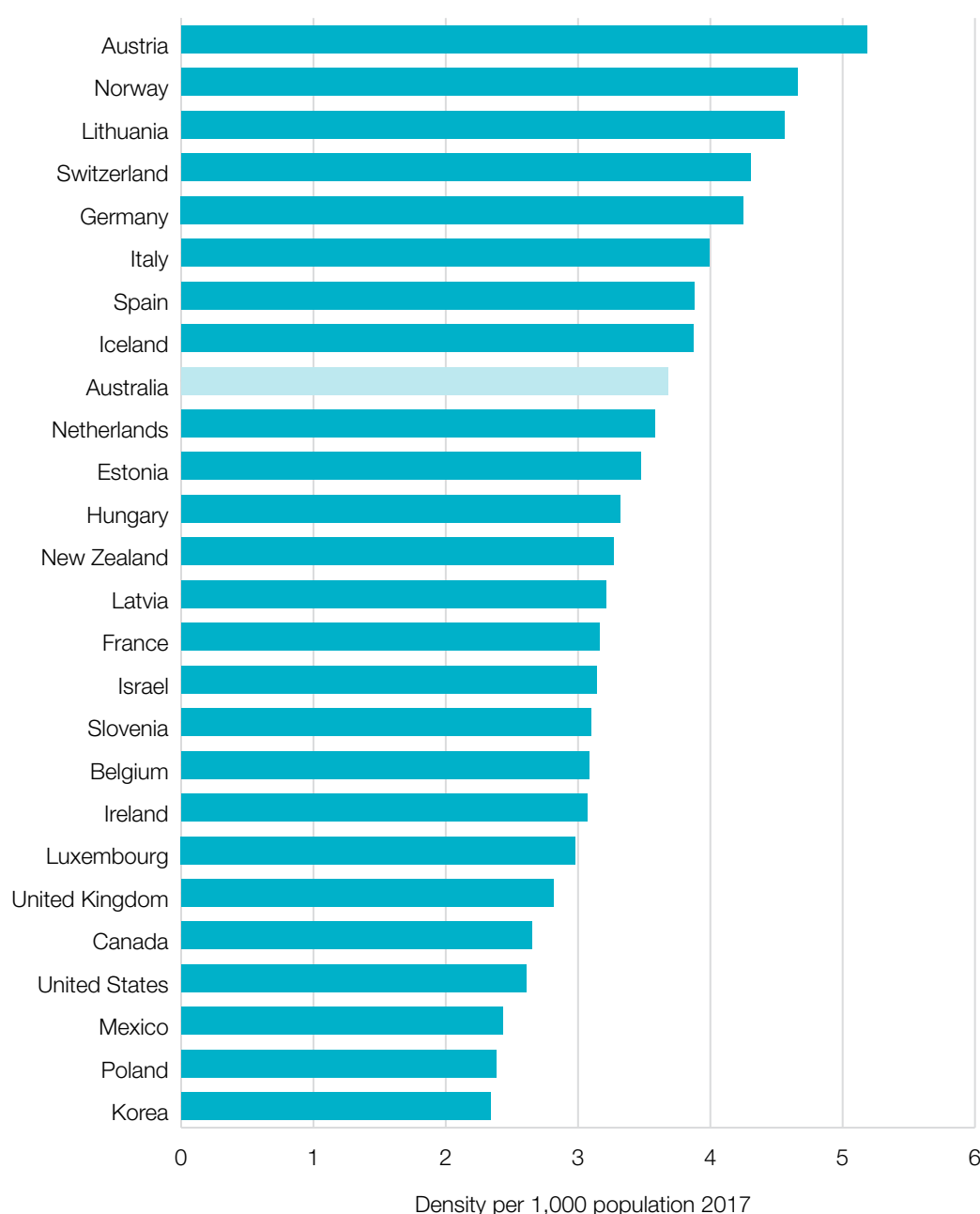
International comparison



In 2017, Australia was ranked **ninth** out of 32 in comparison to other OECD countries with **3.7** practising physicians **per 1,000** population.

Note: the Organisation for Economic Co-operation and Development (OECD) produces a range of key indicators for international comparison to allow for examination of performance against the experiences of other OECD countries, one being the number of practising physicians (defined by OECD as registered medical practitioners who were employed clinicians) per 1,000 population. At the time of publishing, 2018 OECD comparison data was not available.

Figure 6: Practising Physicians* per 1,000 population – OECD countries, 2017



Source: Stats.oecd.org. 2020. Health Care Resources. [online] Available at https://stats.oecd.org/index.aspx?DatasetCode=HEALTH_REAC



Initial qualification country

The proportion of internationally trained medical practitioners has increased slightly over time.

