RANZCO's Vision for Aotearoa New Zealand's Eye Healthcare to 2030 and beyond

Timely and equitable access to eye healthcare services for all New Zealand residents, regardless of postcode, ethnicity or income, to eliminate avoidable blindness.

RANZCO
The Royal Australian and New Zealand College of Ophthalmologists
THE LEADERS IN COLLABORATIVE EYE CARE

RANZCO *Vision 2030 and beyond* - Aotearoa New Zealand

Version 3, August 2026:
This is a living document and will be regularly reviewed and updated by The Royal Australian and New Zealand College of Ophthalmologists (RANZCO), in consultation with Eye Health Aotearoa (EHA), its member organisations, and other eye health stakeholders.

Please see version control history for major changes made to earlier version.

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We acknowledge the Rangatiratanga of Māori as Tangata Whenua and Treaty of Waitangi partners in Aotearoa New Zealand. In recognition that we are a bi-national college we also acknowledge the Aboriginal and Torres Strait Islander Peoples as the Traditional Owners of Country throughout Australia and recognise their continuing connection to land, waters and community. We pay our respects to them and their cultures; and to their Elders past, present and emerging.

Acknowledgements

We acknowledge the dedication and hard work of the members of the Te Kitenga Vision 2030 Working Group in developing *Te Kitenga – Vision 2030* and this Action Plan:

- Dr Justin Mora
- Dr Sarah Welch
- Dr Peter Hadden
- Dr Liz Insull
- Dr Jesse Gale
- Dr Anne-Marie Yardley
- Dr Rebecca Stack

We gratefully acknowledge the significant contribution of EHA, its member organisations, Kāpō Māori Aotearoa, the RANZCO membership, and the many individuals and organisations whose expertise, feedback and advocacy have helped shape *Te Kitenga – Vision 2030* and this Action Plan.

This work reflects the strong partnership between the Royal Australian and New Zealand College of Ophthalmologists (RANZCO) and Eye Health Aotearoa (EHA), formalised through a Memorandum of Understanding (MOU). Through this partnership, RANZCO and EHA share a commitment to advancing equitable, accessible and sustainable eye health services for all people in Aotearoa New Zealand, with a particular focus on improving outcomes for Māori, Pacific peoples and other priority populations.

We look forward to continuing this collaborative partnership as we work together to implement *Te Kitenga – Vision 2030* and improve eye health outcomes across Aotearoa New Zealand.

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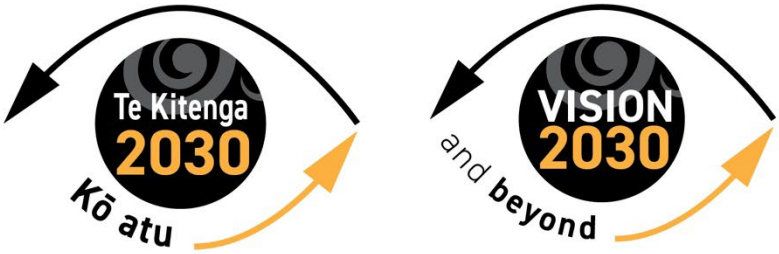


"Timely access to eye healthcare prevents more than 80% of permanent visual impairment and blindness"[1]

and is

"a fundamental human right, the Right to Sight".[2]

Executive summary

Timely access to eye health care is critical to ensuring the wellbeing of our society because the ramifications of vision impairment are severe. While most people will acknowledge that the sense they would most hate to lose is their sight, we are failing to prevent that for too many.

The New Zealand population is aging and the demand on eye health services continues to increase rapidly. Our waitlists continue to grow and while we can offer better treatments for the six main conditions causing vision impairment, namely age-related macular degeneration (AMD), cataract, glaucoma, diabetic eye disease, keratoconus and refractive error, not everyone can access them.

We have major inequities in care with poorer vision outcomes particularly for Māori and Pacific peoples.

Te Kitenga Vision 2030 was launched in 2023 to address the need of a shared vision and framework for improving eye health and reducing avoidable vision loss. The establishment of the Eye Health National Clinical Network has further strengthened national leadership and collaboration across the sector, creating an important platform to support implementation of Te Kitenga priorities. Appendix A provides a summary of the progress and key achievements in implementing RANZCO's *Te Kitenga Vision 2030* across Aotearoa New Zealand over the past few years.

This updated version has been developed to respond to the changing political, policy and healthcare environment, drawing on extensive feedback from eye health sector stakeholders, particularly through partnership with Eye Health Aotearoa, the peak body for the eye health care sector and its member organisations. The Royal Australian and New Zealand College of Ophthalmologists (RANZCO) acknowledges and welcomes the input of these organisations into this new version of Te Kitenga Vision 2030 which has greatly benefitted from their input.

The document sets out the RANZCO's assessment of how New Zealand's eye healthcare system can build on the progress being made through the Eye Health National Clinical Network and outlines what further changes are needed and how the system needs to evolve to meet increasing demand for services over the coming decades. It also recognises that resources are limited, and that some eye health procedures lie outside the scope of a high-quality public eye care system.

The strategy includes the following eight main foci.

1. **Service delivery**
2. **Research and data**
3. **Workforce and training**
4. **Māori healthcare**
5. **Pacific healthcare**
6. **Global eye health**
7. **Preventative healthcare**
8. **Sustainability**

Introduction

Vision, as our dominant sense, is one of the cornerstones of our existence, affecting early childhood development, schooling and higher education, relationships, and the ability to work and live independently.

The Lancet Global Health Commission on Global Eye Health[1] highlighted that poor eye health has a negative impact on quality of life, education and work. Further, the Commission showed that vision impairment reduces mobility, affects mental wellbeing, exacerbates risk of dementia, increases likelihood of falls and road traffic crashes, increases need for social care and ultimately leads to higher mortality rates.

The economic and social impact of vision impairment is well documented. In New Zealand, the Economic Cost of Vision Loss in New Zealand 2021[2] estimated that vision loss costs the country more than NZ$4 billion annually, including NZ$838 million in direct and indirect financial costs and NZ$3.19 billion in lost wellbeing. These findings are consistent with global evidence, with Marques et al, noting in their 2021 article *global economic productivity losses from vision impairment and blindness* that "blindness and moderate and severe vision impairment are associated with a large economic impact worldwide".[3]

Timely access to eye healthcare prevents more than 80 per cent of permanent visual impairment and blindness, which may otherwise, without timely treatment, become irreversible.[4]

Therefore, access to timely eye healthcare is a fundamental human right – the Right to Sight.[5]

This is both a health system priority and an equity issue. Investment in prevention, early detection and timely treatment can reduce avoidable vision impairment and blindness, improve health and wellbeing outcomes, and deliver broader social and economic benefits.

At present in Aotearoa New Zealand, access to eye healthcare is not equitable. Māori people are particularly disadvantaged.[6] Pacific Peoples,[6] ethnic minorities,[7] other vulnerable groups,[8] regional New Zealand residents[9] and those with lower incomes all have reduced access to eye healthcare.

As a result, there is a higher rate of visual impairment and blindness in these groups – some of which is irreversible and would have been prevented with timely eye healthcare intervention.[10] This does not sit well with the societal values we hold dear as a country.

In addition to the problem of inequity, the need for eye healthcare services is increasing across all patient groups because of our growing and ageing population, with eye diseases more prevalent in older New Zealanders, increased obesity and thus diabetic retinopathy, and the advent of new treatments and technologies, which improve outcomes but require increased servicing and costs to deliver.

This strategy sets out a plan to give every New Zealander access to high-quality, preventive and cost-effective eye health services, reducing preventable vision loss and delivering lasting health, social and economic benefits for all of Aotearoa New Zealand.

The patient journey in eye health

Every element of Te Kitenga Vision 2030 is ultimately judged by a single test: does it improve the experience and outcomes of the person sitting in front of an eye health professional, and of the whānau and community around them? A patient-centred approach does not sit in a single section of this strategy – it is the thread that runs through all the focus areas and the recommendations which arise from them.

This section sets out the patient journey in eye health as a shared reference point for that ambition, identifying where the system currently serves people well, where it does not, and what a patient-centred standard should look like at each stage.

The eye health patient journey is rarely linear. For some New Zealanders it is a single, well-managed episode of care – a referral, a diagnosis, a treatment, a discharge. For many others, particularly those living with chronic and progressive conditions such as glaucoma, diabetic retinopathy or age-related macular degeneration (AMD), it is a lifelong relationship with the health system, punctuated by repeat appointments, procedures and moments of uncertainty about vision loss. Both experiences must be held in mind when designing services, and both are shaped as much by equity of access as by clinical excellence.

1. Awareness, prevention and early detection

The journey begins long before a patient reaches an ophthalmologist. Public awareness of eye health, participation in screening and vision checks, and the accessibility of first point-of-contact services (optometry, primary care, Well Child checks, kaupapa Māori and Pacific health providers) determine whether a treatable condition is caught early or allowed to progress toward irreversible vision loss.

A patient-centred system invests in community-level awareness and culturally appropriate early detection, particularly for the conditions with the greatest asymmetry between early and late intervention, such as diabetic retinopathy and glaucoma.

- Vision and eye health awareness embedded in existing community, workplace and school health touchpoints, rather than treated as a stand-alone campaign.
- Screening and detection pathways designed around where people already are – diabetes clinics, kaupapa Māori and Pacific health services, aged residential care – rather than requiring a separate visit.
- Clear, plain-language information available in the languages and formats communities need, co-designed with Māori, Pacific and disability communities.

2. Access and referral

Once a concern is identified, timely and equitable referral becomes the critical determinant of outcome. Long or inconsistent waits for referral, unclear pathways between optometry and ophthalmology, and geographic distance from services all introduce delay at the point where delay is most costly. Rural and regional patients, and Māori and Pacific communities disproportionately affected by structural barriers to care, are most exposed to this risk.

A patient-centred referral pathway is one where the urgency of a condition, not a person's postcode or income, determines how quickly they are seen.

- Nationally consistent triage and prioritisation criteria, understood and trusted by referrers and patients alike.

- Outreach, mobile and virtual clinics that bring specialist assessment closer to rural and regional communities.
- Referral pathways that are navigable without specialist health literacy – patients should not need to advocate for themselves to be seen appropriately.

