



## POSITION STATEMENT

# The optometry workforce in Australia

### Key messages:

- A secure and sustainable optometry workforce must be able to:
  - Deliver services consistent with a full scope of practice to meet the primary eye and vision care needs of Australians
  - Support ready access to preventative eye care
  - Meet projected population demand for optometry services.
- At a national level there are currently sufficient numbers of practicing optometrists to meet community demand for services.
- Without change to key determining factors, there is likely to be a substantial excess supply of full time equivalent optometrists in coming decades.
- It is not in the interests of optometry students, the public, Government or the optometry profession, to support growth in the optometry workforce beyond that required to cater for growth in service demand.

### Optometry Australia's position:

Optometry Australia believes that:

- A mechanism should be introduced to limit the introduction of new entry-level optometry courses. It is not in the interests of the community or the profession to support the opening of further optometry schools/courses in the current workforce environment. Moreover, the profession may not be in a position to meet increased demand for clinical placements.
- Restrictions on the number of students in optometry courses should be introduced. Public university funding systems for optometry student placements should be amended to facilitate the balance between enrolment and graduation numbers to ensure the supply of optometrists matches the projected demand for services. There are provisions in legislation to enable the government to cap places in other courses, notably medicine. This mechanism should be applied to optometry.
- Optometry should be removed from the Medium and Long-term Strategic Skills List (MLTSSL) which replaces the previous Skilled Occupation List (SOL), and from the Short-term Skilled Occupation List (STSOL) which replaces the previous 'Consolidated Sponsored Occupation List' (CSOL). There is no skills shortage in optometry that would support the need for overseas-trained optometrists to be brought in through Australia's permanent and temporary skilled visa programs.
- Workforce programs targeted to help address barriers to, and incentivise, rural and regional practice, are necessary to ensure that the optometry workforce is distributed in a way that addresses the demand for services in all areas of Australia.



- There are opportunities to enhance patient access to eye care and health system efficiency by maximising use of optometrists' skills and the optometry workforce within eye care pathways which cross traditional service-delivery boundaries of the healthcare system.
- Ongoing monitoring of the current and projected future supply and demand balance for optometry services is required to ensure community eye health needs are met and equilibrium is established between demand for, and supply of, optometry services.



## Background

### Snapshot of key statistics

- 5,134 optometrists held general registration with the Optometry Board of Australia in December 2016<sup>1</sup>
- There are five optometry courses in Australia with a sixth expected to open in Canberra in 2018.
- There were 252 optometry graduates in 2015 and 230 graduates in 2016.
- In 2015, 3 new registrants entered the workforce for every optometrist who did not renew their registration from 2014.<sup>2</sup>
- In 2015, the average age of optometrists was 41 years and 51% of optometrists were women.<sup>2</sup>
- 90% of optometrists (i.e. 4,620) are likely to be clinicians (based on 2015 figures for all registered optometrists (employed and not employed in Australia) from the National Health Workforce Dataset).<sup>2</sup>
- Clinician optometrists' average working hours were 35.4 hours in 2013, 2014 and 2015.<sup>2</sup>
- In December 2016 there were approximately 4,300 equivalent full-time optometrist clinicians (EFTO clinicians) (based on clinician optometrist average working hours of 35.4 hours<sup>2</sup> where full-time is defined as a 38 hour week).
- In 2015, on average 33.6 of the 35.4 hours per week worked by clinician optometrists were spent performing clinical duties.
- In 2016, the estimated population per EFTO in Australia was 5,242<sup>3</sup>. Compared to countries with a similar scope of practice, this ratio is low:
  - in Canada in 2013 there were 15 optometrists (not EFTO) per 100,000 or 6,700 people per optometrist;<sup>4</sup>
  - in the USA in May 2016, there were 36,430 optometrists (not EFTO),<sup>5</sup> in July 2016 there was an estimated population of 323,148,587,<sup>6</sup> giving 8,870 people per optometrist
  - in the United Kingdom in 2015 there were 12,099 full time equivalent optometrists<sup>7</sup> and a population estimate in mid-2015 of 65,110,000<sup>8</sup> giving a population per optometrist of 5,381
  - in New Zealand in 2017 there were 715 optometrists registered with a current certificate<sup>9</sup> and a population of 4,794,938<sup>10</sup> giving a population per optometrist of 6,706

<sup>1</sup> Optometry Board of Australia, Registration Data Table - December 2016. [www.optometryboard.gov.au/About/Statistics.aspx](http://www.optometryboard.gov.au/About/Statistics.aspx)