In 2018, **30.6%** (29,276) of the medical workforce (**95,534** with a known qualification country) obtained their initial qualification overseas. The proportion of those who obtained their initial qualification overseas in 2018 remained the same as in 2015 (**33.0%**).

Medical practitioners whose initial qualifications were obtained overseas form a key part of the medical workforce in Australia.

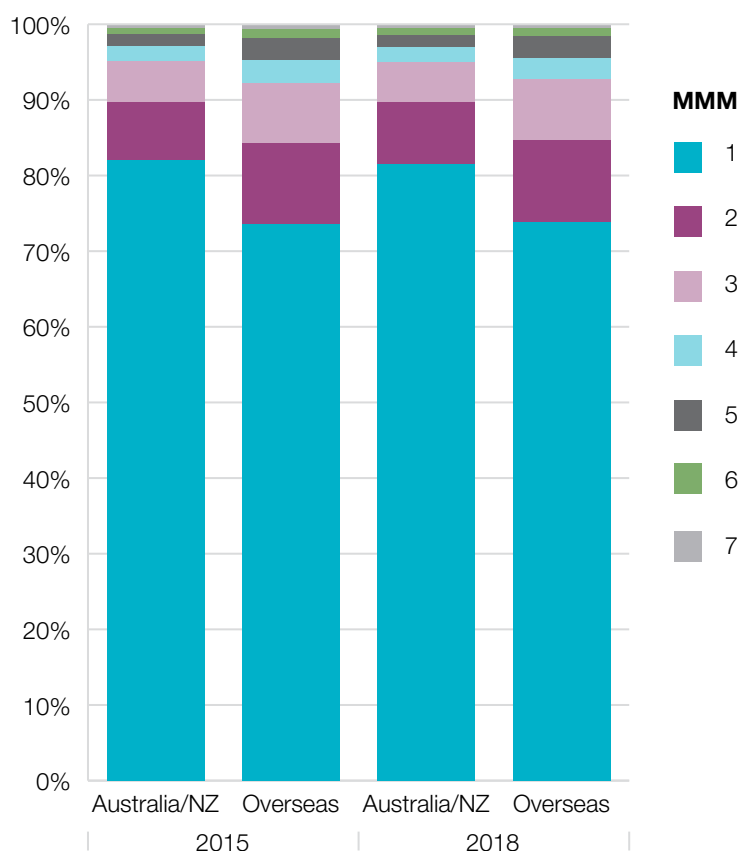


30.6%
of the medical workforce
obtained their initial
qualification overseas



Between 2015 and 2018, the percentage of the medical workforce who obtained their initial qualification overseas increased slightly (between **4.0** and **0.1** percentage points) in MM 1-3 and MM 7, but decreased (between **0.1** and **0.2** percentage points) in MM 4-6.

Figure 7: Initial qualification country by Modified Monash Model (MMM), 2015 and 2018



Note: Based on MMM2019.

Not stated/Unknown are excluded from the calculation of percentages

Source: NHWDS Medical Practitioners 2018.



2

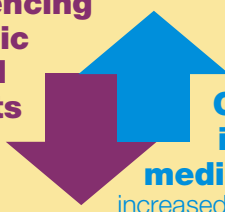
Medical Students

The majority of medical students are Australian citizens or permanent residents but the growth in international students is strong (**7.9%** between 2015 and 2018). By 2021 the total number of medical graduates is expected to increase by **4.7%** to **3,767**.

Commencing students



Commencing domestic medical students
decreased



Commencing international medical students
increased

♀ >50.0%
total medical students

From 2015 to 2018, the number of commencing domestic medical students decreased slightly by **39 (1.2%)** to **3,171**, with more than half being female. The number of commencing international medical students increased by **84 (14.8%)** to **651** in the same time period.

Table 11: Commencing medical students

Commencing medical students	2015	2016	2017	2018
Domestic	3,210	3,215	3,211	3,171
Proportion female	51.9%	52.3%	51.8%	53.5%
International	567	613	642	651
Proportion female	48.9%	49.1%	n/a	51.2%
Total	3,777	3,828	3,853	3,822

Note: Domestic student numbers include New Zealand citizens

Source: Medical Deans Australia and New Zealand Inc. and the Australian Government Department of Health