3. Diagnosis and treatment planning

At the point of diagnosis, patients and whānau need more than a clinical explanation – they need time, clarity and the opportunity to participate in decisions about their own care. This is particularly true where a diagnosis carries the prospect of progressive vision loss.

A patient-centred approach treats the diagnosis as the beginning of a partnership, not simply the transfer of information, and ensures patient-reported experience and outcomes are captured alongside clinical measures from this point forward.

- Sufficient consultation time and support (including interpreters and Māori and Pacific health navigators and the presence of whānau) to ensure diagnosis and treatment options are genuinely understood.
- Shared decision-making that reflects a patient's own priorities – for example, balancing frequency of treatment against quality of life and travel burden.
- Systematic collection of patient-reported outcomes and experience measures, feeding back into service improvement.

4. Treatment and ongoing management

For many of the conditions driving demand growth – wet age-related macular degeneration, diabetic retinopathy, glaucoma – treatment is not a single event but an ongoing commitment, sometimes involving monthly intravitreal injections or lifelong monitoring. The burden of this treatment falls heavily on patients: travel, time away from work or whānau responsibilities, and cost. Overdue follow-ups remain a significant risk to sight nationally, and are as much an access and capacity issue as a clinical one.

A patient-centred model actively manages this burden rather than treating it as an unavoidable by-product of effective treatment.

- Treatment scheduling and shared care models (including community optometrist involvement in postoperative and monitoring care) that minimise travel and time burden.
- Proactive recall and follow-up systems that identify and prioritise overdue patients before harm occurs, rather than relying on patients to self-monitor.
- Support with the practical costs of ongoing treatment – transport, accommodation and time – recognised as part of the clinical pathway, not separate from it.

5. Vision loss, rehabilitation and long-term support

Where vision loss cannot be prevented or reversed, the patient journey does not end – it shifts toward rehabilitation, independence and community participation. Rapid access to vision rehabilitation delivers substantial social return on investment, yet is often the most under-resourced part of the journey. The needs of a child developing independence, a working-age adult adapting to vision loss, and an older person seeking to remain safely in their own home are distinct, and a patient-centred system recognises and resources each accordingly rather than offering a single generic rehabilitation response.

- Rapid, well-resourced referral into vision rehabilitation at the point vision loss is confirmed, rather than after avoidable delay.
- Life-stage-appropriate support – early intervention for children and whānau, workforce participation support for working-age adults, and independence and safety support for older people.
- Ongoing emotional and social support recognised as integral to rehabilitation, not an optional adjunct to it.

Cross-cutting principles

Across every stage of the journey, three commitments must hold consistently if the patient experience is to genuinely improve:

- Equity by design: services, pathways and workforce planning should be designed from the outset to support those we know suffer the greatest inequities. This means ensuring right from the outset that systems address the needs of Māori, (consistent with Te Tiriti o Waitangi obligations) and Pacific Peoples, rural communities and those on lower incomes.
- Whānau and community voice: people with lived experience of vision impairment, and their whānau, should be involved in the design, delivery and review of services at every stage, not consulted only at the point of care.
- Continuity across the system: a patient's experience of moving between primary care, optometry, ophthalmology and rehabilitation services should feel like one coordinated journey, not a series of disconnected episodes of care.

RANZCO's vision

As the medical college responsible for the education of ophthalmologists, the doctors who treat the conditions causing permanent visual impairment and loss, RANZCO has a unique role to play in bringing eye healthcare stakeholders together around one coherent plan for Aotearoa New Zealand eye healthcare into the future.

A national approach presents an opportunity to improve eye health service delivery by improving waitlist management efficiency, increasing equity, shortening waiting times and enhancing the patient experience. In developing this strategy RANZCO has applied the following core principles:

Principle 1

To provide culturally safe, patient-centred eye care that supports meaningful partnership and shared decision-making ensuring patients and whānau can access the very best eye healthcare aligned to their values, needs and aspirations.

Principle 2

To achieve equitable outcomes for tangata whenua, we will ensure that Māori world views and values are reflected in the delivery of eye health services.

Principle 3

To ensure eye healthcare delivery is sustainable and future-proofed, enabled by innovation, research, technology and integrated IT systems, to better care for our community and build trust with our patients.

The ongoing implementation of *Te Kitenga* aligns with the *Pae Ora (Healthy Futures) Act 2022*,[11] as amended by the *Pae Ora Amendment Act*, and supports the Pae Ora Health Strategies, including *Pae Tū: Hauora Māori Strategy*[12] and *Te Mana Ola: Pacific Health Strategy*.[13] It also reflects Māori and Pacific models of health, including *Te Whare Tapa Whā*[14] and the *Fonofale* model, recognising the importance of holistic, culturally grounded approaches to improving eye health outcomes.

Kāwanatanga (partnership)

Partnership is fundamental to the successful implementation of *Te Kitenga Vision 2030*. This strategy is developed collaboratively with Eye Health Aotearoa (EHA), its member organisations (including Blind Low Vision NZ, Kāpō Māori Aotearoa (Māori vision impaired), the New Zealand Association of Optometrists (NZAO), the School of Vision Sciences (University), Glaucoma NZ, Macular Degeneration NZ and the Sight Support Trust the Eye Health National Clinical Network, Māori and Pacific partners, professional bodies, primary and community providers, researchers, and consumer organisations. By working together, we can provide coordinated leadership, share expertise and resources, and drive sustainable improvements in eye health services across Aotearoa New Zealand.

Te Kitenga Vision 2030 is committed to ensuring Māori perspectives, knowledge and lived experience are reflected in decision-making at all levels. Māori and Pacific Peoples' participation will be supported through representation within national and regional governance structures, ensuring the strategy is implemented in a way that promotes equity, partnership and shared accountability, consistent with the principles of Te Tiriti o Waitangi.[15]

The voices of patients, whānau and communities are equally central to this partnership. People with lived experience of vision impairment should be involved in the planning, design and delivery of eye health services. Embedding patient-reported experiences and outcomes alongside clinical evidence will help ensure services are patient-centred, culturally safe and responsive to the diverse needs and values of the communities they serve.

Eye Health National Clinical Network

In February 2024, Te Whatu Ora (Health New Zealand) announced the establishment of the Eye Health National Clinical Network (the Network) to provide leadership and governance of eye health care across the country.

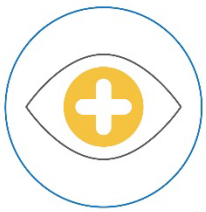
The Network brings together eye care professionals and patient groups to improve access and eye health outcomes. The strategic objectives of the Network are to:

- build an eye health service grounded in Te Tiriti o Waitangi principles to enhance Māori health outcomes
- achieve equity in eye health outcomes
- protect, promote and improve eye health in New Zealand
- deliver safe and sustainable care
- develop a skilled workforce with a positive culture.

These objectives closely align with RANZCO's *Te Kitenga Vision 2030*, which advocates for a coordinated national eye health system, equitable access to services, strengthened workforce capacity, improved data and research, and collaborative models of care.

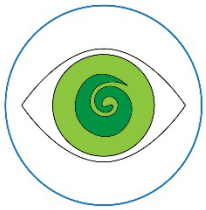
The Network will play a critical role in driving continued implementation of *Te Kitenga Vision 2030*, monitoring progress, fostering collaboration across the eye health sector, and ensuring the strategy continues to respond to emerging challenges and opportunities.

Eight key areas of focus



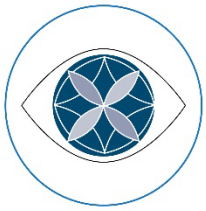
Service Delivery

Workforce and Training

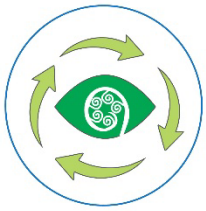


Māori Health Care

Global Eye Health



Pacific Peoples Healthcare



Sustainability

Preventative Healthcare

Research & Data

Focus on service delivery

The current state of eye health service delivery

Ophthalmic services are mostly delivered from outpatient clinics and theatres within hospital grounds across the country. In general, areas remote from a hospital are also remote from eye care.

The distribution of community optometry services across Aotearoa New Zealand also remains inequitable, with significant geographic gaps limiting access to primary eye care. There is a notable scarcity of optometry clinics on the western side of Auckland's Southern Motorway, only one clinic serving Te Tai Tokerau/Northland north of Whangārei, and no community optometry services in Tairawhiti/East Cape.

This means that many Māori and rural populations live far from eye care. To ensure eye care is available to all our population, new models of care such as mobile delivery and more outreach clinics are required.

Ophthalmology is mostly outpatient care; approximately one-third of patients require surgery (most commonly day cases) and the rest require ongoing medical care. Chronic eye conditions include diabetic retinopathy, AMD and glaucoma. Ophthalmology embraces more than 12 subspecialties including: paediatric ophthalmology, oculo-plastics, neuro ophthalmology, ocular oncology, vitreo-retinal diseases, strabismus, glaucoma, uveitis, genetics, anterior segment, cataract and acute services. Not every department is able to provide all these services and patients may be referred to larger centres for tertiary or quaternary care. Current care is fragmented and access varies depending on locality.

Demand for ophthalmic services has been growing significantly faster than population growth due to the aging population as well as the increasing number of people with diabetes in our communities. A consequence of the increasing demand is insufficient resource within eye departments. This is demonstrated by increasing numbers of overdue follow up patients and long delays for initial appointments. Vulnerable populations and Māori are facing the brunt of these service gaps and delays, which are contributing to poorer outcomes for these groups.

Current barriers to equitable care:

- → Different levels of access available from different services across the country.
- → Concentration of services within large metro areas (particularly Auckland) with lack of service in rural and remote areas.
- → Inequitable access even within major metro areas as service delivery is concentrated in a few locations.
- → Inability to recruit qualified staff within subspecialties and in particular workforces.
- → Lack of support for patients and whanau to travel to appointments.
- → Differential of surgical eligibility and waitlist guidelines between localities.

- → Differential between hospitals and services of data collection and reporting.
- → Lack of unified electronic medical record and image viewing systems.