<sup>2</sup> National Health Workforce Dataset (NHWDS) Optometry 2015. [www.data.hwa.gov.au](http://www.data.hwa.gov.au)

<sup>3</sup> Uses a population of 24,220,200 from Australian Bureau of Statistics Australian Demographic Statistics Sep 2016 [www.abs.gov.au/AUSSTATS/abs@.nsf/mf/3101.0](http://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/3101.0)

<sup>4</sup> Canada's Health Care Providers: Provincial Profiles, 2013 <https://secure.cihi.ca/estore/productFamily.htm?locale=en&pf=PFC3045&lang=en&media=0>

<sup>5</sup> United States Department of Labor. Occupational Employment and Wages, May 2016. 29-1041 Optometrists <https://www.bls.gov/oes/current/oes291041.htm>

<sup>6</sup> United States Census Bureau. U.S. and World Population Clock <https://www.census.gov/popclock/>

<sup>7</sup> The Optical Workforce Survey - College of Optometrists <https://www.college-optometrists.org/the-college/research/research-projects/optical-workforce-survey2.html>

<sup>8</sup> Office for National Statistics. Population Estimates for UK, England and Wales, Scotland and Northern Ireland: mid-2015 <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/latest>

<sup>9</sup> New Zealand Optometrists and Dispensing Opticians Board Search the Register [https://www.odob.health.nz/cms\\_display.php?pg=1759&search\\_string=&district=&register\\_search=optometrists&submit=Search](https://www.odob.health.nz/cms_display.php?pg=1759&search_string=&district=&register_search=optometrists&submit=Search)

<sup>10</sup> Stats NZ Population Clock (May 3, 2017, 05:11:33 p.m.) [www.stats.govt.nz/tools\\_and\\_services/population\\_clock.aspx](http://www.stats.govt.nz/tools_and_services/population_clock.aspx)

- In 2015, the number of FTE clinicians per 100,000 population decreased with remoteness (19 in Major Cities to 5 in Very Remote locations) suggesting a maldistribution of optometrists in Australia.<sup>2</sup> (Note: optometrists were classified according to their primary practice location; they may have had secondary or visiting practices in other remoteness areas that are not able to be included in this analysis, so there may be better access to optometric care than these figures imply).<sup>2</sup>
- Optometry remains on the Australia Government Medium and Long-term Strategic Skills List (MLTSSL) and the Short-term Skilled Occupation List (STSOL).

### Expected supply and demand imbalance

In 2013 Health Workforce Australia (HWA) released a snapshot of the optometric workforce in 2011 and 2012 based on data collected when optometrists re-registered.<sup>11</sup> The HWA analysis of workforce dynamics indicators showed 'no real areas of concern' for the optometric workforce in 2011 and 2012. Subsequently data from the 2015 National Health Workforce Dataset showed that there were 3.0 new registrants for every optometrist who did not renew their registration in 2015, and that average working hours of clinician optometrists had been steady for the 3 years to 2015.<sup>2</sup>

Whilst the HWA analysis observed workforce trends that can be expected to continue into the future, including the increasing proportion of female optometrists in the workforce, it did not project future expected balances of supply and demand. Projection analysis is necessary to support an understanding of expected future mal-distributions or supply and demand imbalances, and to support early identification of emerging problems and corrective action to mitigate these problems.

In 2008, Optometry Australia had engaged the Centre for Population and Urban Research (CPUR) at Monash University to make projections regarding the supply of optometrists and the demand for optometric services from 2001 to 2031.<sup>12</sup> The study indicated that with the three optometry schools then in operation, in 2031 there would be an adequate number of optometrists to meet the demand for services.

In 2011 two new schools of optometry were established in Australia, representing a 66% increase in the number of universities training students to entry-level for the profession. As a result, there has been a substantial increase in the number of people entering the profession in 2015 and 2016 with approximately 50% more graduates in 2015 and 2016 compared to 2013.<sup>13</sup> This development rendered previous projection analysis that did not account for the increase in graduates, out of date.