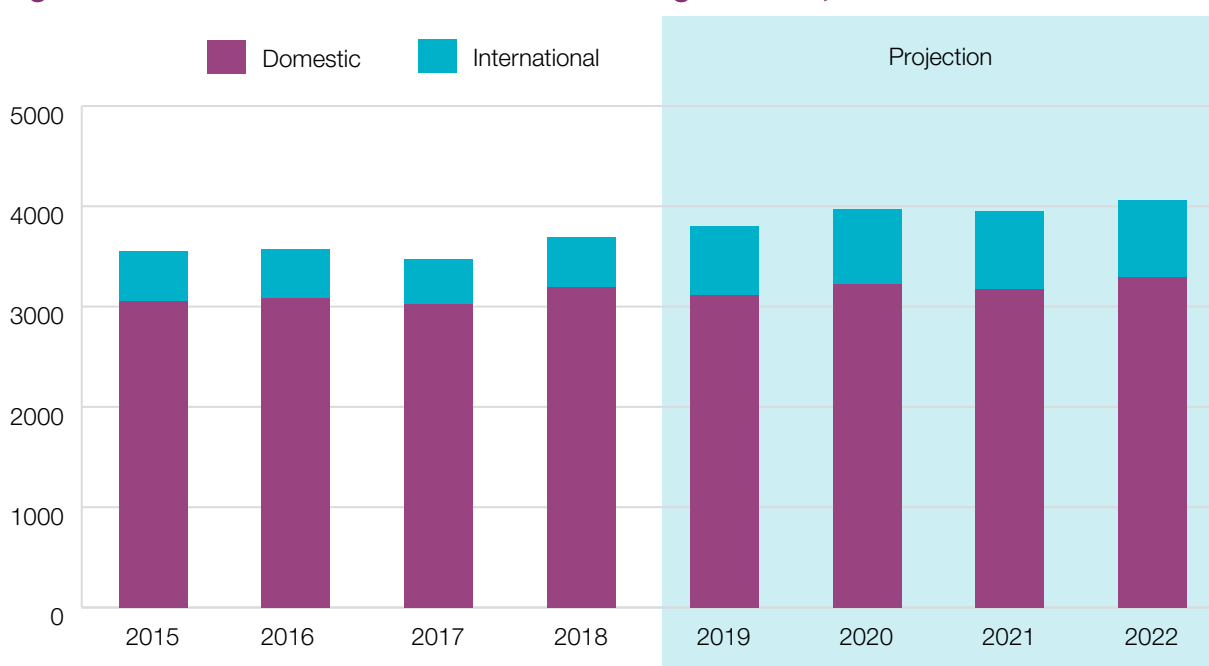
Graduating students



In 2018 there were 3,693 medical graduates (domestic and international), with **3,805** expected to graduate* in 2018. Numbers of graduates are projected to increase by **6.8%** from 2019 to 2022 to reach **4,065** in 2022.

** Note, projections based on the numbers of students currently enrolled in the years that will graduate and no attrition rate has been applied*

Figure 8: Domestic and international medical graduates, 2015–2022



*Note: 2019–2022 are projections based on the numbers of students currently enrolled in the years that will graduate and no attrition rate has been applied.
Source: Medical Deans Australia and New Zealand Inc. submission to MET 4th Edition*



3

Medical interns

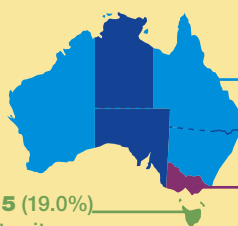
Satisfactory completion of an internship also referred to as the first postgraduate year (PGY1), is required before junior doctors are eligible for general registration. After PGY1, and prior to starting vocational training, most doctors spend one or more years working in public, private or community settings to gain more clinical experience. International students who graduated from an Australian medical school occupied **300 (8.9%)** of the PGY1 positions in 2018.

State and Territory distribution of interns



From 2015 to 2018, the number of interns commencing PGY1 increased by **4.4% (141)** to **3,365**, with an average annual increase of **1.0%**.

The number of PGY1 internships in Tasmania increased by **15 (19.0%)** representing the largest proportional increase for a state or territory



QLD, WA and NSW had increases of between **18** and **27** PGY1 places.

VIC, with an absolute increase of **51** PGY1 places had the largest increase across all states and territories

Table 12: Medical Interns by State and Territory, 2015–2018

Commencing medical students	2015	2016	2017	2018
NSW	979	984	994	997
VIC	762	807	816	813
QLD	701	740	733	728
SA	254	250	251	255
WA	313	314	337	335
TAS	79	86	94	94
NT	44	45	46	48
ACT	92	94	95	95
Total	3,224	3,320	3,366	3,365

Source: Australian Government Department of Health, MET 3rd Edition

* Eligible international students who graduated from an onshore Australian medical school and were placed by the Commonwealth

Provisional registration applies to doctors required to complete a period of approved supervised practice to become eligible for general registration.