We seek to remove these barriers and align the principles of this proposal, with key areas of change identified as:

- → We will continue to work in partnership with Māori, who will have a greater role in designing health services to ensure our health services work for Māori, and people accessing kaupapa Māori health services.
- → People will be able to get the healthcare they need closer to home. Local clinics, imaging centres or mobile services will be available.
- → High quality emergency or specialist care will be available when people need it.
- → Digital technology will be used more and in better ways, to provide people with services in their homes and local communities.
- → We will plan for our future health workforce requirements and provide for the training and development so our healthcare workers will always have the skills they need.
- → Addressing overdue follow up and first specialist appointments requires effective allocation of resources, improvements in efficiency, appropriate utilization of allied health staff and the use of virtual clinics.

Proposed structure

Collaboration, partnerships and consumer engagement

Effective eye care relies on strong collaboration between ophthalmologists, primary care providers, community organisations, iwi and Māori health providers, consumer groups and other stakeholders, to improve coordinated, culturally appropriate and integrated models of care.

Strengthening partnerships with patient advocacy and community organisations, and incorporating lived experience into service design and delivery will support more coordinated, holistic and person-centred car.

Increased awareness and improved referral pathways between eye care providers and patient support organisations will enable patients and whānau to access information, support, rehabilitation and community services early in their care journey.

Regional services

Deliver ophthalmology services through four regional eye services across the four Te Whatu Ora regions, supported by National Clinical Network priorities, to ensure equitable access to high-quality care regardless of where people live. These services will combine current eye departments and develop and invest in facilities (both mobile and static) to ensure equitable delivery of care across each region.

Currently, different regions are at different stages of networking/forming a unified service. It is recognised that developing a network on the pathway to become a regional service will take time. Each region will be a multi-site distributed service perhaps with integrated mobile units. The current eye outpatient clinics and theatres will be maintained, and smaller clinics, sometimes ‘imaging’ clinics, opened in areas of need to reduce travelling requirements for patients and enable care closer to home. ‘Imaging’ clinics provide a base for ophthalmic technician staff or optometrists to see new patients or follow up patients with a view to determine if they need more intensive care or treatment. They can also be used as a site for

a visiting ophthalmologist. These imaging sites and the mobile unit can be used for **diabetic retinal screening** as well.[16]

Specific recommendations for the six conditions responsible for most of the vision loss in Aotearoa New Zealand

Cataract

Cataract is a leading cause of treatable vision loss, caused by progressive clouding of the eye's lens. It is most often age-related, with prevalence rising sharply in later life. Surgery to remove the cataract and implant a new lens is highly effective and safe.

Health New Zealand has introduced a nationally consistent Clinical Priority Assessment Criteria (CPAC) threshold of 46 for cataract surgery, representing an important step towards equitable access. The focus should now be on ensuring consistent implementation across all regions so that patients receive timely access to surgery regardless of where they live.

A significant proportion of cataract surgery in New Zealand is already delivered through the private sector, including under contract to public hospitals, and this contribution needs to continue while ensuring ongoing support of public hospital cataract services, particularly for training. Alongside this, a range of further strategies will be required to ensure the national CPAC threshold can be consistently achieved across all districts, so that access to cataract surgery is determined by clinical need rather than by geography. In some areas the throughput of cataract surgeries is limited by improvable factors such as theatre access, staff rostering, excessive documentation requirements.

New Zealand should also align with the NICE (National Institute for Health and Care Excellence) Cataract Guidelines that state that access to cataract surgery should not be restricted on the basis of visual acuity.

Equitable nationwide access will particularly benefit Māori and Pacific patients who typically present with worse vision at an earlier age than other ethnic groups.[6] There are very real benefits to timely cataract surgery, particularly for younger, often working-age Māori and Pacific peoples.[6]

Creating a nationally accepted threshold for toric (astigmatism correcting) intraocular lenses would reduce the requirement for distance vision glasses, lessen the ongoing financial burden for patients and provide equity of access across the country. Anyone with more than 1 dioptre of astigmatism should be able to receive a toric intraocular lens.

Measures to improve the efficiency of cataract surgery provision should be considered. These include:

a) Facilitating 'straight to wait list' pathways for cases referred by optometrists or external ophthalmologists.
b) Considering immediate sequential bilateral same day cataract surgery for appropriate cases using guidelines such as these from the UK: https://www.rcophth.ac.uk/wp-content/uploads/2020/09/Immediate-Sequential-Bilateral-Cataract-Surgery-Guidance.pdf
c) Improving the throughput of theatres by more efficient processes and staffing.

d) Abandoning day 1 post-operative checks as audits have shown they are unnecessary as long as patient's have a means of contacting the hospital if they have any problems.
e) Funding optometrists to undertake the 4-6 week review for routine cases, ideally closer to the patient's home.

Many eye departments have insufficient access to theatre space. RANZCO calls for increased theatre time for ophthalmology departments via all available options including outsourcing to private practices, new builds and wet leases.

Age-related macular degeneration

AMD is degeneration of the macula, causing loss of central vision, reading vision, and driving vision. It affects 1 in 4 people over 80. Eighty per cent is the "dry" form with no treatment; 20% is "wet" (neovascular) AMD, which can cause rapid vision loss but responds well to regular eye injections (90% of treated patients maintain vision, 60% improve).

New Zealand has been in the forefront when it comes to managing AMD. Collaborative care arrangements mean nurses currently give 90 per cent of the intravitreal injections in most public hospitals. Access needs to be improved as getting to the clinic on a monthly basis can be challenging for some patients. Treatments that require less frequent attendance are preferable.

Patients should have equitable, timely access to cost-effective, evidence-based ophthalmic treatments, including innovative therapies and medicines, through nationally consistent funding and regulatory pathways. Agents that require frequent injections reduce the cost and stress on patients and whānau, result in less travel and carbon emissions and reduce the burden on hospital services. Access to such agents should be prioritized.

The pending arrival of treatments for dry AMD makes it even more critical that our processes are streamlined, access is diversified and robust collaborative care arrangements are put in place.

Diabetic retinal surveillance

Diabetes affects 7% of the New Zealand population, with a further 26% living with prediabetes. Of those with diabetes, an estimated 20–25% have diabetic retinopathy, which is a leading cause of blindness and sight loss in New Zealanders under 50. In 2018, an estimated 253,480 people were living with diabetes.

The burden of diabetes - and by extension diabetic retinopathy - falls disproportionately on Māori and Pacific communities:

- Māori have a diabetes prevalence of 7.1% and are 1.85 times more likely to have diabetes than non-Māori
- Pacific peoples have a diabetes prevalence of 11.2% and are 3.18 times more likely to have diabetes than non-Pacific peoples
- By age 65, more than half of all Pacific peoples are living with diabetes

Diabetic retinopathy is the most common microvascular complication of diabetes and a leading cause of preventable blindness. Early detection and treatment can prevent up to 98% of related vision loss, yet only around 50% of people with diabetes in New Zealand currently receive regular retinal screening - well short of the 80% target. Screening is also

poorly coordinated: it is currently managed across multiple regions under different models, with an ophthalmologist as clinical lead in each but no consistency in how services are run. As a result, engagement is poor and patients are losing vision because they weren't identified as needing treatment early enough - a gap that disproportionately affects Māori and Pacific Peoples.

The evidence for action is strong. Good control of diabetes and hypertension reduces the risk of vision loss from diabetic eye disease, and screening programs are not only clinically effective but cost-saving. International guidance recommends a systems-level approach combining public education, national screening, timely referral, and treatment for advanced disease.

The first step toward a networked approach is a national diabetic screening program, underpinned by a national register of people with diabetes. Given their expertise, community screening services would be well placed to manage this register, with patients identified through HbA1c results, diabetic medication prescriptions, and GP/specialist referrals. Establishing this database is a high priority so that everyone who needs screening can be identified.

Rather than building a standalone diabetic screening system, this should be designed as one arm of a broader eye health network - anticipating a future where AI and imaging enable screening for multiple at-risk eye conditions through a single system. Existing diabetic screening services could be integrated into this model and expanded via imaging clinics in peripheral areas and mobile imaging services, with assessment and treatment overseen by regional ophthalmology services through outreach, local, and mobile clinics. Modern retinal cameras and cloud-based image storage make it feasible to place this technology in community locations such as pharmacies, marae, and community centres, substantially widening access. A suitable IT system is critical to ensuring results and reports are accessible to all relevant parties, including GPs and specialists.

Emerging technologies such as telemedicine and non-mydriatic retinal photography offer cheaper, higher-reach alternatives to conventional screening, though they currently carry higher technical failure rates and can struggle to reliably detect macular oedema.

A universal national screening program built on this newer, more cost-effective technology would improve early detection of vision-threatening complications, particularly among vulnerable groups, and represents a strong investment case for government. This should be paired with a national approach to educating patients on intravitreal injections about the importance of monitoring their HbA1c.

Glaucoma

Glaucoma is a group of related eye conditions that cause damage to the optic nerve.

Glaucoma is the leading cause of preventable blindness in Aotearoa New Zealand, affecting an estimated 100,000 people, mostly over 40. Because it initially develops without symptoms, nearly 50% of people with the condition remain entirely unaware they have it often undiagnosed until significant damage has occurred.

Glaucoma is most commonly detected by optometrists during a routine eye check. Timely, affordable and convenient access to secondary assessment is needed to filter out those who require higher level care under an ophthalmologist versus those who can be monitored in the community by optometrists.

Educating the community about the importance of routine eye checks and improving access to these, particularly for the older age group, would reduce the burden of glaucoma blindness. Financial support to improve access to routine eye checks for older New Zealanders would be helpful in detecting glaucoma early.

Collaborative care arrangements will be critical to ensuring we can meet the burden of increasing glaucoma assessments as our population ages. Expanding 'closer to home' local and mobile clinics utilising shared care arrangements involving both optometric and ophthalmic expertise could be a cost efficient and effective solution. IT access will be critical to allow offsite review of remote patients.

Many people, over time, develop an intolerance to the preservatives agents in glaucoma drops so funded access to preservative-free glaucoma agents is important.

Keratoconus

Keratoconus is a progressive corneal disease usually starting in adolescence, which can cause severe vision loss and used to be the commonest reason for corneal transplantation.

New Zealand has unusually high rates of keratoconus and still has the highest proportion of corneal transplants for keratoconus among OECD countries. Māori and Pacific adolescents are disproportionately affected and it is also more common in people with Down syndrome (Trisomy 21).

