



Optometrists
and Dispensing
Opticians Board

Te Poari o ngā Kaimātai
Whatu me ngā
Kaiwahakarato Mōhiti

The Optometrists and Dispensing Opticians Workforce in Aotearoa New Zealand **2022**





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Foreword

He aha te mea nui o te ao?

(What is the most important thing in the world?)

He tāngata, he tāngata, he tāngata

(It is the people, it is the people, it is the people).

We present to you the first annual workforce survey. Each year we collect valuable workforce data but have never published it.

The Ministry of Health and now Te Whatu Ora Health New Zealand have been collecting workforce data since 2019. These sources provided us with the opportunity to present to you rich and informative information for universities, policy maker, and researchers.

This reporting year is from 1 April 2021 to 31 March 2022. The data was collected from mid-February to 31 March 2022 as part of our annual practising certificate (APC) renewal processes. It was also in the third year of the COVID-19 pandemic which required all health practitioners to be vaccinated and boosted against COVID-19. The workforce survey therefore also included questions on the impact of the COVID-19 pandemic and government's public health response at that time. This report is mostly drawn together from the feedback gathered in the workforce survey that each health practitioner completes when applying for an APC. Where other data was used, references are made.

I would once again like to thank all the health practitioners who completed the survey through the APC application, and thus for this important contribution to understanding the demographics, work practices, and distribution of health practitioners in Aotearoa New Zealand (NZ).

We would also like to thank our practitioners for the tremendous support and service they have given to their communities during 2022. Together, New Zealanders are better served in eye healthcare.

A special thanks to Dr Phil Turnbull, our Advisor and Researcher for his work on this report. His assistance and expertise have been invaluable.

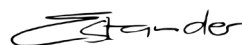
We welcome your feedback on the report (registrar@odob.health.nz), including what information you would like to see presented in future editions.

We trust this annual workforce survey will be of interest and use to many organisations and individuals.

Nā māua noa, nā



Kristine Hammond
Chair



Elmarie Stander
Chief Executive and Registrar

Introduction

This is the first workforce report by the Optometrists and Dispensing Opticians Board of Aotearoa New Zealand (ODOB). All practitioners applying or renewing their annual practising certificate (APC) during March 2022 were invited to take part, and we received 1053 responses from 1262 APC applications (83.4 per cent, %).

This response rate gives very high confidence in the data, and we thank the healthcare professionals for their participation in the survey and their contributions to the future of both professions (optometry and optical dispensing) in NZ.

This data collection is additional to what we use to maintain registration, and includes additional detailed employment information, practitioner outlook, and in the reporting year the impact of COVID-19 on the professions. Many of the questions had free-form comment options, and all submitted comments have been reviewed as part of the creation of this report, to ensure all voices were heard. This report can be read alongside the ODOB annual report, which is published for 2022 and earlier years on the ODOB website.¹

The aim is to repeat the survey annually, to generate data to identify changes or trends, and better inform decisions regarding the future of the workforce. It also allows us to model the distribution and representativeness of the professions against the communities they serve.

As with any survey, the data is limited by the responses received and care should be taken when using this data as the numbers are unlikely to be exact. However, as the data grows each year, it will give greater confidence in the representativeness of the data, and particularly any trends that emerge.

Notes:

- Percentages are reported to one decimal place, so may not total 100% due to rounding.
- Some questions allowed multiple responses, so percentages may total greater than 100%.
- Use of the word 'significant' to describe differences means statistically significant at the level of $p < 0.05$.
- Ethnicity and gender are self-reported, and therefore represent the identification of the individuals.
- The survey was completed by practitioners who had a valid APC by 31 March 2022, and not all practitioners responded to the survey.
- Therefore, the data may not reflect the profession in its entirety and numerical values may not be exact.
- However, we had responses from a wide range of regions, ages, ethnicities, and working styles, so proportional answers and themes should reasonably reflect both professions.

¹ <https://odob.health.nz/site/about-us/annual-report>



Facts at a glance

- We had high and very similar response rates from both optometrists (83.8%) and dispensing opticians (DOs, 81.7%), which gives us very good representation of the workforce.
- Māori optometrists are significantly underrepresented compared to the population, making up just 2% of the responses.
- The net number of optometrists increased by 42 in the 2021/2022 period, while the number of DOs decreased by 12.
- The median age of both professions is relatively young, with the median DO age 47.2 years and the median optometrist 39.0 years old. The replacement rate is sufficient to cover the number of practitioners considering retirement in the next 10 years.
- There is a higher number of female practitioners in both professions, with females making up 75% of DOs and 60.8% of optometrists.
- NZ trains the vast majority (84.4%) of optometrists registered in NZ, but less than 10% of its DOs.
- The COVID-19 pandemic placed additional stress on the professions, with almost a quarter reporting feeling overwhelmed due to increased workloads.
- The COVID-19 Health Mandates had minimal impact on the professions, with only a couple of individual practices impacted by staffing unavailability.



Key statistics for 2021-2022

Optometry		Dispensing Optician
1032	Registered practitioners	230
858	Active practitioners (Current practising certificate)	193
58	New practitioner registrations	8
61%	Proportion female	75%
39 yrs	Median age	47 yrs
16.7	Practitioners per 100,000 ²	3.8
33.7 hrs	Average weekly workload (hours)	36.2 hrs

² Resident population of all ages across the 20 DHBs, estimated by the Ministry of Health as at 30 June 2022.

Key terms and definitions

The Board In this report, the Board refers to the Optometrists and Dispensing Opticians Board (ODOB). The ODOB is the responsible authority overseeing the optometrist and dispensing optician professions in NZ. The role of ODOB is to protect the health and safety of the public of NZ by ensuring optometrists and dispensing opticians are qualified, competent and fit to practise. The Board is a statutory body, empowered by The Health Practitioners Competence Assurance Act 2003 (HPCA Act).

Dispensing optician (DO) A DO is a health practitioner with a recognised qualification that is registered with the ODOB under the DO scope of practice. DOs interpret prescriptions for glasses and contact lenses, give advice to the patient in selecting spectacle lenses and frames (including their fitting). They can also teach how to use contact lenses and low vision aids and dispense a prescribed optical appliance. It is illegal for a person to call themselves a DO unless they are registered with the ODOB. A DO must hold a current practising certificate to practise in NZ. DOs are required to regularly prove their competence to be allowed to keep practising.

Locum practitioner A health practitioner registered with ODOB who may work between multiple practices without a regular schedule. They often have flexibility to move around the country and cover vacancies (e.g., due to illness) at short notice. Both optometrists and DOs can work as locums, and like all registered practitioners they are required to regularly prove his or her competence to be allowed to keep practising, even if their work is less frequent.

Optical assistant A person who works within an optometry practice, but in a role which is not registerable, can have any job title they wish. Similar unregistered job titles used in the industry include optician, sales assistant, or sales consultant. People in these roles may assist with ordering optical appliances, managing the practice, or help perform certain ophthalmic tests under supervision of an optometrists or DO.

Optometrist An optometrist is a health practitioner with recognised qualifications registered with the ODOB, under the Optometrist, Provisional Optometrist or Specialist Optometrist scope of practice. An optometrist provides evidence-based comprehensive eye health and vision care in a professional, culturally safe, and ethical manner, in accordance with the HPCA Act. Optometrists conduct eye examinations, diagnose eye disease or other conditions, and prescribe optical appliances or medications for defects in sight or diseases of the eyes. An optometrist must be registered with the ODOB and hold a current practising certificate to practise in NZ. Optometrists are required to regularly prove their competence to be allowed to keep practising.