The following analysis of the provisional registrants is drawn from the number of medical practitioners with provisional registration (5,664 in 2018) unless otherwise stated.



2018

DOCTORS IN FOCUS



4

All Provisional registrants

Demographics

In 2018, **5,664** medical practitioners were provisionally registered (Australian and overseas-trained practitioners inclusive).

In 2018, the average age of provisional registrants was 29.0 years and **85.9%** were aged 34 and under. In comparison, in 2015 the average age was 28.9 and **86.6%** were aged 34 and under.

2018 provisional registrants



Between 2015 and 2018, the proportion of female provisional registrants increased from **52.3%** to **53.9%** of total provisional registrants.

↑ Gap between the genders increased from **4.6%** to **7.8%** since 2015

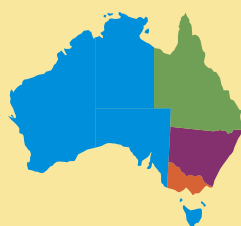
Figure 9: Age and gender distribution – provisional registrants, 2015 and 2018



Source: NHWDS Medical Practitioner 2015 and 2018



State and Territory distribution of provisional registrants



In 2018, the highest proportion of provisional registrants was located in **NSW with 26.7%**, followed by **VIC with 22.7%** and **QLD with 22.6%**.

Table 13: Provisional registrants by State and Territory distribution, 2015 and 2018

State/Territory	2015		2018	
	Headcount	proportion	Headcount	proportion
NSW	1,460	27.3	1,510	26.7
VIC	1,143	21.4	1,284	22.7
QLD	1,318	24.7	1,281	22.6
SA	372	7.0	468	8.3
WA	713	13.4	693	12.2
TAS	101	1.9	116	2.0
ACT	109	2.0	118	2.1
NT	73	1.4	108	1.9
Unknown	50	0.9	86	1.5
Total	5,339		5,664	

Note: Not stated/Unknown and Other Territories have been excluded from the table but are included in the total
Source: NHWDS Medical Practitioner 2015 and 2018



Modified Monash Model distribution



A very small proportion of provisional registrants was located in Very Remote locations or MM 7 across 2015 to 2018. In 2018, **91.1%** were located in MM 1 (Metropolitan) and MM 2 (Regional centres). MM 3 (large rural towns) and more remote represented only **7.4%** of provisional registrants collectively.

Table 14: MMM distribution – 2015 and 2018

MMM Description	2015		2018	
	Headcount	proportion	Headcount	proportion
1	4,239	79.4	4,400	77.7
2	657	12.3	758	13.4
3	253	4.7	289	5.1
4	73	1.4	54	1.0
5a	NP	NP	NP	NP
6	38	0.7	45	0.8
7a	NP	NP	NP	NP
Unknown	50	0.9	86	1.5
Total	5,339		5,664	

Note: a Some data items with small numbers are not provided to protect provisional registrant privacy
Source: NHWDS Medical Practitioner 2015–2018



5

Hospital non-specialists

The proportion of doctors working as salaried medical officers in hospital (Hospital Non-Specialists) settings is growing but slightly slower than other areas of the total clinical workforce. The proportions of Hospital Non-Specialists who intend to take vocational specialist training is lower in 2018 than in 2015.

The category of Hospital Non-Specialists (HNS) is used to count doctors that work as a salaried medical officer in a hospital setting. The HNS workforce makes a major contribution to the provision of medical services in hospitals. This workforce includes doctors in training as interns, resident medical officers (RMOs), career medical officers (CMOs), hospital medical officers (HMOs), principal house officers (PHOs) and other salaried hospital doctors who are not specialists or in recognised vocational training programs to become specialists.

In 2018, the HNS workforce accounts for **11.7%** of the total clinical workforce and has seen an annual growth rate of **3.0%** compared to the total medical workforce which has grown at an average annual growth rate of **3.0%** over the same period.

Table 15: Hospital Non-Specialists by position held in hospitals

Position in hospital	2015	2018	Change 2015–2018
RMO	3659	3461	-198
HMO	1052	1129	77
CMO	780	867	87
PHO	496	623	127
Registrar	2,053	2,064	11
Other	1,707	2,610	903
Total	9,747	10,754	1,007

Source: NHWDS Medical Practitioner 2015–2018



Intention to undertake vocational training



Questions in the Workforce Survey identified those who intended to undertake vocational training. The information collected from these questions form part of the future planning process by providing an indicative number of the future intentions of trainees.

