# Surgery

# 2016 Factsheet

Data in this factsheet covers the following surgery subspecialties: cardio-thoracic surgery, neurosurgery, oral and maxillofacial surgery, paediatric surgery, urology and vascular surgery. Depending on the specialty, up to seven years full-time advanced training through the Royal Australasian College of Surgeons or the Royal Australasian College of Dental Surgeons is required to practice:

- <u>Cardio-thoracic surgery</u> encompasses the lung, heart, and/or the great vessels;
- <u>Neurosurgery</u> encompasses disorders of the brain, meninges, skull and their blood supply;
- Oral maxillofacial surgeons specialise in the oral and maxillofacial regions of the neck and head;
- <u>Paediatric surgery</u> encompasses conditions in children usually up to the age of 16 that may require surgery, such as non-cardiac thoracic surgery, general paediatric surgery and paediatric urology;
- <u>Urology</u> is the treatment of problems involving the kidney, bladder, prostate and male reproductive organs; and
- <u>Vascular surgery</u> encompasses diseases of the vascular system.

#### Workforce

In 2016, there were 1,271 surgeons employed in Australia, of whom 63.7% worked in the private sector. Over 94% of surgeons who completed the 2016 National Health Workforce Survey indicated they were clinicians.



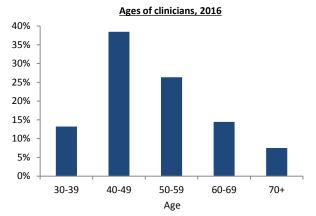
\* Includes roles reported by survey respondents that did not fit predefined survey categories.

#### **Demographics of clinicians**

Males represented 89.1% of clinicians in 2016 and had an average age of 51.9 years. Females represented 10.9% of clinicians and were on average 6.1 years younger than male clinicians.

Category	% of clinicians	Average age	Average hours per week
Male	89.1%	51.9	48.6
Female	10.9%	45.8	45.8
Clinician total	100.0%	51.2	48.3

Over 38% of clinicians were aged 40-49 years and over 26% were aged 50-59 years.





#### **Quick facts of clinician workforce**

22.0	% Aged 60 or older
51.2	Average age
48.3	Average hours per week
10.9	% Female
89.3	% Located in a major city
38.0	% Intend to retire within 10 years

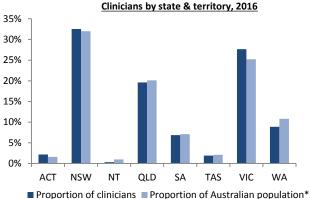
# **Distribution of clinicians**

In 2016, over 89% of clinicians were located in a major city or a location considered as MMM1 under the Modified Monash Model classification system.

Location of clinicians by remoteness, Modified Monash Model (MMM*)							
MMM							
category	1	2	3	4	5	6	7
%	89.3	6.8	3.3	0.3	0.2	0.1	-

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

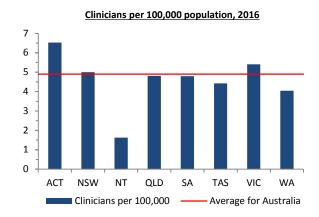
Over 32% of clinicians indicated their principal place of practice was in New South Wales and over 27% indicated it was in Victoria.



\* Proportion of clinicians ■ Proportion of Australian population

\* ABS 3101.0 – Australian Demographics Statistics. Released 22/09/16.

There was an average of 4.9 clinicians per 100,000 population across Australia in 2016. The Australian Capital Territory had the highest ratio of clinicians with 6.5 per 100,000 population, followed by Victoria with 5.4 per 100,000 population.



#### **New fellows**

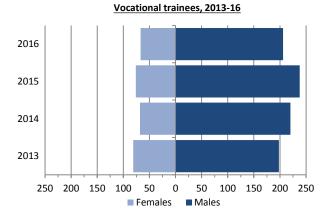
The total number of new fellows decreased by 9.5% between 2013 and 2015. During this period, female new fellows decreased by 50.0% and male new fellows decreased by 1.9%.

Number of new fellows, 2013-15			
	2013	2014	2015
Males	53	43	52
Females	10	18	5
Total	63	61	57

# **Vocational training**

Between 2013 and 2016, the number of female trainees increased by 20.9%, whereas the number of male trainees decreased by 3.9%.

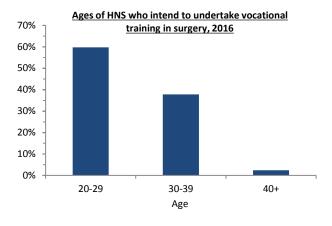
Trainee numbers, 2013-16				
Year	Females	Males	Total	
2013	67	206	273	
2014	76	238	314	
2015	68	220	288	
2016	81	198	279	
Change 2013-16 (%)	20.9%	-3.9%	2.2%	



# **Vocational intentions**

In 2016, there were 460 Hospital Non-Specialists (HNS\*) who indicated their intention to undertake vocational training in cardio-thoracic surgery, neurosurgery, oral and maxillofacial surgery, paediatric surgery, urology and vascular surgery.

\* A HNS is a medical practitioner employed in a salaried position mainly in a hospital. They do not hold a specialist qualification and are not training to obtain one. They include career medical officers, hospital medical officers, interns, principal house officers, resident medical officers and registrars.



# Workforce dynamics indicator\*

The workforce dynamics indicator highlights areas of concern in the future. The indicators measured and their current status is highlighted in the table below.

**Note:** The workforce dynamics indicators are for workforce assessment purposes only and are not intended to guide future training numbers.

\* Further information on the workforce dynamics Indicator is available at <a href="https://health.gov.au">health.gov.au</a>



Indicator	Description	Status
Ageing of workforce	Workforces with higher average ages are more susceptible to higher exit rates due to retirements.	
Replacement rate	This measure indicates whether trainee numbers are sufficient to replace the numbers leaving the workforce.	
Duration of training program	This measure indicates how long it takes to train a replacement workforce.	

#### References

- 1) National Health Workforce Dataset (NHWDS): Medical Practitioners 2016.
- 2) Australian Medical Association (AMA) Career Pathways Guide.
- 3) Medical Education and Training Report  $\mathbf{1}^{\text{st}}$  edition (Unpublished)
- 4) ABS 3101.0 Australian Demographics Statistics. Released 22/09/16.
- 5) National Medical Training Advisory Network (NMTAN) Prevocational Doctor Factsheet Methodology Paper.

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