Abbreviations and acronyms

ABDO	Association of British dispensing opticians
APC	Annual practising certificate
CPD	Continuing professional development
DHB	District health board
DO	Dispensing optician
FBDO	Fellow of British dispensing opticians
IQR	Interquartile range (25-75th percentile)
Nd:YAG	Neodymium-doped yttrium aluminium garnet
NZ	Aotearoa New Zealand
ODOB	Optometrists and dispensing opticians board

Number of practitioners

In 2022, there were a total of 1262 practitioners registered with the ODOB, comprising of 1032 (81.8%) optometrists and 230 (18.2%) DOs. Of these registered practitioners, 858 optometrists (83.1%) and 193 DOs (83.9%) were practising (Figure 1).

Practitioners can choose to go non-practising if they want to take a break from practising (e.g., parental leave, or holidays), and this reduces the requirement for maintaining competency during this period. However, they must not see patients until the ODOB approves their return from their non-practising status.

Depending on the length of time away from active practise, there may be additional steps required to ensure a safe return.

The proportion of registered practitioners who are non-practising has remained relatively constant over the previous 5 years and does not appear to have been impacted by COVID-19.

Registered optometrists have been gradually increasing over the previous 5 years, with a mean of 34 practitioners being added to the register per year over this period. In the year ending March 2022, there was an additional 58 new practitioners added to the register, but a net increase of 42 with 16 practitioners removed from the register. DOs have seen a much more modest increase in registered practitioner growth, with a mean of 3.6 practitioners added per year over the past 5 years. In the most recent year, there was a net loss of 12 practitioners, despite eight new practitioners becoming registered. We suspect some of these practitioners became non-registered during the 2021-2022 year due to COVID-19 pandemic stresses.

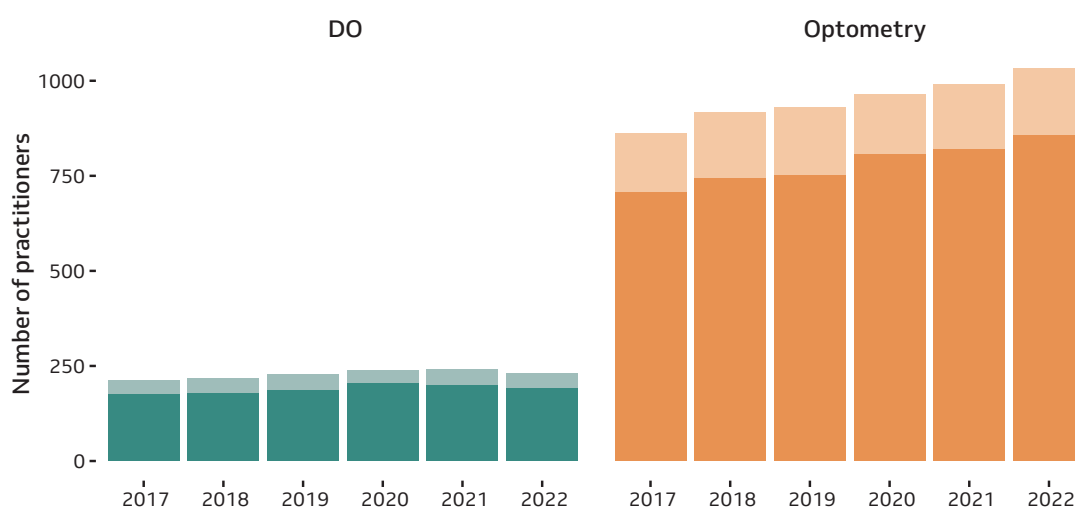


Figure 1 - Number of practitioners registered under each profession. Those actively practising are in bold, with the desaturated component on the top of each bar indicating the number of non-practising but registered practitioners. Data is from ODOB annual reports, available at <https://odob.health.nz>.

Gender and age

All 1053 responses included their gender, with 667 (63.3%) reporting female and 386 (36.7%) reporting male. This gender imbalance was more pronounced in DOs, with 75% identifying as female compared to 60.8% of optometrists.

At the 2018 Census, 50.6% of the population identified as female, so there is a considerable female predominance in both professions. There is a common move internationally towards training more female health professionals, and ensuring they advance to more senior positions. The high proportion of females in our professions may reflect the fact that, especially when compared to medical specialisations, both the training and the job market are comparably more family friendly, with less post-qualification training.

The average age of DOs (median: 47.1 years old) is significantly higher than that of optometrists (38.9 years old). Females outnumber male DOs at almost all age bands, whereas for optometrists there are more females in all age bands younger than 55, but more males in older age brackets. The proportion of females in optometry is likely to increase over the next decade, as older males reach retirement and are replaced with a younger cohort who are predominantly female.

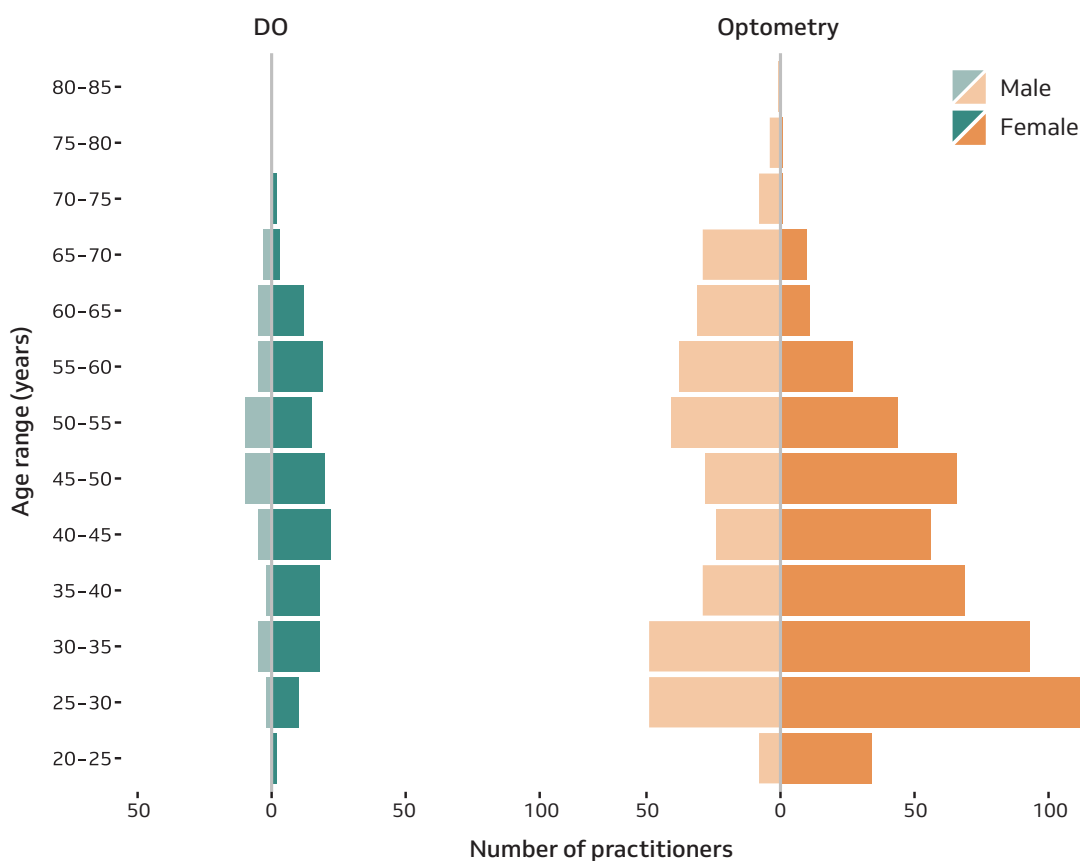


Figure 2 - Pyramid plots showing age bands and gender by profession.