Table 16: HNS intending to undertake specialty by training by position – 2015 and 2018

Position in hospital		2015	2018	Change 2015–2018
RMO	Number	3,659	3,461	-198
	Intend to train	3,451	3,278	-173
	% intend to train	94.3%	94.7%	0.4%
HMO	Number	1,052	1,129	77
	Intend to train	964	1008	44
	% intend to train	91.6%	89.3%	-2.4%
CMO	Number	780	867	87
	Intend to train	282	245	-37
	% intend to train	36.2%	28.3%	-7.9%
PHO	Number	496	623	127
	Intend to train	467	569	102
	% intend to train	94.2%	91.3%	-2.8%
Registrar	Number	2,053	2,064	11
	Intend to train	1,922	1,918	-4
	% intend to train	93.6%	92.9%	-0.7%
Other	Number	1,707	2,610	903
	Intend to train	88	103	15
	% intend to train	5.2%	4.0%	-1.2%
Total	Number	9,747	10,754	1,007
	Intend to train	7,174	7,121	-53
	% intend to train	73.6%	66.2%	-7.0%

Source: NHWDS Medical Practitioner 2015 and 2018



The specialty in which a HNS had intended to undertake training could differ from the specialty training undertaken in subsequent years.

From the 2015 cohort, there were **1,630** HNS who expressed an intention to undertake specialty training in general practice. Of those, **789** undertook specialty training in General Practice and **69** undertook training in specialties other than general practice in 2018.

Of the 2015 HNS cohort that reported an intention to train **38.8%** were undertaking training in their intended specialty in 2018 and **19.7%** in another specialty.

Table 17: Intended specialty in 2015 compared to specialty training undertaken in 2018

2015 HNS cohort – Specialty intention to train	Headcount	Undertaking training 2018	
		In intended specialty	In other specialty
Top 10 specialties	4,610	2,059	627
General practice	1,630	789	69
Emergency medicine	635	326	85
Anaesthesia	465	267	76
Surgery-general surgery	379	121	62
Surgery-orthopaedic surgery	341	89	33
Physician	243	49	115
Obstetrics and gynaecology	237	118	38
Physician-general medicine	234	61	92
Psychiatry	231	145	11
Intensive care medicine	215	94	46
Other specialties	2,571	726	785

Source: NHWDS Medical Practitioner 2015–2018



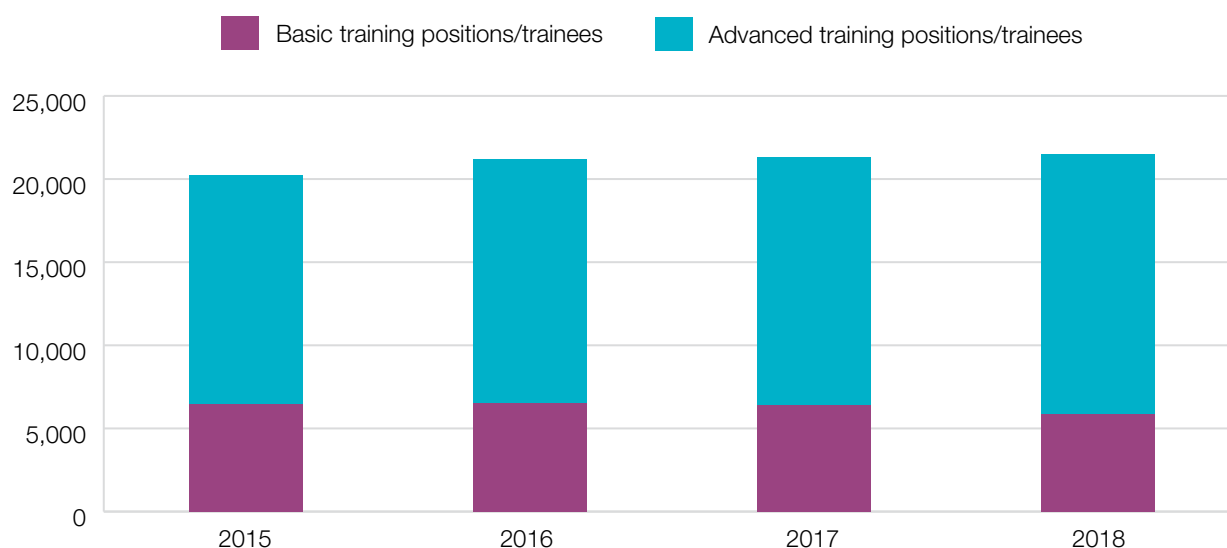
6

Vocational training

Most medical graduates seek entry into a specialist training program that leads to fellowship from a medical college. Each medical college has its own training program and requirements approved by the Australian Medical Council (AMC). A number of doctors will work in hospital settings in hospital non specialist roles, such as career medical officers (CMOs).