Early detection enables corneal cross-linking treatment, which can prevent progression and reduce the need for transplants. As there is a safe and effective treatment to stop progression of the disease we need to be more proactive about identifying those people with early disease suitable for treatment.

Keratoconus is a priority area for the Eye Health National Clinical Network's which has developed a coordinated programme of work in this area. This includes a strong focus on equity for Māori and Pacific communities, reducing regional variation, and long-term sustainability. A national stocktake of current keratoconus service delivery and corneal cross-linking provision has been undertaken and targeted keratoconus screening trials are underway, with the aim of developing business cases to support national rollout. Supporting these initiatives is an examination of the cost-effectiveness of early screening for high-risk teenagers, to help reduce the need for costly surgery later in life.

Uncorrected refractive error

Uncorrected Refractive Error includes myopia, hyperopia, astigmatism, and presbyopia. Refractive error is a leading cause of vision impairment worldwide. Myopia is the most common eye disorder globally and the leading cause of childhood vision impairment, with rates rising rapidly.

Prevalence data on refractive error is limited due to the lack of a National Eye Health Survey. Screening programs play an important role in detecting myopia but gaps exist, particularly for Pacific children and older age groups and some children do not have access to glasses needed to correct their refractive error.

Community-based optometry plays a critical role in the prevention, early detection and ongoing management of eye disease. RANZCO supports strengthening the integration of optometry within the wider eye health system to improve equitable access to care, particularly for rural, remote and underserved communities.

RANZCO supports expanding publicly funded community eye care services, including access to routine eye examinations for priority populations at increased risk of vision loss, with particular consideration for Māori, Pacific Peoples, older adults and people experiencing financial barriers to care.

Children's eye health should remain a priority through timely vision assessment, early detection of conditions such as amblyopia, refractive error, keratoconus and progressive myopia, and equitable access to appropriate treatment and spectacles where clinically indicated.

For children in the critical period of visual development spectacles may be essential. Without the appropriate glasses there is a risk of amblyopia and a lifetime of vision impairment. Currently spectacles are funded through an Enable subsidy for families with a Community Services Card (CSS). That fund is inadequate and towards the end of the financial year some families are told that their child cannot have the critical glasses update they need because the fund has run out of money. Furthermore, many families with a CSS struggle with the cost of glasses and have to defer paying other bills in order to pay for them. As an important aid to development spectacles for children under age 7 who need them for visual development and who meet strict prescribing criteria should be fully funded.

RANZCO supports evidence-based public health initiatives to increase awareness of eye health, encourage regular eye examinations and reduce the long-term burden of preventable vision impairment, including strategies to prevent and manage progressive myopia.

Appropriately funded shared-care models involving optometrists and ophthalmologists should be supported to improve access to timely assessment, monitoring and follow-up care, enabling patients to receive care closer to home while ensuring timely referral for specialist management when required.

Shared/collaborative care

There are several areas around Aotearoa New Zealand where ophthalmologists and optometrists manage patients jointly in a ‘shared care’/co-management model. For example: glaucoma patients require regular follow-up with optical coherence tomography (OCT) and visual field (VF) testing.

RANZCO has considered a number of co-management models involving optometrists, orthoptists, nurses and GPs and believes many of these could be expanded. Using other members of the eye care workforce, with appropriate oversight and support from ophthalmologists, offers the potential for more cost-effective care delivered closer to home.

As an example, hospital-employed optometrists could contribute to the assessment of routine glaucoma, diabetic and AMD patients in hospitals and, via peripheral and mobile clinics, provide refractive and eye health screening to currently underserved regional areas.

Appendix B lists the numerous collaborative care models for glaucoma, diabetic retinopathy, macular degeneration and intravitreal injections that are currently used or would be considered by ophthalmology departments.

There is a worldwide shortage of paediatric ophthalmologists and therefore difficulty providing adequate services to paediatric patients. Orthoptists are a highly trained allied health group who can support paediatric services with strabismus assessment, management of amblyopia and with secondary screening of children with poor vision in conjunction with optometrists. Orthoptists and orthoptic/optometry clinics should be available in all departments with outreach clinics to smaller centres. As there is a national shortage of orthoptists, regional models of care enable better management of outreach programs and ensure coverage of the region by services. Establishing an Orthoptic training program in New Zealand should be prioritized to ensure an adequate long-term pipeline of staff to support eye health services.

A New Zealand developed ophthalmic technician training program provides an opportunity to expand this critical workforce nationally. Technicians can gather data from OCTs, VFs etc which can be reviewed by ophthalmologists or optometrists and a management plan developed. There is scope for this to expand into more local and mobile services.

As well as their more traditional roles, nurses play a vital part in eye health delivery performing critical specialist activities such as delivering intravitreal injections for macular degeneration and subtenons anaesthesia for surgery. Maintaining a stable and effective nursing workforce will help clinics achieve efficient delivery of care.

Mobile services

Some areas with very remote and small communities may be best served by mobile units. Learnings from one region should be adopted by others if similar services are being set up and appropriate IT support will be vital. Financial assistance will be important to implement these in some regions. We would recommend that mobile units be supported for Te Tai Tokerau, Tairawhiti and Central Otago in the first instance. These locations are considered areas of greatest need in relation to inequities and poorer health outcomes.

Improved support for the visually impaired

Despite advances in eye healthcare, it is unavoidable that some New Zealanders will continue to suffer permanent visual impairment and blindness. This carries significant consequences: a higher risk of physical injury, mortality, and dementia; emotional and psychological distress including depression and anxiety; loss of independence and self-esteem; and increased isolation and vulnerability.

RANZCO shares EHA's position that with timely access to vision rehabilitation and other supports, people who are blind, deafblind, or have low vision can remain independent and continue to be engaged in their communities.[17] This is echoed in the lived experience of people who rely on such support: rehabilitation services, mobility training, and adaptive skills training are consistently described as life-changing, helping people rebuild confidence and

independence after sight loss. Trained rehabilitation professionals work directly with people to assess their needs and develop an individualised program of service.[19]
There are approximately 30,000 people who meet Blind Low Vision NZ's criteria for blindness — a best corrected visual acuity ≤6/24 in the better-seeing eye.[20,21] Support needs vary across this community:

- Children who are blind or vision impaired face significant challenges on the path to independence and lifelong success, and need intensive support through the early years to grow and thrive.
- Adults need support to participate and succeed in the workforce; specialised technology training can enable them to contribute to the economy alongside sighted peers.
- Older adults, including many with age-related vision loss, are focused on achieving or maintaining personal safety and independence; basic skills training to adapt to vision loss, along with emotional support and social inclusion, are critical.

These services help vision-impaired individuals learn to use their remaining vision and other senses — hearing and touch — to compensate for reduced visual information, and require greater engagement with optometry and other collaborative care arrangements. Beyond individual wellbeing, vision rehabilitation maximises remaining vision, enables independent living and physical activity, decreases falls, and reduces social isolation.

Unfortunately, access to low vision services in Aotearoa New Zealand is limited or unavailable in many areas. Funding of low vision services in the community should be considered, alongside continued investment in public awareness so people recognise early symptoms, understand their risk, and know where to seek support before irreversible damage occurs.

An independent 2019 policy and advice report advised that expanding Blind Low Vision NZ service provision to all those eligible by 2024, accounting for cost pressures, would require additional funding of $14.0 million.[17] The report also laid out three different funding models for providing these services and training providers.

Focus on research and data

High-quality data and research are fundamental to improving eye health outcomes and ensuring equitable access to services across Aotearoa New Zealand.

Strengthening our understanding of population eye health needs, service utilisation, outcomes and lived experience across the continuum of care, from prevention and early detection through treatment, rehabilitation and ongoing support, will support evidence-informed planning, monitoring of equity, workforce development and continuous improvement.

While a comprehensive national eye health survey would provide valuable information about the prevalence and distribution of eye conditions across Aotearoa New Zealand, there are substantial opportunities to strengthen and better use existing data sources. Improved standardisation, linkage and reporting of routinely collected data can support service planning, quality improvement, workforce development and equity monitoring while longer-term surveillance approaches continue to be explored.

In the 2022 ECSAT, both collection of health systems data on availability and use of eye care services and on outcomes of eye care services were considered to be in need of major strengthening.[18] A more coordinated national approach to eye health data and research will help ensure services can respond effectively to current and future population needs.

Data

Each regional service will need access to local data of outcomes and service to ensure care is being delivered in a timely and equitable way. Appropriate, consistent data recording, collection and analysis from each region will be required for national reporting of outcomes.

We recommend:

a) Establishing a national eye health data repository with nationally standardised datasets, definitions and reporting frameworks that support monitoring of access, outcome, and equity across population groups and regions, particularly for Māori, Pacific Peoples, rural communities and other underserved populations.
b) Strengthening the collection, linkage and use of eye health data across organisations and regions to support service planning, quality improvement, workforce development, equity monitoring and research.
c) Establish nationally consistent collection and reporting of patient-reported outcome and experience measures, including functional vision, quality of life, wellbeing, participation and treatment experience, alongside clinical outcomes.
d) Develop national workforce intelligence systems to monitor workforce supply, distribution, scope of practice, productivity and future service demand.
e) Develop a national eye health monitoring and evaluation framework with agreed indicators for access, quality, equity, patient experience and outcomes.

IT issues and future technologies

Modern digital infrastructure is essential to enable integrated, patient-centred eye care.

We recommend:

a) Develop and implement a nationally consistent ophthalmic electronic medical record with standardised clinical coding, interoperability, audit and reporting capabilities to support coordinated care across care settings, quality improvement and monitoring of outcomes and equity.
b) Establishing a national ophthalmic imaging platform to enable secure storage, retrieval, remote viewing and sharing of diagnostic images across hospital, community and mobile services.
c) Ensuring digital infrastructure and regional service networks are designed to support the adoption and scalable implementation of emerging technologies, including artificial intelligence (AI), teleophthalmology and remote monitoring.

AI is already demonstrating significant potential in the detection and monitoring of diabetic retinopathy and is rapidly expanding into areas such as glaucoma and age-related macular degeneration. Future AI applications should be validated using diverse New Zealand population data and implemented in ways that improve access, quality and equity, particularly for communities currently experiencing barriers to care.

Research, innovation and evidence for improvement

Research is critical to strengthening the evidence base for policy, workforce planning and service delivery, while clinical trials provide patients with access to innovative therapies and contribute to continuous improvement in eye care.