Ethnicity

Most survey responses (796 of 1053, 75.6%) included ethnicity information, with 66 (6.3%) reporting two or more ethnicities. In total, 40 unique ethnicities were reported across respondents.

To maintain anonymity, and to facilitate comparisons between other agencies, each reported ethnicity was collated into higher level (Level 1) categories using the Stats NZ Ethnicity New Zealand Standard Classification 2005 (Version 2.1.0).³ These categories are Māori, European, Pacific Peoples (note the term *Pasifika* is used in this report), Asian, and Middle Eastern/Latin America/Africa (MELAA), and Other.

For both professions, European was the most common ethnicity (DO: 79.5%, Optometry: 49.3%), with Asian the second most frequent.

Māori ethnicity was reported in 1.9% of optometrist responses, and 2.7% of DOs. In the 2018 Census, 16.5% of the population identified as Māori, so this means that Māori are significantly underrepresented in both professions. This is also true of Pasifika, which made up 8% of the population in 2018, but only 1% of the combined professions. Asian ethnicity is representative in the DO profession (15.8%, versus 15.1% of the population), but the proportion of Asian optometrists is significantly higher than the proportion of Asians in the NZ population (43.9% of optometrists, versus 15.1% of population).

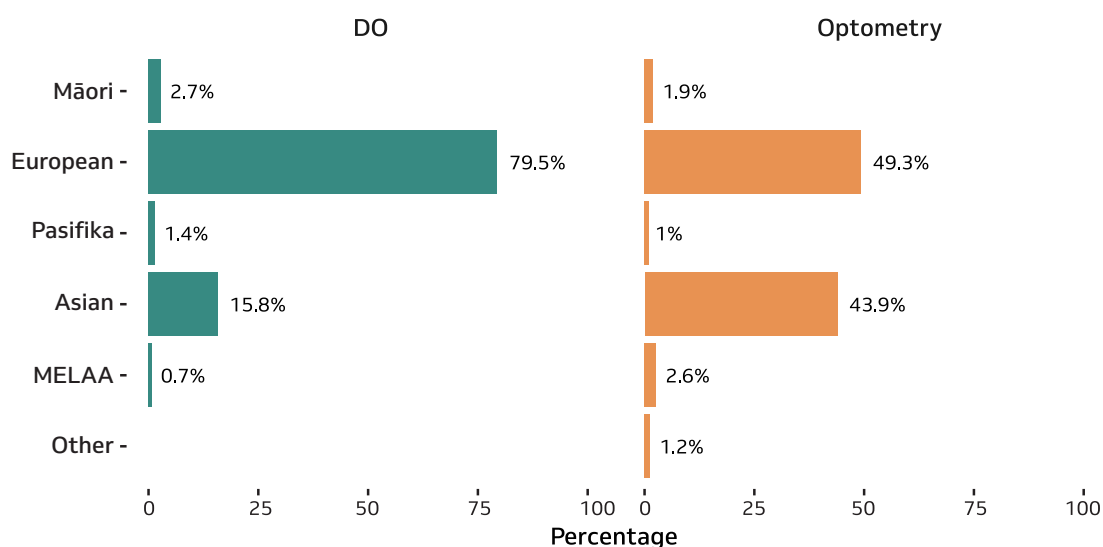


Figure 3 - Ethnicity of the two ODOB professions, grouped into Stats NZ Level 1 categories.

³ <http://aria.stats.govt.nz/aria/#ClassificationView:uri=http://stats.govt.nz/cms/ClassificationVersion/YVqOcfHSlguKkT17>

Geographic distribution

As this data was collected prior to the Te Whatu Ora rollout in July 2022, practising locations were codified to Ministry of Health district health boards (DHB).

Using the Ministry of Health DHB population data for all ages estimated at June 2022 (with a NZ population of 5,124,000), there is a mean of 26,549 population per practising DO, and 5972 population per practising optometrist.

Compared to 2018, there has been an increase from 15.5 optometrists per 100,000 population to 16.7 – an 8% increase over the past 5 years,⁴ and a 25.6% increase in optometric coverage from 2006.⁵ The number of optometrists per 100,000 population is now well above the global average of 1.8 and the average of 15.6 for high income countries.⁶ The number of optometrists in NZ is now very similar to the 17.0 per 100,000 population in Canada,⁷ which has a similar scope of practice and health care model.

As was seen in 2018,³ there is significant variation in the per capita population that each practitioner serves within each of the former DHBs. Figure 4 shows the number of practitioners per DHB, with darker hexagons representing a higher number of practitioners. Optometrists in the Auckland DHB have the highest density of optometrists relative

to population, with over 15.4 times more optometrists per capita than Wairarapa, which has the lowest density. While Auckland is oversaturated with the number of optometrists, regions such as Wairarapa, Tairāwhiti, and the Bay of Plenty are at risk of being underserved. With the overall number of optometrists per capita similar to countries with similar scopes of practice, this suggests that difficulties in obtaining optometrists in the regions is more related to distribution, rather than overall supply. Such high variation in practitioner distribution limits the ability to access eye health care in a timely manner, and greatly increases the risk of worsening existing inequities.⁸

In contrast, based on our survey responses, DOs are most densely concentrated in Tairāwhiti, and the most poorly served region is the Hawkes Bay with 7.0 times fewer DOs per capita. The regional diversity of DOs is less than half that of optometrists, which means that DOs are more evenly spread across the countries DHBs. To our knowledge, an ideal ratio of DOs to the population has not been estimated.

⁴ Chapman, N.A., Anstice, N.S. and Jacobs, R.J. (2020), Geographic distribution of eye-care practitioners in Aotearoa/New Zealand: implications for future eye health workforce. *Clin Exp Optom*, 103: 531-541.

⁵ Frederikson, L.G., Chamberlain, K. and Sangster, A.J. (2008), New Zealand optometrists 2006: demographics, working arrangements and hours worked. *Clin Exp Optom*, 91: 353-363. x.

⁶ National indicators. (2021, February 15). The International Agency for the Prevention of Blindness. <https://www.iapb.org/learn/vision-atlas/solutions/national-indicators/>.

⁷ Shah, T., Milosavljevic, S. & Bath, B. Geographic availability to optometry services across Canada: mapping distribution, need and self-reported use. *BMC Health Serv Res* 20, 639 (2020).

⁸ Campbell, J., Buchan, J., Cometto, G., David, B., Dussault, G., Fogstad, H., Fronteira, I., Lozano, R., Nyongator, F., Pablos-Méndez, A., Quain, E. E., Starrs, A., & Tangcharoensathien, V. (2013). Human resources for health and universal health coverage: fostering equity and effective coverage. *Bulletin of the World Health Organization*, 91(11), 853–863.