Consistent with increases in medical students, graduates and interns, vocational trainee numbers have also been increasing. Between 2015 and 2018, the total number of trainees rose by **6.2% (1,257)** from **20,250 to 21,507**, with advanced trainee numbers rising by **13.3% (2,097)** from **13,810 to 15,649**. Basic training though decreased by **582 (9.0%)**. Basic training positions represent **27.2%** of vocational training positions while advanced training represents **72.8%**.

Figure 10: Vocational training positions/trainees



Source: Australian Government Department of Health, MET 3rd Edition, Table 4.3



7

Specialist workforce

The proportion of the medical workforce working as specialists has increased notably over time with the 6 most popular non-GP specialties accounting for **54.0%** of the total increase over time.

The workforce survey asks medical practitioners if they have a specialist registration and if so, which two specialty fields they worked the most hours in the week prior to completing the survey. The specialty with the most hours is assigned as their primary specialty. In the 2018, there were **23 specialties** and **86 subspecialties** recognised by the MBA.

Between 2015 and 2018 the size of the workforce who indicated they were primarily working as specialists increased from **53,936 to 59,961** for an increase of **11.2%** over the three year period or an average of **3.7% per annum**. The average age of the specialty workforce decreased marginally from 2015 to 2018, from **46.0 to 45.7 years**. Sexual health and sport and exercise medicine showed an average age increase though, of **1.6 and 1.5 years** respectively.

The following table shows size of the specialist medical workforce based on the reported primary specialty of the medical practitioner as reported in the 2018 health workforce survey.

Table 18: Primary Specialty, 2015 and 2018

Primary Specialty	2015		2018		Change 2015 to 2018	
	Head-count	Avg. age	Head-count	Avg. age	Head-count	Avg. age
Addiction medicine	100	58.1	112	58.5	12	0.4
Anaesthesia	4,053	48.6	4,530	48.7	477	0.1
Dermatology	464	51.0	518	51.0	54	-0.0
Emergency medicine	1,546	45.5	2,078	45.6	532	0.1
General practice	22,416	53.8	24,350	53.6	1,934	-0.2
Intensive care medicine	603	47.7	709	48.1	106	0.4
Medical administration	220	56.6	217	56.7	-3	0.1
Obstetrics and gynaecology	1,710	52.4	1,821	52.0	111	-0.3
Occupational and environmental medicine	238	57.8	242	58.2	4	0.4
Ophthalmology	896	53.0	946	53.3	50	0.3
Paediatrics and child health	1,783	49.4	2,146	49.0	363	-0.4
Pain medicine	124	53.3	161	53.4	37	0.1
Palliative medicine	221	50.4	271	49.8	50	-0.6
Pathology	1,325	51.9	1,429	51.8	104	-0.1
Physician	7,153	49.9	8,277	49.7	1,124	-0.2
Psychiatry	3,216	53.3	3,595	52.9	379	-0.4
Public health medicine	253	56.3	253	56.1	-	-0.2
Radiation Oncology	329	46.8	360	47.9	31	1.1
Radiology	1,895	49.8	2,107	50.0	212	0.2
Rehabilitation medicine	402	50.4	455	50.1	53	-0.3
Sexual health medicine	87	53.3	98	54.9	11	1.6
Sport and exercise medicine	106	52.8	109	54.3	3	1.5
Surgery	4,796	52.5	5,177	52.4	381	-0.0
All	53,936	46.0	59,961	45.7	6,025	-0.2

Note: Table total excludes medical practitioners who did not indicate their specialty
Source: NHWDS Medical Practitioner 2018