We recommend:

a) Supporting a balanced programme of clinical, population health, health services and implementation research that informs prevention, policy, workforce planning and equitable service planning, including evaluation of innovative models of care, collaborative workforce approaches and community-based services.
b) Strengthening collaboration between researchers, clinicians, Māori and Pacific providers, health services, universities and consumer organisations to ensure research priorities, methods and translation activities are responsive to the needs of people most affected by vision loss, their whānau and communities.
c) Support Māori and Pacific leadership in eye health research, including kaupapa Māori approaches, Indigenous data sovereignty, Pacific-led research methodologies and community-led priority setting.
d) Promoting participation in clinical trials and research networks to improve access to innovative treatments.
e) Support research that quantifies the health, social and economic impacts of vision impairment, including productivity losses, caregiving impacts, wellbeing impacts and the return on investment from interventions that prevent vision loss and improve access to care.
f) Ensure data collection and research encompass the full eye health pathway, including prevention, early detection, treatment, rehabilitation, low vision services and support for people living with vision impairment.

Focus on workforce and training

Like many countries around the world, New Zealand has a workforce shortage of ophthalmologists as demand for services grows and the existing workforce ages.

Currently, there are 192 ophthalmologists working in New Zealand, including 122 RANZCO graduates and 73 who have trained elsewhere. In addition, there are 34 trainees in the first 4 years of the program and another 20 full time doctors (most from overseas training programs) in a final year of training "senior fellow" position. Of the 195 specialist ophthalmologists, 65 (33%) are based outside of the 5 main centres, 30 per cent are women. 2% identify as having Māori ethnicity.

RANZCO is working to address these imbalances by actively recruiting Māori and Pacific trainees and the proportion of trainees is now 51 per cent women.

Most fellows and trainees work full-time, with the last workforce survey finding the average number of hours per week was 44. Half of the surveyed ophthalmologists indicated that they regularly (i.e., more than once a month) worked in a regional/remote location which was defined as being outside of Auckland, Wellington and Christchurch urban areas. Just over a third (36.9 per cent) of Branch Fellows' work hours were carried out at these regional/remote locations.

There are 3.4 ophthalmologists for every 100,000 people in Aotearoa New Zealand. This is at the bottom end of the range compared to countries in Europe, less than the number in Australia (4 for every 100,000) and significantly less than the USA (5.7 per 100,000 people). This suggests that New Zealand has insufficient ophthalmologists for the country's population. Furthermore, the distribution of ophthalmologists is uneven, with rural and small towns having fewer doctors and having more difficulty recruiting.

The critical role of the collaborative care team in delivering outpatient and inpatient eye care services

Ophthalmologists work as part of a multidisciplinary team to deliver care to patients in both public hospital and private outpatient settings. In the outpatient setting, patients are typically screened and undergo several ancillary tests performed by nurses, orthoptists, technicians, and/or optometrists. A robust and sustainable allied health and nursing workforce is essential to support the efficient delivery of ophthalmic care.

There are now numerous successful models of care in public outpatient clinics across Aotearoa New Zealand, overseen by ophthalmologists but run variably by nurses, orthoptists and/or optometrists. These ophthalmologists led models are evidenced to improve access to care, reduce hospital costs and reduce wait times without compromising the quality of care.

It is important to have systems that support patients to attend public hospital appointments by reducing practical barriers and improving communication, coordination and follow-up.

RANZCO looks forward to working with other stakeholders such as the New Zealand Association of Optometrists (NZAO) and the New Zealand Nurses Organization to develop a living resource outlining these models of care that would be made available to eye healthcare service providers.

Orthoptists commonly work closely with ophthalmologists in both public and private settings, while also practising independently. Although the role of orthoptists within the eye care team has expanded, growth in New Zealand's orthoptic workforce has remained modest.[19]

Optometrists also work collaboratively with ophthalmologists and are an important part of the team.[20] The proportion of practicing optometrists with therapeutic prescribing credentials has steadily increased over the last few years, from 74.6 per cent in 2018 (554 out of 743 practicing optometrists) [21] to 87.8 percent in 2025 (838 out of 954 practising optometrists). Although the optometry workforce is growing by approximately 4% per year and is primarily community based, it is not well distributed across all communities in New Zealand. Recruiting and retaining optometrists in rural and remote locations is challenging due to current business models and lack of public funding.[22]

Advanced practice roles in ophthalmic nursing are well established in New Zealand,[23] with ophthalmology clinical nurse specialists (OpNCS) assisting in the delivery of ophthalmic procedures. These partnerships not only extend and utilise nurses expertise, but are of benefit to ophthalmologists in managing burgeoning patient loads.[24]

Staff recruitment and retention

Staff recruitment and retention is a problem across the country but particularly in regional areas.

We currently do not train and retain enough local ophthalmologists to maintain our workforce. We are dependent on overseas trained colleagues. Twenty-one per cent (36/174) of the New Zealand ophthalmic workforce is overseas trained and 20 per cent of those we train do not return to New Zealand. If we could retain more, we would be less dependent on international medical graduates.

Salaries for public hospital ophthalmologists in Aotearoa New Zealand have fallen behind those available in comparable jurisdictions, particularly Australia. As of July 2026, the top base salary for a specialist employed by Health New Zealand is NZ$282,645. Equivalent positions in Australia commonly offer substantially higher remuneration packages. This growing disparity is a significant factor contributing to the migration of New Zealand-trained ophthalmologists overseas, exacerbating workforce shortages and reducing access to public eye care.

Specialist International Medical Graduates (SIMGs) are an integral part of New Zealand's ophthalmology workforce. Strengthened support for their recruitment, assessment, integration and long-term retention is essential to addressing workforce shortages and improving equitable access to eye care. It is gratifying that Ophthalmology New Zealand is now offering

specific support for SIMGs. The pathway to RANZCO fellowship should become more straightforward while still ensuring an appropriate level of expertise.

Increasing the number of ophthalmologists is a priority, particularly for regional areas. The following strategies should be considered:

1) Making regional work more attractive by improving the support for their departments. The regional model should assist with larger centres providing increased sub-specialty outreach clinics, providing remote support for consultants on leave, improving training opportunities for all staff. Consideration should be given to requiring all major centre ophthalmologists to contribute, as part of their contract, a few days per month to a regional hospital.
2) Support certainty of training posts with centralised funding.
3) Training requires trainers with adequate clinic and theatre space to support training. Excessive contracting of routine cataract surgery risks negatively impacting public hospitals' ability to train registrars. Lack of physical space is a limiting factor for many departments.
4) Allowing departments to make longer term commitments to trainees who want to return to New Zealand. At the moment, human resources policy and a lack of certainty about available full-time equivalent makes this difficult.
5) Identifying early in training those who want a regional post long term and allocating them to more regional rotations during training.
6) Public hospital departments should work with local private practices to create combined employment packages attractive enough to recruit and retain ophthalmologists.
7) Improving reimbursement for public hospital ophthalmologists to encourage them to stay in New Zealand and in the public system.

Across New Zealand there is a shortage of orthoptists and there is variability in eye technicians' skills and experience. Orthoptists are trained to assess vision and alignment issues and manage amblyopia in children and are critical for paediatric ophthalmology services. They are recruited from overseas as there is currently no local training program. Given their specialised skillset they are now on the Green List/Straight to Residence Pathway for immigration, but retention is a problem because their salary in New Zealand is much poorer than elsewhere.

Ophthalmic technicians are trained within departments and serve a vital role in assessing vision and running the various tests required before a patient sees the doctor. They are essential for remote and virtual clinics.

Optometrists are increasingly utilised within ophthalmology departments for collaborative glaucoma, diabetic and macular degeneration clinics, for paediatric refractions and specialised contact lens management. There is scope for increasing their role in these settings and RANZCO supports a variety of models to achieve this. Dedicated funding support for training and employment will be necessary to make this work. Our collaborative care surveys have identified that the greatest barriers to departments utilising optometric collaborative care more extensively are insufficient funding, lack of space and lack of equipment. RANZCO also

supports the development of a workforce and training plan for optometrists to be integrated into a national eye health plan.

RANZCO is committed to working with NZAO on the components of Te Kitenga Vision 2030 that are important to both groups, particularly how optometrists' skills could be best utilized within the public health system.

Continuing and expanding the pool of all disciplines of staff across regions is needed to provide more flexibility in resource allocation in line with demand. This is essential if we are to expand the number of virtual (test-based), community-based and mobile clinics to help ensure uniformity and equity of access to care.

Training

Ophthalmologists

New Zealand currently has 30 training positions of which 20 are funded by the government. The remainder sources funding from local health authorities and ophthalmology private practices; while such arrangements can work well there is always uncertainty about their ongoing viability and funding issues make it challenging to create additional posts.

Increasing the number of public hospital training posts is important and training rotations into private practice could further expand numbers. Such post would be partially funded by, and provide surgical experience with, contracted cataract surgery cases. Privately contracted FSAs (First Specialist Appointments) and follow-ups as well as ACC cases could contribute to the training experience. It’s not plausible that these posts could be fully funded by private practices and hospitals should expect to cover at least the training expenses and on-call salary components.

RANZCO’s trainees are qualified doctors with at least two years of hospital experience when they apply for the program. There is a binational selection program with RANZCO overseeing a short-listing of applicants based on professional, medical and academic attributes, with additional selection points for Māori and Pacific peoples and those from regional backgrounds. A New Zealand selection committee then selects from that shortlist those most suitable for training in this country.

RANZCO has made it a priority to support the selection of Māori and Pacific trainees to ensure better representation within the ophthalmology workforce. The long-term goal is to have a proportion of Māori and Pacific ophthalmologists to match the population.
Trainees undertake five years of ophthalmology training with a focus on becoming competent comprehensive ophthalmologists. Trainees rotate through departments around the country spending at least six months in a regional area.

A typical ophthalmology trainee accrues over 10,000 hours of clinical experience and has completed over 300 cataract surgeries as well as many other operations by the end of their five years of training.

Training is provided by ophthalmologists in public departments acting as tutors and supervisors and trainees undertake defined assessments over time to ensure their competency.

Once they graduate most will spend one to two years overseas gaining additional experience and often sub-specialising as, for example, a glaucoma or retina specialist.