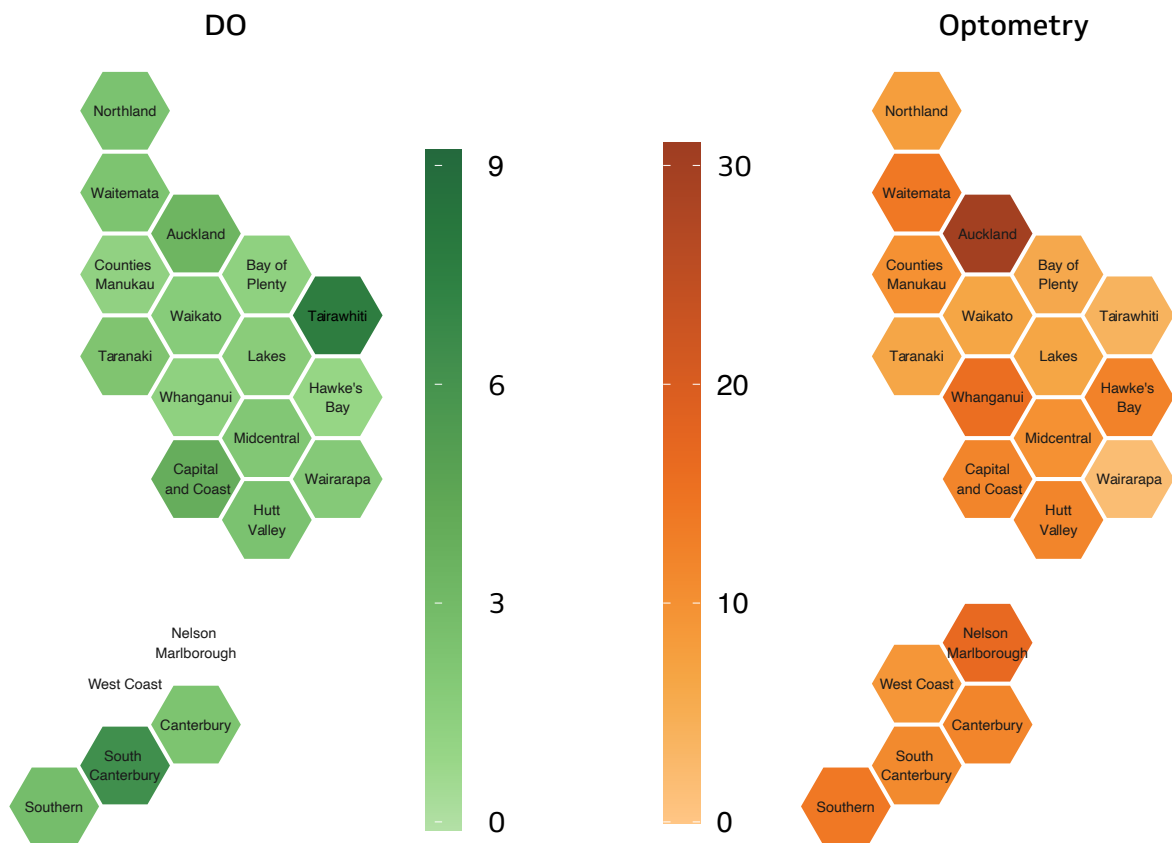


Figure 4 – Number of survey-responding practitioners per 100,000 population across the 20 DHBs. Darker regions indicate a higher number of practitioners relative to the total population that lives within the DHB region.

Note that this data is both sensitive to the number of practitioners who responded to the survey, and the number of practice locations that could be accurately mapped. This is particularly true in the DHBs with fewer practitioners.

Further, as there were some practitioners who did not respond to the survey or obtained their APC after 31 March 2022, the number of practitioners per population reported here is likely an underestimate.

International graduates and practitioners

Information on the country of qualifications was available from 1050 of 1053 (99.7%) respondents. 84.4% of optometrists have qualifications obtained domestically (i.e., The University of Auckland), with 15.7% of optometrist qualifications obtained internationally.

In contrast, the majority of DO qualifications (79.9%) were obtained from Australia, with just 9.5% being obtained in NZ. The next most common international country for qualifications was the United Kingdom (UK), representing 10.1% of DO qualifications and 6.0% of optometrist qualifications. The most common international country for optometry qualifications was Australia with 9.2%, then the UK with 6.0% of optometrist qualifications.

The most common non-domestic qualification was a Master of Optometry (35.6% of all optometry qualifications obtained outside NZ), which would be the primary qualification to for the registration pathway in NZ.⁹ Another 34.0% of these international optometry qualifications were post-graduate therapeutic courses.

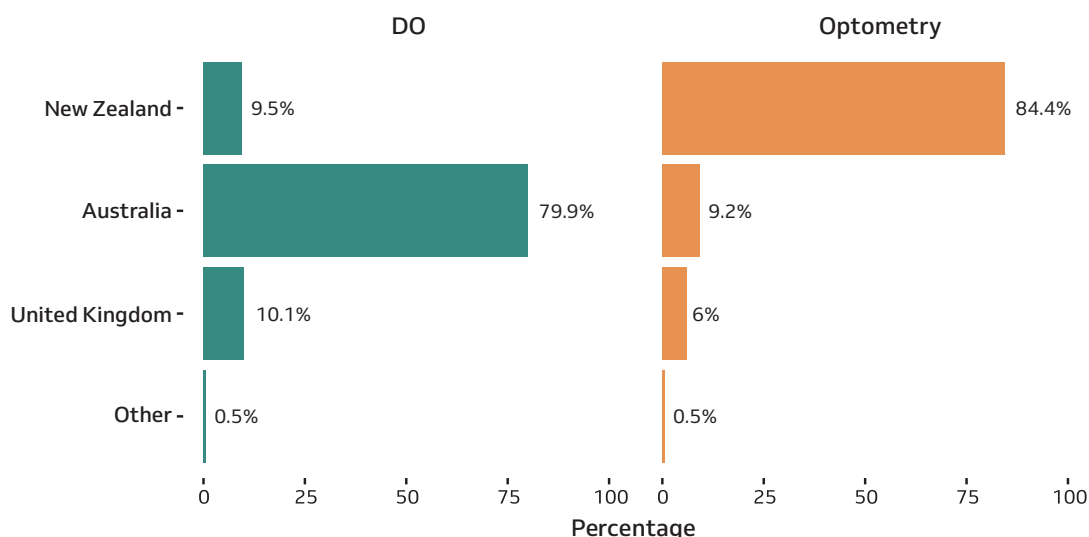


Figure 5 - The issuing country of qualifications held by practitioners. Note that this is all qualifications, and not just those required for registration with this Board.

⁹ <https://www.odob.health.nz/site/registration>



These post-graduate therapeutic courses are taken by optometrists whose primary qualification did not include the necessary training but now want to upskill to prescribe pharmaceutical medications as authorised prescribers in NZ. These optometrists are registered under the optometrist scope of practice, but with a condition on their scope of practice which states they are not permitted to prescribe therapeutic medications. This includes those who obtained their Bachelor of Optometry degree from the University of Auckland (or Australian universities) earlier than 2006, and some overseas practitioners who have provisional registration in NZ and must complete the course as a condition of becoming fully registered.