In 2013 Optometry Australia again commissioned the CPUR at Monash University to project the supply and demand of/for optometrists from 2011 to 2036, accounting for the impact of the new schools. They modelled the relationship between the projected Australian optometric workforce and projected demand for optometric services up to 2036, factoring in projected numbers of optometrists using current weightings for mortality, attrition, proportion of optometrists in active practice, working hours, immigration and new graduates. Nine hypothetical scenarios based on different supply-side

---

<sup>11</sup> Health Workforce Australia (HWA), 2014. *Australia's Health Workforce Series – Optometrists in Focus* Accessed 18/8/2014 via: [https://www.hwa.gov.au/sites/default/files/HWA\\_Australia-Health-Workforce-Series\\_Optometrists%20in%20focus\\_vF\\_LR.pdf](https://www.hwa.gov.au/sites/default/files/HWA_Australia-Health-Workforce-Series_Optometrists%20in%20focus_vF_LR.pdf)

<sup>12</sup> Kiely PM, Healy E, Horton P, Chakman J. 'Optometric supply and demand in Australia: 2001–2031' *Clin Exp Optom* 2008; 91: 4: 341–352.

<sup>13</sup> Based on figures provided in private communication with the each of the University Schools of Optometry. Estimates suggest 283 students may graduate eligible to register to practice in 2015.



(number of clinical contact hours per full time equivalent optometrist) and demand-side scenarios, were considered. Under the highest service demand (13.8 million Medicare services annually, an increase of 20% on the current growth trajectory of service use under Medicare) and lowest clinical contact hours scenario (where 21 hours of a 38 hour week per equivalent full-time optometrist (EFTO) were allowed for the provision of optometry services under Medicare), it was estimated that by 2036, there would be surplus of over 1,200 EFTO nationally. Under the lowest likely demand scenario and highest clinical contact hours' scenario, it was predicted that there would be an excess of 4,000 EFTO by 2036.<sup>14</sup>

Substantial surpluses were predicted in all states and territories except Queensland, Tasmania and the Northern Territory. More detailed projections related to supply and demand balances in regional and rural areas were not undertaken.

Optometry Australia believes the CPUR projections are sound and credible, and based on well-supported assumptions, many informed by additional research. The use of multiple credible scenarios, including those based on conservative assumptions of supply, provides a firm foundation from which to develop policy.

Since the CPUR study, plans have emerged to create a new optometry course in the Australian Capital Territory, raising the likelihood of even higher surpluses in future years.

### **Risks of supply/demand imbalance**

It is important that sufficient EFTO are practising in order to meet population demand so that those who require optometric services have ready access to the important primary health care offered by optometrists, including preventative care and the detection and management of a wide range of eye health and vision conditions and ocular and systemic diseases.

There are real risks, with potential consequences for quality of care and patient health, associated with a larger workforce than is required for the demand for services. These include:

- the potential for negative impacts on employment conditions, including wage stagnation or reduction and reduced flexibility, which can lead to the profession becoming less attractive to students of high abilities with broad study options;
- the need for optometrists to increase non-clinical elements of eye and vision care (for example dispensing) because there is insufficient demand to make use of their clinical expertise; this has the potential to negatively impact the maintenance of their clinical expertise;
- due to increased competition for employment, and the opportunity for employers to employ less experienced practitioners on lower salaries, possible loss to the profession of more experienced optometrists, with flow-on effects to the quality of care; and
- dilution of quality in clinical placement opportunities if student numbers continue to increase, which could lead to a negative impact on the quality of student education and students' clinical capabilities.

---

<sup>14</sup> Healy E. Kiely PM. Arunachalam D. Optometric supply and demand in Australia: 2011-2036. *Clin Exp Optom* 2015; 98: 273–282. (Also e1-e2).



There are additional risks of lost time and financial investment to the student through the study of a very specific discipline in which they may not be able to find employment.

There are also further potential impacts on the Government's finances associated with potential increases in joblessness and the possibility of over-servicing which would increase healthcare costs and run counter to patient interests.

The Government also makes a substantial financial investment to train optometrists. In 2017 optometry is funded at \$12,641 per full-time student per year, so the Government will invest over \$60,000 for each student trained in a 5 year optometry course.<sup>15</sup> Where the training of optometrists is matched to demand for their services, this is a sound and wise investment that promotes population eye health. Where it is expected that a significant proportion of graduates may not be able to find work in the profession, this represents significant wasted expenditure.

### **Service demand as the determinant of the workforce supply need**

There are a range of personal, socio-demographic and system factors that influence the demand for optometry services. It is well established that amongst specific sub-populations, including Aboriginal and Torres Strait Islander people, there is sub optimal access to, and utilisation of optometry services.<sup>16</sup>

There are numerous factors that influence community access to eye care that do not necessarily relate to the number of practising optometrists, including personal factors such as awareness of eye health needs and geographical factors such as distribution of the workforce and distribution of the Australian population. Given analysis suggesting a current overall equilibrium between supply and demand at a national level, access barriers are unlikely to relate to the overall supply of optometrists.