Twenty per cent of those we train do not return to New Zealand and the majority state that reimbursement is a major factor in that decision. Another is a lack of certainty about the availability of public hospital appointments. This highlights there is a lack of long-term recruitment planning to be addressed.

RANZCO has revised its training program and beginning with the 2023 cohort, there was an increased focus on general ophthalmology so that all graduates are equipped with the skills to work in regional areas. Trainees will not be permitted to undertake Fellowship training in final year unless they have met the requirements to be considered a competent general ophthalmologist.

Ophthalmology allied health has also started to develop a national plan of training and career development and within that there is a focus on ensuring there is diversity in the workforce and recruitment.

Orthoptists
RANZCO supports the proposal to establish a Master of Orthoptics program at the University of Auckland. Establishing a New Zealand-based training program will create a reliable pipeline of locally trained orthoptists, strengthen workforce sustainability, and ensure training is tailored to New Zealand's health system, models of care, and population needs.

Ophthalmic technicians
There is now a NZ designed and NZQA approved ophthalmic technician training program that can be undertaken remotely from any public or private clinic in the country. Funding is required to increase this important workforce

Other medical practitioners
RANZCO supports eye training for doctors from other disciplines including GPs, regional doctors and emergency and urgent care physicians. We hope to provide specific training resources and we are assessing systems for real time and 'store and forward' consultations.

Focus on Māori eye health care

Background

RANZCO recognises Māori as the Tangata Whenua of Aotearoa New Zealand and Te Tiriti o Waitangi as Aotearoa New Zealand's founding document, with its associated responsibilities and obligations.

In 2021, the RANZCO Board endorsed the five Te Tiriti principles relevant to the health sector, adapted from recommendations made by the Waitangi Tribunal in Stage one of its Health Services and Outcomes Kaupapa Inquiry WAI 2575.[25] The Ministry of Health articulates those principles as:

- → **Tino rangatiratanga**: The guarantee of tino rangatiratanga, which provides for Māori self-determination and mana Motuhake in the design, delivery and monitoring of health and disability services.
- → **Equity**: The principle of equity, which requires the Crown to commit to achieving equitable health outcomes for Māori.
- → **Active protection**: The principle of active protection, which requires the Crown to act, to the fullest extent practicable, to achieve equitable health outcomes for Māori. This includes ensuring that it, its agents and its Treaty partner are well informed on the extent and nature of both Māori health outcomes and efforts to achieve Māori health equity.
- → **Options**: The principle of options which requires the Crown to provide for and properly resource kaupapa Māori health and disability services. Furthermore, the Crown is obliged to ensure that all health and disability services are provided in a culturally appropriate way that recognises and supports the expression of Hauora Māori models of care.
- → **Partnership**: The principle of partnership which requires the Crown and Māori to work in partnership in the governance, design, delivery and monitoring of health and disability services. Māori must be co-designers, with the Crown, of the primary health system for Māori.

Those principles have guided and will continue to guide RANZCO's work towards achieving equitable health outcomes for Māori in Aotearoa New Zealand.

Current issues

Inequity in Aotearoa New Zealand has been entrenched through colonisation, the ramifications of which have been passed to current generations.[19] Colonisation is often considered to be a historical event rather than an ongoing process that is negatively affecting the health of Māori peoples.[26]

Māori people have been politically, economically and socially undermined, leading to lower income and life expectancy, poorer education and health outcomes, and stigmatisation within health care, among other consequences.[27]

Using ECSAT to compare our current policy and implementation of equitable health care to WHO standards, the current score for equity of eye care services coverage across disadvantaged population groups in Aotearoa New Zealand is level 2 – requires major strengthening.[18]

There is overwhelming evidence to suggest that Māori Peoples experience a disproportionately high burden of type II diabetes and diabetes-related complications, including diabetic retinopathy, vision loss and premature mortality, in comparison to New Zealand Europeans or other populations. For example, in 2024, it was estimated that Māori have the highest age-standardised prevalence of diabetes in New Zealand at 82.1 per 1000 Māori population (95% CI: 81.4, 82.7) in comparison to 33.1 per 1000 European or other populations (95% CI: 33.0, 33.3).[28] Additionally, the severity of type II diabetes-related complications in Māori peoples are more advanced than in European patients.[29] For instance, in a South Auckland study of 436 people with type II diabetes, moderate or more severe diabetic retinopathy was 2.80 (1.08–7.31)-fold more common in Māori than in New Zealand European patients.[29]

There is also evidence to suggest that in comparison to New Zealand Europeans, Māori are more likely to develop diabetes at younger ages and experience earlier progression of microvascular and macrovascular disease, leading to poorer long-term health outcomes.[30] A systematic review examining attendance at diabetic retinopathy screening highlighted that approximately 1 in 4 Māori with diabetes did not attend retinal screening at the recommended rate.[31] While these studies did not disaggregate age group and ethnicity simultaneously, the results indicated that younger adults (aged 20-40 years) have lower rates of attendance compared to older age groups.[31] Further, a metanalysis found that Māori peoples with diabetes had an 88 percent higher risk of all-cause mortality compared with White individuals (HR 1.88)[32] and have almost double the all-cause mortality rate (adjusted IRR 1.96),[33] substantiating that Māori Peoples experience persistent inequities in disease prevalence, severity, complications, and health outcomes.[34, 35]

At present, diabetic retinal screening across Aotearoa New Zealand is failing many patients because they are not engaged in the screening process. Patients are also losing vision because early treatment was not available to them as they were not identified as needing it. This particularly affects Māori and Pacific Peoples.[36]

There was a lower incidence of strabismus surgery performed in Māori, compared to non-Māori.[37] Māori presented on average 10 years earlier for cataract surgery than other ethnic groups with significantly worse visual acuity.[6] Estimates suggest Māori under the age of 75 are at least twice as likely as non-Māori to have vision loss from cataract, diabetic retinopathy, refractive error, age-related macular degeneration or glaucoma.[38]

More culturally appropriate services with expedited pathways are essential in the New Zealand public health system to effectively address inequities in health for Māori.[39]

Development of frameworks, accreditation curricula and policy that focus on culturally safe clinical practice are embedded, however, ongoing evaluation is crucial. By enhancing patient experiences within ocular health services, we have an opportunity to contribute to healing the relationship between the Māori population of Aotearoa and the New Zealand health system, to enhance the vision of Māori and begin addressing ethnic ocular health inequities.[40]

Te Tiriti o Waitangi Action Plan

RANZCO developed the Te Tiriti o Waitangi Action Plan (TAP) in 2023, focused on advancing eye health care for Māori populations. Underpinning this work was three guiding principles:

- Genuine partnership with Māori.
- Cultural competence.
- Improving Māori representation within the ophthalmology workforce.

Following a renewal of the Memorandum of Understanding (MoU) with Kāpō Māori Aotearoa (KMA) in July 2026, the TAP will continue to be guided by the existing kaupapa:

a) Principles and governance;
b) Workforce;
c) Data;
d) Cultural safety; and
e) Equitable eye health outcomes.

Refer to Appendix C to read the TAP.

Focus on Pacific Peoples eye health care

Pacific eye health inequity in Aotearoa New Zealand

Pacific Peoples share common world views and values, but also encompass 17 ethnicities, each adding their own specific identity and Pacific knowledge frameworks. Despite Pacific peoples making up only about 8.9% of the New Zealand population,[41] 43% of corneal transplants for advanced keratoconus (those with hydrops) performed in the Auckland keratoconus study (2013) were Pacific subjects.[42] Pacific Peoples also have a median age of 23 years and 50% are under the age of 30 years old, however, life expectancy for Pacific people is 5.5 years lower than for Europeans. This inequity is linked to differences in access to timely, high-quality health care and the socioeconomic determinants of health. Subsequently, Pacific Peoples are still considered a minority ethnic group in Aotearoa New Zealand and experience worse health outcomes compared to other New Zealanders.[7]

The South Auckland study also revealed that of those who have type II diabetes, the overall prevalence of retinopathy and macular disease was moderate or more severe by 3.55 times more in Pacific peoples compared to New Zealand Europeans.[43] Pacific peoples also present 10 years earlier with cataracts and have more severe disease progression.[6]

Currently there is no national eye health survey in Aotearoa New Zealand, therefore a true picture of inequity is unknown. More data is required on the prevalence of eye disease among Pacific Peoples, hence the emphasis on data acquisition and management in the Pacific Peoples Eye Health Action Plan.

Pacific Peoples Eye Health Action Plan

In July 2023, *Te Mana Ola: the Pacific Health Strategy*[13] was released as one of six population health strategies under the *Pae Ora Act 2022*.[11] These strategies set the direction for an equitable, accessible, cohesive and people-centred health system that achieves pae ora – healthy futures for all New Zealanders.

Five key priority areas of *Te Mana Ola* included:

1. Population health;
2. Disease prevention;
3. Health promotion and management for good health workforce;
4. Access; and
5. Autonomy and determination.

In 2024, RANZCO developed the Pacific Peoples Eye Health Action Plan (PPAP) in partnership with the Pasifika Medical Association. Similar to the Te Tiriti o Waitangi Action Plan, it set out specific goals and actions required to improve eye health equity for Pacific Peoples. Refer to Appendix D to read the PPAP.

Focus on global eye health

New Zealand's strong relationships with its South Pacific neighbours provide a valuable platform for RANZCO's longstanding work in eye care and blindness prevention. For many years, RANZCO has partnered with governmental and non-governmental organisations across the health and development sector to build capacity, infrastructure and leadership in the region - raising standards in eye health education through teaching, conference and examination access, and research, observerships and fellowship opportunities. RANZCO is committed to continuing this collaborative approach to meeting the growing need for eye health services and facilitating collaboration in the region.

The global prevalence and distribution of blindness and visual impairment

The Lancet Global Health Commission on Global Eye Health reported that 1.1 billion people were living with untreated vision impairment in 2020, a figure projected to reach 1.8 billion by 2050.[44] Despite progress against certain infectious diseases, millions continue to live with impaired vision and blindness unnecessarily. Ninety per cent live in low- and middle-income countries, and the burden falls disproportionately on women, rural populations and ethnic minority groups.