An equivalent therapeutics course or modules were offered domestically by the University of Auckland until 2015, but since then if an optometrist wishes to gain pharmaceutical prescribing rights, they must take the course at an Australian university. We expect the number of optometrists completing international post-graduate courses will likely decrease over time, as all domestic and many international optometrists registering already have therapeutic prescribing rights included as part of their primary qualification, so do not need to complete additional training to prescribe medications.

Qualifications

The majority of respondents (1050 of the 1053, 99.7%) reported at least one qualification, 305 reported two qualifications (30.0%), and 55 reported three (5.2%).

As such, the percentages listed below do not represent the proportion of each qualification of all qualifications, but instead are the proportion of practitioners with each qualification type.

In terms of level of qualification, over 80% of DOs hold a Level 4 Certificate in Optical Dispensing, included on the Australian Qualifications Framework (AQF). A further 13.9% completed the Association of British dispensing opticians (ABDO) Level 6 Diploma in Ophthalmic dispensing¹⁰, and graduates are awarded the Fellowship of British dispensing opticians (FBDO). A smaller number of DOs (5.9%) obtained registration using the OptiBlocks pathway, which assesses international 'equivalence' of the underpinning prescribed

qualifications, for eligibility for registration under section 15(2) of the HPCA Act.

For optometrists, most practitioners hold a bachelor's level qualification, many with honours. This aligns with most practitioners being domestically trained at the University of Auckland, which offers a Bachelor of Optometry (Honours) programme. This is a Level 7 qualification on the New Zealand Qualifications Framework (NZQF). 40.4% of optometrists hold a postgraduate certificate or diploma, primarily for ocular therapeutics, and 8% have a master's degree. 0.5% have a doctorate level degree, which includes both professional doctorates (e.g., Doctor of Optometry) and PhD (Doctor of Philosophy).

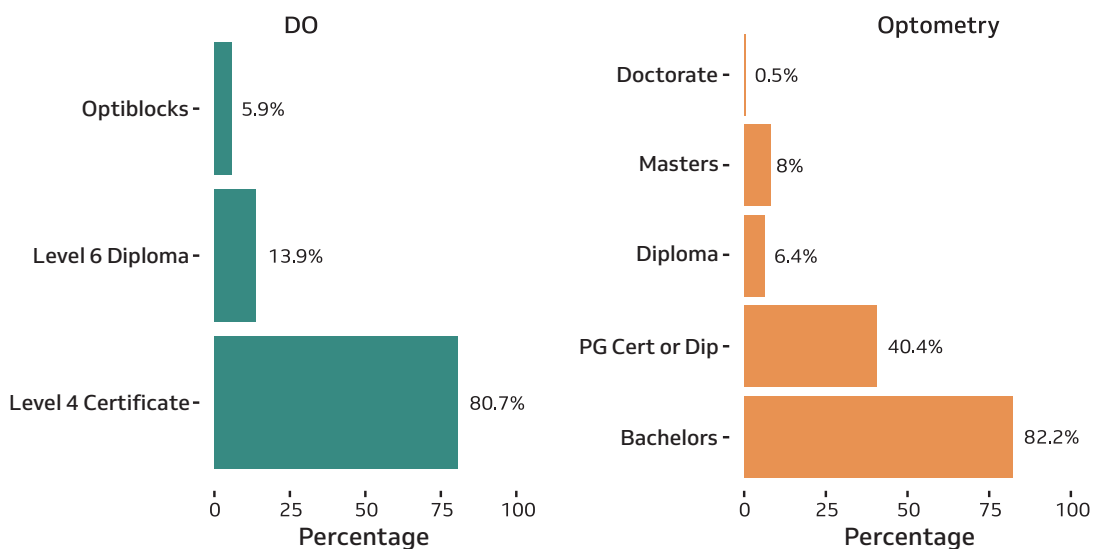


Figure 6 – Percentage of practitioners with a given level of qualification. Note the sum across categories is greater than 100%, as practitioners can have more than one qualification.

¹⁰ The ABDO programme is mapped at Level 6 on the Regulated Qualifications Framework (RQF) (England/Northern Ireland), and is recognised by the General Optical Council (GOC). A Level 6 qualification on the RQF may be recognised as a Level 7 qualification on the New Zealand Qualifications Framework (NZQF), but this would require an assessment by NZQA (<https://www.nzqa.govt.nz/>).

Issues faced by the workforce

This section discusses six questions that were asked during the Workforce survey, which are summarised in the figure below.

For these questions, we had a 100% response rate with 188 DO responses and 865 optometrist responses. Each question also had an optional free-form text area, where practitioners could provide additional details. These comments have all been read and are summarised as themes to preserve anonymity.

Both professions have no issues with access to work. Very few (2.1%) of practitioners from either profession struggle to find work, with most stating they can find work as required. There were a few comments that it can be difficult to find work in specific areas of NZ. This included both less populated regions where the number of practices may be limited, but also central Auckland, where there may be saturation of the job market. There were several comments from employers in the regions noting that they were

struggling to find both optometrists and DOs; these regional variations are discussed in more detail above in Geographic distribution.

Of concern, 14% of DOs and 27% of optometrists feel overworked. The most common theme was the need to balance running a practice, seeing patients during regular work hours, and ensuring adequate personal time. There were also comments on employer pressure to reduce testing times and see a larger volume of patients, which left inadequate time for completing paperwork within paid employment hours. Another common theme in this year's survey was the impact of the COVID-19 pandemic, particularly with increased workloads due to staffing shortages, which often need to be managed at short notice.

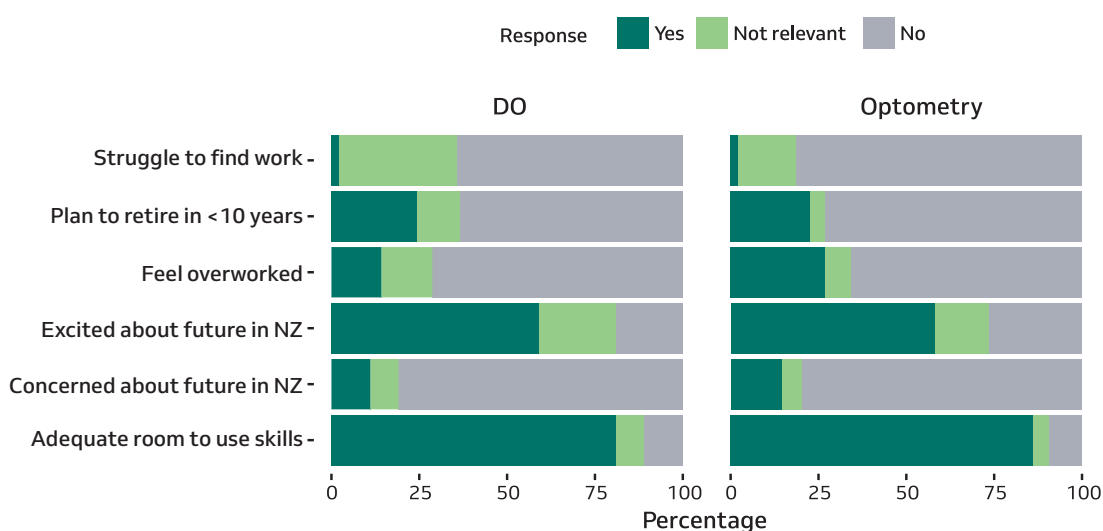


Figure 7 - Responses to the workforce questions by profession.