### **Key determinants of optometry supply**

The effective size of the optometric workforce in Australia is dependent on graduate numbers, retention rates, optometrists returning to the workforce and immigration, and is influenced by age, gender and working hours. Australian university optometry courses are the source of the vast majority of new entrants to the optometry workforce. Health Workforce Australia data indicate that close to 85% of optometrists completed their entry-level education in Australia.<sup>11</sup>

Unlike many fields of study, university courses offering entry-level education in optometry are directed toward a specific vocation, as a practising clinical optometrist. Whilst some graduates go on to pursue careers in related non-clinical roles, or outside the profession, the vast majority (around 95%) enter clinical practice.<sup>11</sup>

Given the impact of Australian graduates on workforce supply, it is important to ensure that university optometry courses are admitting and graduating sufficient numbers of students to meet population demand for optometry services.

To address the projected supply/demand imbalance of a significant oversupply of optometrists in coming decades, action is required to balance graduate numbers to projected supply needs.

---

<sup>15</sup> Australian Government. Department of Education and Training. 2017 Allocation of units of study to funding clusters. <https://docs.education.gov.au/node/41046> (accessed 15 May 2017)

<sup>16</sup> Australian Institute of Health and Welfare, 2011. Eye health in Aboriginal and Torres Strait Islander people. Canberra: AIHW.



In 2012, the Federal Government lifted previously imposed limits on domestic bachelor-degree student numbers at public universities, introducing a system of 'demand-driven funding.' This funding system replaced a supply-driven system, in which the Federal Government determined place allocation in particular streams of study per public university. There was flexibility within this system for universities to determine how places were allocated to particular degrees/courses of study, within broader streams of study. It was under this funding system that the two newest schools of optometry were established.

This change in funding arrangements has supported substantial growth in university student places across the board. It has largely placed determination of how many Government-supported places a university can offer in a particular field of study in the hands of the university. Arguably, the introduction of the demand-driven funding system could support greater growth in university places for entry-level optometry study if this was seen as desirable by a public university.

Optometry Australia has concerns about the impact of the demand-driven approach on optometry education. Given the changing pattern of graduate numbers expected and the length of time between student commencement and graduation in entry-level optometry courses, it is reasonable to expect that those entering university training may not be aware of the different employment market expected when they graduate following a number of years of increased graduate numbers; estimates of demand may be informed by inappropriate assumptions.

Optometry Australia believes that greater action to balance graduate numbers against projected supply needs is required, and recommends that the Federal Government introduce specific limits on the numbers of optometry entry-level education places that can be offered across all Australian public universities and within specific universities. There are provisions in the legislation establishing the current funding arrangements that enable the Government to cap places in any field of study. Such caps are currently in place for medicine.

### **Immigration**

Immigration is a relatively low contributor to the size of the optometry workforce in Australia. Department of Immigration visa-issue data for settlers to Australia in 2012-13 indicate that 28 optometrists and orthoptists immigrated that year. Overseas arrivals and departures data for the years 2009-10 and 2010-11 indicate a net figure of around 35 optometrists to Australia over these two years.<sup>14</sup>

Visas issued by year <sup>2</sup>	Temporary visas	Permanent visas
2012/13	22	26
2013/14	19	22
2014/15	21	34

Optometrists are currently included on the Federal Government's Medium and Long-term Strategic Skills List (MLTSSL) (which has replaced the 'Skilled Occupation List' (SOL)) and on the Short-term Skilled Occupation List (STSOL) (which has replaced the Consolidated Sponsored Occupation List (CSOL)). These lists detail occupations for which there is considered unmet demand and are approved for use under Australia's permanent and temporary skilled visa programmes. These inclusions mean overseas-trained optometrists are eligible for permanent migration through the skilled independent pathway or through sponsored pathways.





Optometry Australia believes that optometry should be removed from both the MLTSSL and the STSOL given the evidence of current supply and demand balance and looming excess supply. Indicators used to determine demand and inform listing on the skilled lists can reflect other issues, such as the suitability of employment conditions offered by employers and employment and other conditions that foster high staff turnover.

It should also be noted that optometrists trained in New Zealand are entitled to apply for registration in Australia and there are no figures available to indicate on average, how many optometrists from New Zealand enter the Australian workforce each year. In 2012, over 90% optometrists had earned their first optometry qualification in Australia (85.2%) or New Zealand (5.4%).<sup>11</sup> In 2015, 87% of optometrists had Australian or New Zealand qualifications.<sup>2</sup>

### **Workforce distribution and eye care access in rural and regional Australia**

Whilst there has been no comprehensive report assessing the optometry supply/demand balance relative to classifications of remoteness in Australia, there are indications of workforce mal-distribution despite an overall supply/demand balance.