2018

DOCTORS IN FOCUS



8

Registered medical practitioners not in the medical labour force

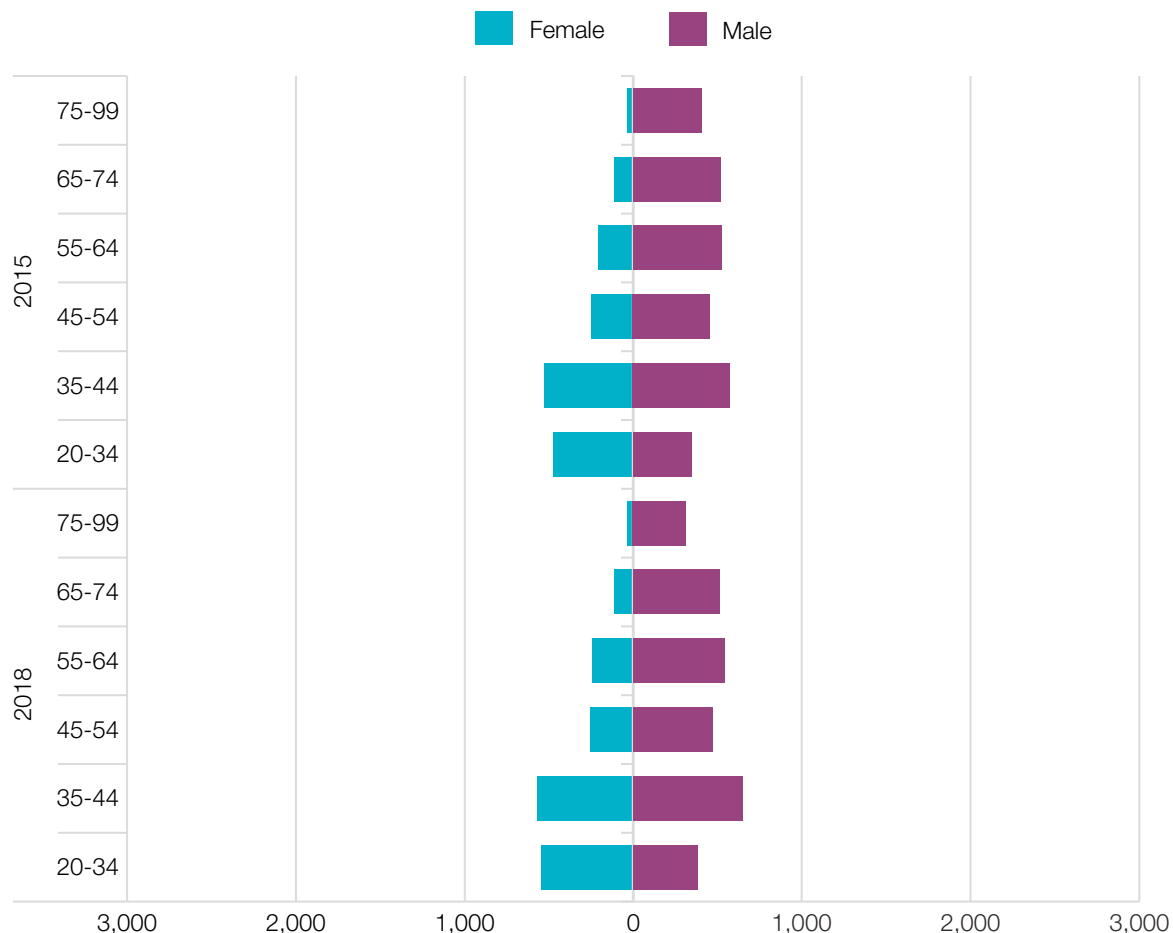
In 2018, **4,650** registered medical practitioners were not in the medical labour force: **709** were retired, **1,215** were not looking for work and **2,726** were overseas.

In 2018, the average age of those not in the medical labour force was **49.7** years, with **21.2% aged 65 and over**. In comparison, in 2015, the average age was **50.9**, with **24.3% aged 65 and over**.



Between 2015 and 2018, the proportion of female medical practitioners not in the medical labour force increased a little from **36.5% to 38.1%** and the proportion of males decreased from **63.5% to 61.9%**.

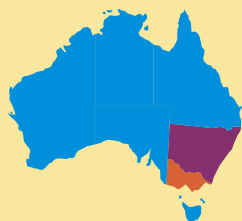
Figure 11: Age and gender distribution – registered medical practitioners not in the medical labour force, 2015 and 2018



Source: NHWDS Medical Practitioner 2015–2018



State and Territory distribution



In 2018, the largest proportion of medical practitioners not in the medical labour force were located in **NSW** and **VIC**, with **23.2%** and **15.5%** respectively.

Table 19: State and Territory distribution, 2015 and 2018

State/Territory	2015		2018	
	Headcount	proportion	Headcount	proportion
NSW	1,099	24.7	1,078	23.2
VIC	687	15.4	721	15.5
QLD	473	10.6	542	11.7
SA	186	4.2	219	4.7
WA	352	7.9	294	6.3
TAS	69	1.5	62	1.3
ACT	47	1.1	52	1.1
NT	32	0.7	49	1.1
Unknown	1,509	34	1,633	35.1
Total	4,454		4,650	