Many more practitioners from both professions were excited about the future in NZ, than those concerned about the future. Optometrists were excited about being able to offer new treatment options, such as myopia control and dry eye therapies, artificial intelligence, neodymium-doped yttrium aluminium garnet (Nd:YAG) laser surgery, and intravitreal injections. Most saw the move towards medical optometry as something to be excited about. However, there were some with concerns that this increasingly medical scope of practice could create two tiers of practice, refractive non-therapeutic optometrists, versus those with full scope. There were also concerns from optometrists around the public perception of the profession, largely because of the negative impact of free or discounted eye exams, reduced appointment times, and marketing that is focused on the retail aspects of optometry. There were some concerns regarding the influence that overseas based corporates could have on reducing the professions value in NZ (primarily through discounted or free eye exams), and also their ability to lobby NZ agencies. There were also a few comments on the high standard the ODOB holds optometrists to (relative to other professions), and pay stagnation versus the increasing responsibilities, roles, and risks.

Most DOs were similarly excited about the future in NZ, although the theme was more regarding some future scope expansion, but without specific details. Many stated they were very happy in their roles, which frequently included practice management or ownership components. Concerns from DOs were regarding the cost of maintaining registration, difficulties obtaining sufficient continuing professional development (CPD) points, remuneration, lack of a clear

career development pathway outside of practice ownership, and the deregulation of the DO profession in Australia (which happened in 2010).

Most practitioners felt they have adequate room to utilise their skills. Within the DO responses, some practitioners were concerned that despite their training and registration, their roles and remuneration were not significantly different from other non-registered staff members, and some wanted to expand their roles into contact lenses. Some optometrists also commented on the DO scope of practice, concerned that a DO's skills are underused, and the profession must expand to avoid deregulation.

While most optometrists felt they had adequate room to practise, some felt that their skills were being underutilised, or that a wider range of treatments should be available to be provided by optometrists. Examples included treatments for dry eye (e.g., autologous serums), some laser surgical procedures, and intravitreal injections. The barriers noted include a lack of government funding for some procedures, and that increased demands for higher daily patient numbers, with shorter appointment times, can limit the ability to safely practise at a wider scope at an individual level.

About a quarter of respondents – i.e., 25% of DOs and 23% of optometrists, stated that they plan to retire within the next 10 years, which means the workforce will lose approximately 46 DOs and 195 optometrists. However, the overall workforce is not expected to decrease with these retirements, with higher numbers entering and returning to the professions during the same period.

Issues faced by employers

Practice ownership is a common business model, and a total of 37 DOs (19.7% of total DOs) and 259 optometrists (29.9% of total optometrists) answered the employer specific questions

Based on the overall number of respondents, this is a significantly higher proportion of optometrists that report to be an employer compared to DOs.

There were only a few employers that exclusively appoint DOs to work in their practice, with many instead employing someone as an optical

assistant, and then providing support for training as a DO as part of their employment. There were a few comments questioning the value of training DOs, as the public has low awareness of the difference between a DO and optical assistant and employing a DO introduces significant additional compliance costs.



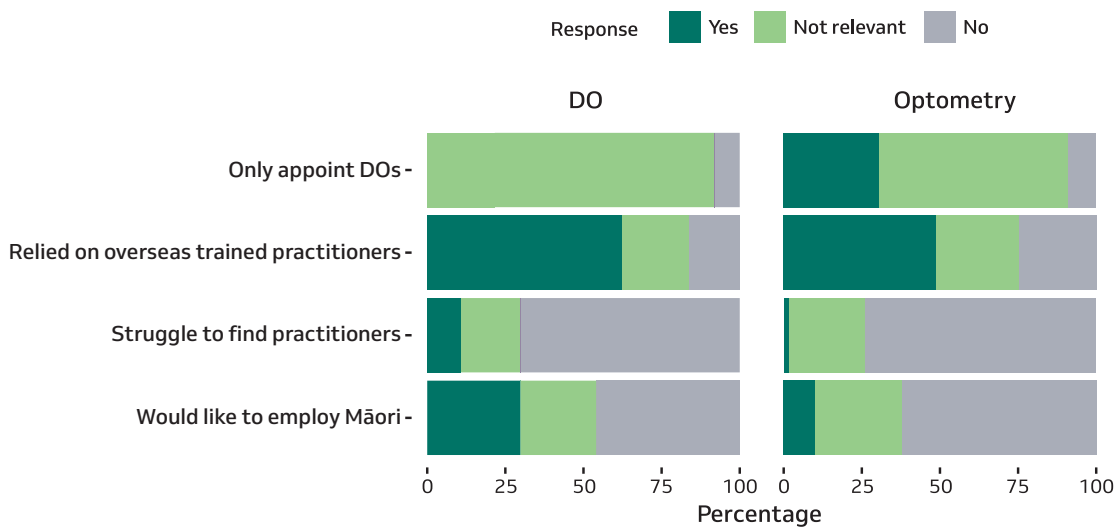


Figure 8 - Response breakdown to employer specific questions.

There were many comments on the difficulties of recruiting both optometrists and DOs, which is supported by the fact that most employees do not struggle to find work, and a high number of respondents having relied on overseas trained practitioners at some stage. By far the most common difficulty was attracting both DOs and optometrists to smaller towns or rural areas, with many comments on the high salaries required to lure people away from the cities. Some regional practitioners felt trapped while nearing retirement or otherwise wanting to reduce their work hours, being unable to attract practitioners to the regions, and with the cost of a locum practitioner higher than the business could afford.

Almost all commenters indicated that they expect their staff to be culturally safe, and that they employ based on skills and experience, rather

than ethnicity. There may be an assumption that they mean clinical skills, but practitioners cultural and ethical skills must also meet ODOB standards, so these should be also considered when choosing an employee. Appointing people from a variety of backgrounds is an important factor in making a practice culturally welcoming to a wider range of people. One barrier to achieving equity is the lack of representation in health care providers, as seen in this report, and developing a more inclusive health workforce is a priority action for Te Whatu Ora.¹¹ This is particularly true for Māori, who have disproportionately poor healthcare outcomes. While appointing based solely on clinical skills or experience may seem ideal, it is unlikely sufficient to reduce these inequities which will become an increasingly important aspect of primary health care with the Te Whatu Ora healthcare system reforms.

¹¹ <https://www.tewhatuora.govt.nz/whats-happening/what-to-expect/nz-health-plan/#our-six-priority-actions>



The impact of the COVID-19 pandemic on the workforce

At the time of this survey, NZ had recently moved away from the COVID-19 Alert system (on 2 December 2021), to the COVID-19 Protection Framework, or Traffic Light System.¹²

Also in place at this time was a mandate requiring most health practitioners, including optometrists and DOs, and staff working in their practice, to be fully compliant with the COVID-19 vaccination schedule. This meant that they had to be fully vaccinated against COVID-19¹³, with a primary dose and booster, if they were offering in-person consultations. This order was made under the COVID-19 Public Health Response (Vaccinations) Order 2021, applied by the Ministry of Health, and communicated to practitioners by both ODOB and the professional organisations. This mandate ended on Monday 26 September 2022, which was past the reporting period for this report.

Overall, COVID-19 and the Health Mandates appear to have had minimal impact on the workforce. While 8.4% of respondents had staff resign because of the vaccine mandate, most of them were optical assistants rather than registered health care professionals. Just three practitioners, all optometrists, admitted that they were unable to work during the period in which the mandates were active (of 1053, 0.3%).