The growing burden of diabetes

Diabetic retinopathy (DR) is a major and growing driver of demand for eye health services in the region. Globally, diabetes prevalence has tripled over the past 20 years, and DR, its most common eye complication, accounts for 51% of global blindness cases occurring in the Indo-Pacific region. Notably, the 10 countries with the highest diabetes incidence worldwide are in the Pacific, where an estimated 238 million people will be living with diabetes by 2030 (rising to 260 million by 2045), roughly half of them undiagnosed. In some Pacific Island nations, up to 40% of adults over 40 have diabetes, and one study found 69% of those affected had already developed DR. Diabetes care now consumes up to 20% of annual government health expenditure in some Pacific Island countries, with regional diabetes health expenditure reaching US$240 million in 2021. Up to 98% of DR-related blindness is avoidable with early detection and timely treatment, underscoring the value of systematic screening.

Improvements in eye healthcare contribute to sustainable development

Expanding the provision and quality of eye health services globally supports the UN Sustainable Development Goals (SDGs), including those relating to health, poverty, economic productivity, education and equality.[44] The International Agency for the Prevention of Blindness (IAPB) has mapped these connections directly, drawing on findings from the Lancet Commission:[44, 45]

- *Poverty and productivity (SDGs 1, 8):* Eye health interventions have been linked to gains in productivity, household expenditure and income - for example, an 88% increase in household per capita expenditure following cataract surgery in the Philippines.

- *Health and wellbeing (SDG 3):* Vision impairment is associated with higher mortality, falls, poorer quality of life, dementia, mental health decline, and cardiovascular and respiratory disease.
- *Education (SDG 4):* Good vision improves academic outcomes; one study in China found that providing spectacles cut the odds of failing a class by 44%.
- *Equality (SDGs 5, 10):* Training rural community eye health volunteers and providing cataract surgery have been shown to reduce gender and income inequality.
- *Road safety (SDG 11):* Cataracts increase collision risk by 2.5x; cataract surgery reduces driving difficulties and crash rates.

Across 27 studies, eye health services were found to advance one or more SDG targets, with cataract surgery and spectacle provision delivering the widest range of benefits.

The 73rd World Health Assembly Resolution on Integrated, People-Centred Eye Care

In 2020, the World Health Assembly adopted a resolution on integrated, people-centred eye care, led by Australia and Indonesia and since adopted by more than 45 countries.[46] It sets the global eye health agenda to 2030, committing to embed eye care within universal health coverage and eliminate preventable blindness and impaired vision.

This builds on *Vision 2020: The Right to Sight*, launched in 1999 by the WHO and IAPB to eliminate avoidable blindness, which helped unify global, regional and national advocacy on eye care.[1, 47] The WHO's *World Report on Vision* notes that unmet need remains substantial and is projected to grow significantly, posing a growing challenge for health systems.[48] The IAPB's *2030 In Sight* strategy now brings together the World Report on Vision, the Lancet Commission and the UN's *Vision for Everyone* resolution to guide global action over the coming decade.[49]

RANZCO's role

RANZCO Fellows have a longstanding record of tackling avoidable blindness across the Indo-Pacific and beyond - leading visiting medical teams, and teaching, training, supervising and mentoring national eye health personnel and institutions, in response to each community's identified needs. Much of this work relies on the pro bono commitment of individual Fellows, supported by RANZCO through publications, college meetings and travel grants for ophthalmologists from lower- and middle-income countries.

RANZCO's objectives are aligned to the IAPB *2030 In Sight* strategy, seeking "to elevate vision as a fundamental, economic, social and development issue, integrate eye health in wider health care systems and activate consumer demand and market change".[49]

Overseeing RANZCO's mission for sustainable, equitable eye healthcare in the region is the Global Eye Health Committee which works with stakeholders in the region, including clinicians, health system leaders and international non-government organisations, such as Fred Hollows Foundation New Zealand, to:

- Support the development of sustainable eye health systems driven by local priorities and values.
- Advocate at government level for regional eye health initiatives, including an increased overseas aid and development budget for health.
- Support the establishment and maintenance of a Friends of Vision Group amongst diplomats in Wellington to enable Pacific focused eye health initiatives.

- Provide assistance for education and training of ophthalmologists and other eye health professionals
- Reduce duplication among Fellows by creating a registry of overseas aid programs and interested eye care personnel.
- Encourage advanced trainees to take part in overseas aid initiatives.
- Facilitate coordination across industry and NGOs to share priorities for supporting regional eye health and reduce duplication.
- Participate in and support research and data collection to inform the development of programs and services
- Facilitate support for broader eye health infrastructure in the region.

In relation to the New Zealand government's role in supporting eye health in the region, RANZCO calls for:

- Increased financial support to build climate resilience in Pacific Island nations, whose health, wellbeing and livelihoods are increasingly affected by worsening weather events.
- Increased financial support for in-country capacity building - infrastructure and training - for sustainable eye health services in New Zealand's neighbouring countries, drawing on New Zealand's volunteer workforce to build hospital-to-hospital links and exchange programs.
- Financial support to develop and implement a comprehensive regional eye health strategy involving Pacific-based ophthalmologists and eye health professionals, governments, NGOs and community stakeholders.
- Continued support of established IAPB, WHO, Pacific Heads of Health and other forums to build partnerships, strengthen networks and set locally relevant standards.
- A national coordinator for Pacific ophthalmology work, to enable shared learning, equipment and IT infrastructure.
- Investment in IT infrastructure across the Pacific Islands to link with New Zealand's imaging and reporting systems, enabling telemedicine and screening.

Focus on preventive healthcare

Introduction

Prevention or preventive health is any action taken to protect or promote the health of populations. Prevention aims to prevent poor health, illness, injury and death from occurring and increase the likelihood that people will stay healthy and well for as long as possible.[50]

For preventive health strategies to have an impact on changing health behaviour, they require governments, organisations, and individuals to collaborate. Broad-scale preventive health strategies that have proven to be effective have involved one or more of the following:

- Systems thinking to inform interventions that target infrastructure change – addressing factors that impact psychological, social and physical environments.[50-52]
- Extensive stakeholder collaboration to identify shared interests and champions.
- The collaborative development of evidence-based, patient-centred, collaborative models of care, (e.g. patient screening and referral pathways for AMD,[53] diabetic retinopathy,[54] and glaucoma).[55]
- The implementation of education targeting an at-risk population to improve health literacy. Risk profiling is used to identify vulnerable populations that are at increased risk and likely to have multiple risk factors. Such education programs would ideally be implemented at primary school age and should be part of the Health Promoting Schools program.
- Population screening to detect a condition early, ensure timely referral and prevent life-threatening outcomes.
- Comprehensive evaluation to assess effectiveness and impact and establish reliable databases to inform decisions around scaling up interventions, considering sustainability.[50]
- Legislation and policies aimed at modifying risk factors or behaviour – for example, cigarette warning labels and retail restrictions, food packaging labels, health star ratings and school canteen guidelines.

Prevention and early intervention strategies are essential to address risk factors and ensure continuous improvement in access to timely referral and preventative care for major eye conditions. Screening is cost-effective when balanced against possible expenditure on healthcare for when the condition presents at a later stage in the disease process.[52, 56]

Vision screening programs have a role in ensuring continuous improvement in equity of access to timely referral and preventative care for major eye conditions – facilitating high-value care and maximising access for high-priority referrals – those referrals for patients with sight-threatening disease.[56, 57]

Childhood vision screening

New Zealand children are currently screened four times:

- Birth and 6 weeks - carried out by Lead Maternity Carers/GPs; centres on the red reflex check to detect serious congenital eye conditions and vision impairment.
- 4 years (B4 School Check) - monocular visual acuity check by Vision Hearing Technicians. A fail (6/12 or worse in one or both eyes) triggers referral to a community optometrist, private ophthalmologist, or hospital ophthalmology (referral pathways vary by region). It aims to identify poor bilateral vision, testing difficulties, and amblyopia (lazy eye) while still treatable - untreated amblyopia can cause lifelong visual impairment and limit occupational options if the better eye is later compromised.
- 11 years - a safety net check to catch missed or newly developed impairment, particularly hypermetropia and astigmatism, which often develop early but aren't always picked up by earlier checks. RANZCO supports Public Health's review of this assessment and would like to see it shifted to 13 years/year 9 with inclusion of keratoconus screening.

Myopia often develops during school years and so 11 years of age is an appropriate time to screen for this but it is too early for adequate detection of keratoconus.[91] Given the myopia epidemic and the effectiveness of utilising myopia progression prevention strategies this check is of ever-increasing value to the population.

RANZCO supports ongoing collaboration between groups responsible for this secondary screening and treatment. These groups include both community and hospital-based optometrists, ophthalmologists and orthoptists. All have a role to play to manage this workload and ensure these children receive the highest standard of care.

These screening points are all essential for the detection of childhood visual problems in a timely way. This enables appropriate treatment and minimizes any negative impacts on development and learning.

Prevention of myopia

Myopia prevalence is rising worldwide, and pathological myopia is expected to become the leading cause of permanent blindness globally. It affects up to 8% of young adults in Asian populations, and roughly half of people with high myopia may go on to develop pathological myopia.

RANZCO's Progressive Myopia in Childhood position statement, along with the World Society of Paediatric Ophthalmology and Strabismus' Myopia Consensus Statement 2023, summarise current evidence on causes, management, and prevention.

While the mechanisms driving progressive myopia aren't fully understood, key risk and protective factors are well established:

- Time outdoors - children who spend less time outdoors are more likely to develop myopia; at least 2-3 sun-protected hours daily is recommended
- Near work - a risk factor that's difficult to manage given its role in education; regular breaks and a viewing distance greater than 20cm may help

Effective treatments exist - pharmacological (atropine eyedrops) and optical (specialised glasses and contact lenses) - but there are cost and access barriers making them inaccessible

to many who could benefit. Public and parental awareness of myopia's long-term risks remains poor, limiting effective prevention and control.

A national myopia strategy is needed to embed evidence-based prevention and control strategies into public health frameworks across Aotearoa New Zealand ensuring consistent implementation, ongoing public awareness campaigns, and responsiveness to emerging evidence. Public funding of low-dose atropine has also been shown to be cost-effective in the New Zealand setting preventing 7 cases of lifetime blindness per 100,000 children screened.

Diet as a risk factor for eye disease

Added sugar now features in 75% of all foods and beverages globally, with sugar-sweetened beverage consumption up fivefold since 1950. High sugar intake is linked to diabetes and to several eye diseases, including diabetic retinopathy, cataract, glaucoma, and AMD.