Source: NHWDS Medical Practitioner 2015 and 2018



9

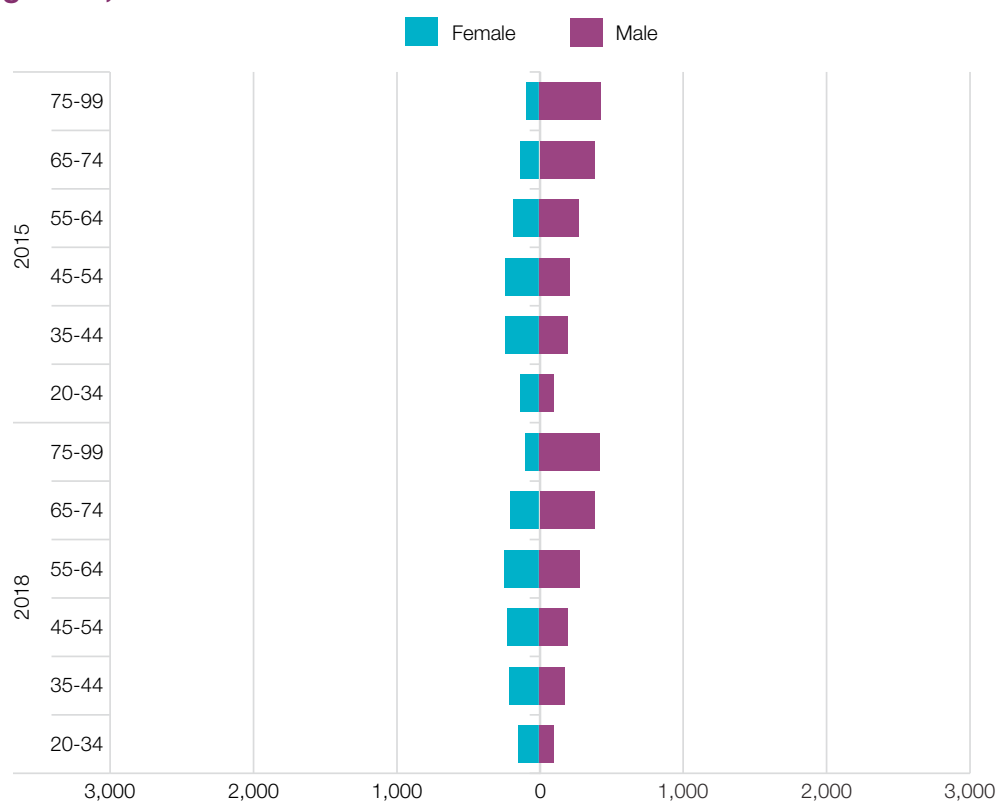
Non-practising registrants

Non-practising registration applies to practitioners who have previously held general or specialist registration in a profession who do not wish to practise the profession but wish to remain registered. Furthermore, under National Law, non-practising registrants are not permitted to practise,

Note: The following analysis of the non-practising registrants is drawn from the number of medical practitioners with non-practising registration (2,736 in 2018) unless otherwise stated.

In 2018, **2,736** registered medical practitioners held a non-practising registration. The average age of non-practising registrants in 2018 was **58.7** years. **41.0%** of non-practising registrants were aged 65 and over. In 2015, the average age was slightly lower at **58.2** and a slightly lower proportion (**39.5%**) were aged 65 and over.

Figure 12: Age and gender distribution – nonpractising registrants by age and gender, 2015–2018

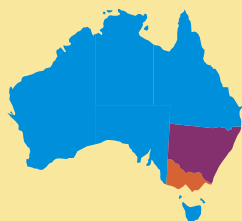


Source: NHWDS Medical Practitioner 2015–2018.

Between 2015 and 2018, the proportion of female non-practising registrants increased slightly from **40.2% to 43.2%** and the proportion of males decreased from **59.8% to 56.8%**.



State and Territory distribution



In 2018, the largest proportion of non-practising registrants were located in **NSW** and **VIC**, with **25.3%** and **19.0%** respectively.

Table 20: State and Territory distribution, 2015 and 2018

State/Territory	2015		2018	
	Headcount	proportion	Headcount	proportion
NSW	658	24.7	692	25.3
VIC	488	18.3	521	19.0
QLD	284	10.7	275	10.1
SA	128	4.8	142	5.2
WA	214	8	203	7.4
TAS	52	2	49	1.8
ACT	33	1.2	28	1.0
NT	6	0.2	10	0.4
Unknown	802	30.1	816	29.8
Total	2,665		2,736	

Source: NHWDS Medical Practitioner 2015 and 2018



Other useful Health Workforce links

Website links

1. [National Health Workforce Dataset \(NHWDS\): Medical Practitioners 2015–2018.](#)
2. [Australian Medical Association \(AMA\) Career Pathways Guide.](#)
3. [MET3 Summary Snapshot 2018, Published 2018](#)
4. [Australia Bureau of Statistics, 3218.0 Regional Population Growth, Australia. Released 24/04/18.](#)
5. [Australia Bureau of Statistics, 3222.0 Population Projections, Australia. Released 2018.](#)

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