A total of six practitioners (0.6% of total), which includes the three mandated practitioners, expressed concern, difficulties, or frustration at the health mandates. While a small sample, a common theme was the perceived inequity resulting from the requirement for staff or practitioner vaccination, but then inability to require or obtain patient vaccine status. Some also misattributed blame towards the ODOB (or others) for mandating COVID vaccination during this period, which made it clear that they misunderstood that this was a government public health response, for which the Ministry of Health was responsible for at that time. The ODOB decided to enforce this during the reissuing of APCs for the 2022 year, to ensure all practitioners meet the Ministry of Health's requirements. While there was not universal agreement, over 99% of practitioners did not express concerns regarding the mandate. It supports the notion that both professions played their part in helping NZ achieve one of the most successful COVID-19 management plans during the global pandemic.

¹² <https://covid19.govt.nz/about-our-covid-19-response/history-of-the-covid-19-protection-framework-traffic-lights/>

¹³ To be fully vaccinated with a primary dose and boosters.

Work type and workloads

All 1053 responses included information about their current workplace and work setting. 94.7% of DOs were currently working in the industry, with 5.3% on leave. Similarly, 94.5% of optometrists were currently working, with 5.5% on leave.

Most of the profession works in the primary care sector (91.7%), with about one in 20 (5.1%) working in tertiary care, which includes working at private ophthalmology practices or hospitals. Just over 2.4% of practitioners work in industry roles, with a similar number (2.2%) having consultancy roles. Almost one in 10 (9.4%) are involved in research or teaching as part of the work. Just over one in 50 (2.1%) have roles that involve community outreach and Māori engagement.

Nearly 80% of DOs were employed, and 19% were self-employed. 94% of the self-employed also owned their practice. Just 1% of DOs reported working as a locum. In contrast, 62.1% of optometrists were employed, with 28.6% self-employed. The majority of self-employed optometrists (91.5%) owned their own practice.

For their primary employment, DOs worked an average of 36.2 hours per week, while optometrists averaged slightly less at 33.7 hours.

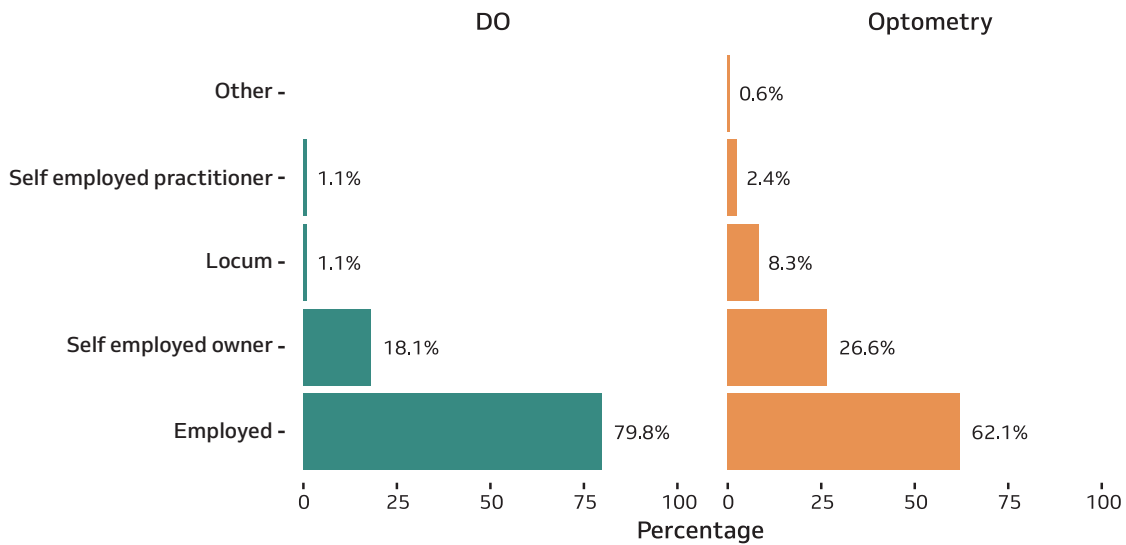


Figure 9 - Employment categories by profession.



As expected, employed practitioners worked a mean of 34.7 hours, while locums worked significantly fewer, at an average of 22.6 hours. Practitioners who owned their practice work an additional 2.3 hours per week, on average, than those who are employed.

Several practitioners reported working more than one role (2.7% of DOs and 10.9% of optometrists), and these additional roles added a further 9.1 hours of work per week. The majority (87.1%) of these additional roles were still in the ophthalmic industry, and 12.1% listed secondary work roles external to the ophthalmic industry. Note that this is likely an underrepresentation, as respondents may not have considered external roles relevant to this survey and so may not have reported all additional work.

Just 2.5% of respondents work 50 or more hours per week, and 88.4% of these practitioners were optometrists. There is a significant decrease in weekly optometrist work hours with increasing age (~1 less hour worked per 7 years of age) but working hours does not vary by age for DOs. Just 4.6% of practitioners reported they have on-call hours, and this was for a mean of 9.0 hours per week.

Retention in the workforce

Optometrists maintain their registration for significantly longer periods (12.8 IQR: 4.8-24.4) than DOs (10.2 IQR: 4.2-17.5 years).

The median registration age is also significantly younger for optometrists (23.7 years old) than for DOs (32.8 years old). The median age of registration for optometry is consistent with that of a first career immediately following 5 years of university study. In comparison, the median registration age for DOs is more than a decade later and suggests that most DOs may switch from alternative previous careers.

Taken together, these data show that optometrists enter the workforce at a younger age and stay in the profession for a longer period. DOs register over a wider range of ages but typically at an older age (half between the ages 28.0 - 40.5 years old), and few remain in the profession for longer than 20 years.

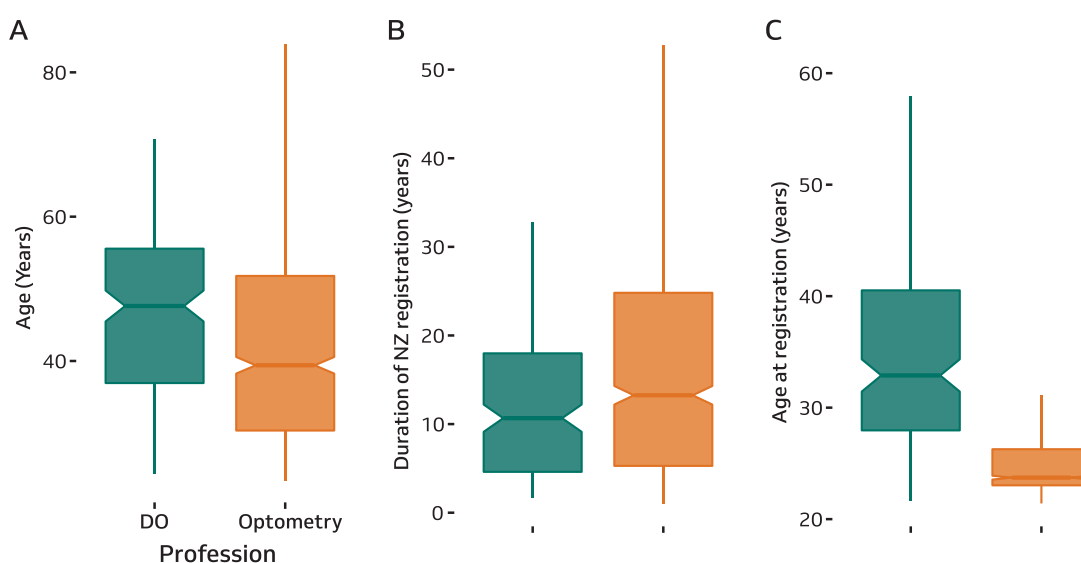


Figure 10 – Box plots of age, years since registration, and age at first NZ registration. Boxes indicate the upper and lower quartiles, and the notch indicates median values. The whiskers indicate the full range of responses.