National Health Workforce Survey Data show a clear discrepancy between workforce coverage in urban versus rural and remote areas.<sup>11</sup> The optometry workforce is concentrated in urban areas, and in 2012 over three-quarters of optometrists were located in major cities.



Table 1: Number of optometrists by remoteness classification, 2012<sup>11</sup> and 2015 and by state and territory 2015.<sup>2</sup>

Remoteness classification	Major cities	Inner Regional	Outer Regional	Remote	Very Remote			
Number of optometrists per 100,000 (2012)	19.9	15.5	10.5	8.2	2.9			
Estimated number of full-time equivalent clinicians per 100,000 (2015)	~20	~16	~11	~6	~5			
State/Territory	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Estimated number of full-time equivalent clinicians per 100,000 (2015)	~18	~18	~10	~17.5	~15	~15	~17	~13

In some rural and remote areas eye care access may also occur through visiting or outreach services not measured here.

Anecdotal evidence similarly attests that some regional and, particularly rural, areas suffer from ongoing undersupply.

There are indicators that distribution is, marginally, improving. However, it is unlikely that workforce size alone can fully correct issues of mal-distribution. The experience in medicine has suggested that increased supply does not remedy issues of distribution.<sup>17</sup>

Distribution continues to be affected by barriers to moving to, and practising in, rural areas. These include issues such as small resident populations covering vast areas, professional isolation, difficulties attracting suitable staff, access to tertiary care and social issues such as separation from family and the benefits of metropolitan-living. Due to the business model common in optometry, where the majority of income is often derived from dispensing optical appliances, rather than clinical services, it can also be harder to establish and sustain a viable business in regional and rural areas, where average income is often lower.

Incentive and facilitation schemes introduced to address mal-distribution in the General Practitioner workforce have been shown to be effective. These are directed at: incentivising rural practice through approaches such as HECS 'forgiveness'; addressing known barriers to rural practice, such as through relocation and transition support; and developing students most likely to take up rural practice.

Notably, the two new optometry courses underway at Deakin University in Victoria and Flinders University in South Australia aim to educate optometrists for practise in rural and regional Australia and are employing approaches that support students from rural areas to undertake study and experience rural practice. This may result in an increase in optometrists in rural and remote Australia in the future.

<sup>17</sup> Birrell, B. 2003. 'Centre for Population and Urban Health Research Report: Too many doctors.' <Accessed 19/8/2014 via: <http://artsonline.monash.edu.au/cpur/files/2013/03/Too-many-doctors-rapson-Mar-2013.pdf> >



The National Rural Health Alliance has called for greater equivalence of support for professionals in all health disciplines to undertake rural practice in recognition of the expected benefits of improved distribution across many health disciplines.<sup>18</sup> Optometry Australia has long supported this approach and advocated for the Government to introduce targeted programs, based on approaches shown to be effective in other disciplines, to incentivise and facilitate optometric practise in under-served rural areas.

In some rural and remote areas it is likely that population demand is, and will remain, too low to support a permanent optometry practice. Meeting need in many of these areas will continue to require Government support for visiting services.

### **Maximising benefit for population health from the optometric workforce**

Currently the vast majority of optometrists providing clinical care in Australia work in private practice. The predominant model is the provision of optometric care through an optometry-only practice operated in conjunction with the dispensing of optical appliances.

There is increasing recognition of the potential to maximise use of the skills of the optometric workforce to alleviate waiting lists for tertiary eye care, support timely access to eye care and improve patient health outcomes. There is potential, already being realised in some jurisdictions to enhance health system efficiency and improve patient health outcomes, by employing optometrists in different contexts or, through altered care pathways, maximising the role they play in eye care from community practice. Research into models trialed and established in Victoria demonstrates that utilising optometrists within the eye care continuum in a manner that takes maximal advantage of their skills and established scope of practice can safely enhance efficiency, access and timeliness of care.<sup>19</sup>

---

<sup>18</sup> National Rural Health Alliance, 2012. Budget Submission. <http://www.ruralhealth.org.au/document/budget-submission> accessed 19/8/2014

<sup>19</sup> Turner, N., Jackson, J. and Beltz, J. for the Australian College of Optometry and the Royal Victorian Eye and Ear Hospital. 'Outcomes of the RVEEH/ACO Collaborative Workforce Project' Presented to the GP Hospital Liaison Conference 2013.