Data sources and tools used in this publication

- The biggest source of information was the responses provided by the optometrists and DOs of NZ as part of this workforce survey between 17 February and 31 March 2022. Special thanks to all participants.
- Ethnicity information was processed using guidelines from the Stats NZ Ethnicity New Zealand Standard Classification 2005 (Version 2.1.0)^{14,15}
- Ethnicity population information was obtained from Stats NZ, which was based on the 2018 Census.¹⁶
- DHB Population data was obtained from Stats NZ, using the estimates as at 30 June 2022.¹⁷
- Data analysis was conducted using R (version 4.2.2)¹⁸ and RStudio (version RStudio 2022.12.0¹⁹), using the following packages: tidyverse²⁰, forcats²¹, data.table²², ggthemes²³, cowplot²⁴, and DHBins²⁵.

¹⁴ <https://datainfolplus.stats.govt.nz/Item/nz.govt.stats/7079024d-6231-4fc4-824f-dd8515d33141>

¹⁵ <http://aria.stats.govt.nz/aria/#ClassificationView:uri=http://stats.govt.nz/cms/ClassificationVersion/YVqOcFHSIguKkT17>

¹⁶ <https://www.stats.govt.nz/tools/2018-census-ethnic-group-summaries/>

¹⁷ <https://nzdotstat.stats.govt.nz/wbos/Index.aspx?DataSetCode=TABLECODE7509>

¹⁸ <https://www.r-project.org/>

¹⁹ <https://posit.co/>

²⁰ <https://cloud.r-project.org/web/packages/tidyverse/index.html>

²¹ <https://cloud.r-project.org/web/packages/forcats/index.html>

²² <https://cloud.r-project.org/web/packages/data.table/index.html>

²³ <https://cloud.r-project.org/web/packages/ggthemes/index.html>

²⁴ <https://cloud.r-project.org/web/packages/cowplot/index.html>

²⁵ <https://cloud.r-project.org/web/packages/DHBins/index.html>

Representativeness and limitations of the survey data

As our first workforce report, we cannot compare response rates from previous years. However, overall, we received 1053 responses from 1262 APC applications (83.4%), which gives us good confidence in the representativeness of the survey responses.

The response rate was similarly high from both optometrists (83.8%) and DOs (81.7%). While there is a significantly higher number of optometrists than DOs, we have presented data for each profession separately to give better insight into the workforce factors affecting each.

With the low number of non-European or Asian practitioners, we cannot conduct robust analysis of ethnicity distribution across the country and workforce roles. With acknowledgement of underrepresentation of Māori and Pasifika within the health care professions, and the barriers that this introduces, this will become a key focus area for professional health bodies.

For the COVID-19 pandemic related impacts, there were very few practitioners who stated they were affected. However, due to the fact this survey was conducted by the ODOB, there may have been some hesitancy to speak out about issues that could affect a practitioner's ability to work.

This means that the number of practitioners affected may be an underestimate, and not all themes may have surfaced. Several practitioners deregistered or went non-practising as from 15 November 2021 when the amendments to the COVID-19 Public Health Response (Vaccinations) Order 2021 required all health practitioners (and their staff covered by this order), to have their first vaccine doses administered by 15 November 2021. The ODOB does not collect information as to why practitioners may wish to change their practising statuses or if they wish to deregister. This workforce survey was only sent to practitioners who applied for a new APC during March 2022.

Another potential issue is the low absolute number of responses from practitioners in less populated DHB areas. This makes some of the analysis more sensitive to even a single missing response. This can be exacerbated if the area is more reliant on locum practitioners who may not have stated a specific employer.

Concluding remarks

The first ODOB workforce survey has provided some useful insights into the state of the professions. The survey had a high and representative response rate, which serves as a robust baseline to assess changes over time.

Compared to the populations they serve, both professions under-represent Māori and Pasifika, and the workforce is increasingly female. Based on current enrolments, these imbalances are unlikely to decrease in the short-term. The age distribution is young, with a sufficient skew towards younger practitioners, and optometrists more so than DOs spend most of their working life in the profession. There are sufficient practitioners to meet the eyecare demands of the public for the next 10 years, with the replacement rate exceeding the dropout rate, and the net growth rate slightly higher rate than anticipated population growth. However, there are some issues regarding the geographic distribution of the workforce. Practitioners are heavily concentrated in the Auckland region despite far great patient need in the more remote regions of NZ. The three regions least well served by optometrists (Wairarapa, Tairāwhiti, and the Bay of Plenty) have higher than that national average proportion of Māori residents, so this uneven distribution may lead to further eye healthcare inequities.²⁶ While only a minority

of practitioners struggle to find jobs, there were several comments from employers noting the difficulty of attracting practitioners to the regions. There were also a few comments from rural practitioners nearing retirement that these recruitment difficulties were a source of stress.

Most practitioners feel they have sufficient room within their scope to practice, but some felt limited by their specific employment circumstances. This is related to a common source of stress – being unable to complete paperwork within a day. Despite this, the average work week was well less than 40 hours, and there was only a very small group of practitioners who worked more than 50 hours per week. A similarly small number of practitioners reported they had on-call hours, and this was for just over one day per week. Taken together, this again supports the idea that there are sufficient practitioners to meet public need, and the professions can support a reasonable work-life balance. We look forward to repeating the survey in future years.

²⁶ <https://www.stats.govt.nz/news/maori-population-share-projected-to-grow-in-all-regions/>

Appendix 1

Registration applications by qualification type

Optometrists

Scope of practice	Applications approved (1 April 2020 to 31 March 2021)	Applications approved (1 April 2021 to 31 March 2022)
Bachelor of Optometry (BOptom), University of Auckland (UoA)	51	58
Pass in the OCANZ Competency in Optometry Examination (COE)	3	1
Trans-Tasman Mutual Recognition Act (TTMRA pathway)	4	10
Other (listed qualifications for "Optometrist Educator" registrations pathway)	3	0
Total number of new registrations	61	69

Dispensing opticians

Scope of practice	Applications approved (1 April 2020 to 31 March 2021)	Applications approved (1 April 2021 to 31 March 2022)
Certificate IV in Optical Dispensing, RMIT University (Melbourne; Australia) ²⁷	1	0
ACOD Certificate IV in Optical Dispensing, Australasian College of Optical Dispensing	19	8
Total number of new registrations	20	8

²⁷ Previously named the "Royal Melbourne Institute of Technology" (Melbourne, Australia)

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Optometrists
and Dispensing
Opticians Board

Te Poari o ngā Kaimātai
Whatu me ngā
Kaiwahakarato Mōhiti