Weight loss is the most effective lifestyle intervention for preventing diabetes - the DiRECT study found 86.1% of people with diabetes who lost 15kg or more achieved remission. Given significantly higher obesity rates among Māori (47.9%) and Pacific adults (63.4%), targeted initiatives for these populations are urgently needed.

Smoking as a risk factor for eye disease

Smoking rates in New Zealand are trending downward overall (8% in 2021/22, down from 16.4% in 2011/12) but remain markedly higher among Māori (19.9%) and Pacific adults (18.2%). Smoking is well established as a risk factor for AMD, and is also linked to:

- Inflammatory eye disease and Graves' ophthalmopathy
- Vascular diseases
- Dry-eye syndrome
- Contact lens–related keratitis

New Zealand is a signatory to the WHO Framework Convention on Tobacco Control, and RANZCO supports the Ministry of Health's Smokefree Aotearoa 2025 Action Plan.

Vaccination and vaccine-preventable illness

The WHO named vaccine hesitancy one of the top 10 threats to global health in 2019. Ophthalmologists and clinicians working with children have a role in promoting vaccination and educating parents on the risks of preventable disease - particularly given the ocular morbidity associated with viruses such as rubella, varicella, and herpes zoster.

Promoting health literacy: Education on modifiable risk factors for disease

RANZCO endorses the use of evidence-based advocacy strategies, which could be provided by interested organisations via public-private partnerships, to promote health literacy and leverage broader public health initiatives to:

- Increase awareness of modifiable risk factors for disease.
- Target at-risk audiences where there is potential for greater impact. RANZCO's Public Health Campaign Advocacy strategy involves the development of relevant evidence-based position statements on modifiable risk factors for major eye diseases. For example:
    - Smoking cessation and its impact on eye health, in particular AMD and vision – Smoking cessation as a protective factor against eye disease.[58]

- RANZCO's position statement on diabetes and diabetic eye disease.[59]
- The impact of health and lifestyle on age-related cataract (ARC) and other age-related eye conditions.[60]
- The use of UV protective eyewear when sun exposure is frequent and regular is an evidenced modifiable risk factor for the prevention of age-related eye conditions - UV-Eye-Protection.

Some of these position statements are currently being reviewed to reflect emerging evidence and contemporary practice.

Public education plays a vital role in preventing avoidable vision loss, and campaigns such as JulEYE, Macular Month and World Sight Day offer valuable opportunities to raise awareness of eye health. By promoting accurate diagnosis and early detection and treatment of eye conditions, these initiatives help ensure timely intervention before irreversible damage occurs. Achieving this also relies on strong collaboration between optometrists, GPs and other healthcare professionals, alongside patient advocacy organisations, to support effective, coordinated models of care. Ultimately, public health education is central to ensuring patients can access safe, evidence-based, best-practice treatment when they need it most.

Prevention of ocular trauma

Ocular trauma is a leading cause of visual impairment and blindness most often affecting people under the age of 46.[61] As well as the financial cost, the consequences of ocular trauma have negative impacts on individual, their families and the community. Lifelong implications associated with vision loss include increased mortality, morbidity, anxiety and depression".[62]

A recent study concludes that up to 90 percent of ocular trauma is preventable, and preventative efforts should be based on an understanding of why, when and where ocular trauma occurs.[63] Prevention strategies, such as policies, legislation and the introduction of eye protection, are effective in reducing the incidence of ocular trauma.[63] In the workplace adequate lighting, protective shields on machinery and the provision of safety glasses can reduce the risk, particularly in areas recognised as high risk in Aotearoa New Zealand such as fencing and in the dairy industry. Similarly, the use of protective eyewear for specific non-work-related activities such as squash, woodwork and metalwork is beneficial.

A national strategy and awareness campaign for the prevention of ocular trauma would reduce the negative impacts of ocular trauma on the New Zealand community.

Focus on sustainability

Climate change and the health sector

Sustainability encompasses a range of environmental concerns, but climate change is distinct because it is a major public health issue, and this empowers doctors to have a strong voice in this area.[64-67] In Aotearoa New Zealand, there are already observable effects of climate change on health, with hospital admissions and premature deaths attributed to air pollution.[68]

It is the position of RANZCO that climate change is an important public health problem and thus an issue on which doctors should have a voice,[69] and this is supported by a majority of fellows and trainees.[70, 71] Mitigating climate change will require reducing greenhouse gas emissions from all sectors including health, while also adapting health systems for a modified climate.[72]

Medical colleges can approach the issue of climate change by:

1) Taking responsibility with corporate activities to show leadership to members;
2) Engaging, educating and empowering members with resources and tools to reduce their environmental impact from clinical activity; and
3) Advocacy to higher organisations and governments, as well as supporting members with more local governance issues.[73]

Advocacy on sustainability

Decarbonisation of society will require major strategic high-level changes internationally, from national governments, regional authorities, as well as practical changes made in organisations and by individuals. RANZCO supports bold policy and international action, towards achieving strong emission reduction targets, including Australia's first Health and Climate Strategy (2024-2028). In this broader effort, RANZCO participates in multi-college and pan-professional projects and statements, with Doctors for the Environment Australia, Australian Centre for Disease Control, Australian Commission on Safety and Quality in Health Care, Ora Taiao and EyeSustain, and with medical organisations such as the Council of Medical Colleges (NZ). These policy statements support the work of the Global Alliance for Climate and Health, which is the peak body for medical advocacy to combat the negative health effects of climate change. RANZCO will continue to support high-level policy for climate action through collaboration and support of pan-professional bodies.

Through participation in the Climate Action Working Group of the IAPB, RANZCO has contributed to the development of a *Call to Action on Climate Change* and a *toolkit* for eye health sector organisations, guiding them on activities that support adaptation and mitigation and continues to participate in awareness-raising events and conferences.

Decarbonising healthcare

Doctors recognise the need for reducing emissions from the health system, which contributes around five percent of national emissions, more than aviation.[74, 75] The New Zealand healthcare sector is responsible for up to eight percent of national carbon emissions.[76] Governments will need to regulate emission reductions to achieve decarbonisation of the health system. Offsetting is not a viable solution for the long term, and emissions themselves will need to reduce drastically.

The greatest impact will come from changing energy use within hospital systems (renewable sources for heating and electricity supply) and changes to transport systems (ambulances, staff commutes, shipping, patient travel). Larger state-level and regional projects to address energy and transport around healthcare are supported by organisations like Doctors for the Environment Australia and Ora Taiao. RANZCO will continue to support this advocacy for urgent and large-scale upgrades.

Healthcare decarbonisation specific to the delivery of eye healthcare will require multiple actions by ophthalmologists as leaders and advocates in the complex health system. Examples that will be important in reducing emissions include:

1) **Travel emissions**

   Reducing emissions from travel in ophthalmology involves eliminating low-value care and unnecessary visits, and this can make use of telehealth methods such as phone and video calls.[77] Community delivery of services closer to patients' homes, particularly for the delivery of ongoing routine care for chronic diseases such as diabetic retinopathy, AMD and glaucoma will also be important.[78] Increasing the availability of local and mobile clinics will be helpful for this. Modelling the distribution of services to population distribution and transport networks would optimise this. Shared care models facilitated by the sharing of patient health records may also reduce travel and unnecessary investigations.

   Bilateral cataract surgery is now becoming more mainstream and is more sustainable – requiring one journey to theatre not two as well as a reduction in the number of appointments. This may require a funding change to ensure the appropriate price is paid for both cataracts as each eye is performed as a separate case and there are no savings of disposables and sets.

2) **Procurement and consumption**

   Consumption of disposable and single-use supplies in surgery and minor procedures is the greatest source of emissions in ophthalmology.[78-80] Large amounts of pharmaceuticals are also wasted.[81] Reducing consumption of single-use supplies can be achieved through a combination of:

   → Industry collaboration, developing re-usable devices, such as blades or gowns, and cataract surgery tubing and cassettes.
   → Minimising the disposal of unused items ('don't open what you won't use') and reviewing surgical packs and set lists to eliminate any unnecessary items from the surgical set-up.
   → The selection of cheaper, less packaged and lower emission options for items such as viscoelastic, gloves and drapes.
   → The use of multi-use topical perioperative medications.[81]

Ophthalmologists will need to show leadership in their health services and advocate for bold policy within their organisations and local governments to progress these service changes. Thankfully, most changes that reduce greenhouse gas emissions from healthcare delivery also reduce the cost, which has benefits to society, improving access and equity.

In the first part of this decade, the carbon footprint of cataract surgery in developed countries is around 150 $kgCO^2_e$.[79, 80] At the same moment in time, the footprint in India is around 6 $kgCO^2_e$,[82, 83] with much lower cost and equivalent safety outcomes,[84] indicating there exists affordable technology for low- carbon ophthalmology. It is interesting to reflect on the barriers that prevent RANZCO ophthalmologists from immediately operating like colleagues in India, such as the habits of training, prevailing practice patterns, convenience and supply chain issues. Ophthalmologists do have an appetite to make bold changes to practice for sustainability if safety is maintained.[70, 85]

Looking forward, RANZCO aims to support fellows in making changes to improve sustainability at a clinical practice level while maintaining quality and safety. This strategy includes a preferred practice guideline that recommends against wasteful consumption and offers evidence for practice changes to reduce resource consumption and carbon emissions. RANZCO aims to continue developing these guides to facilitate clinical practice decision-making.

Corporate responsibility

The offices and staff of RANZCO will help to demonstrate RANZCO's commitment to sustainability. Sustainability will be an important consideration for RANZCO affairs into the future. Recent major renovations at RANZCO have incorporated sustainable building concepts and greatly reduced energy consumption in the corporate activities of RANZCO.

The financial investments or RANZCO are rated to an A-level or better by the Environmental, Social and Governance reporting systems, and yet several major industries that consume and contribute large quantities of greenhouse gas emissions are still included in this rating level and therefore in RANZCO investments. There is some debate about how divestment from emitting industries can impact the behaviour of those industries (as there will be other investors who will take up the shares), but RANZCO must demonstrate that it is not profiting from environmentally and socially harmful industries to be a trusted professional advocate.

RANZCO undertakes to measure the emissions attributable to corporate activities (carbon foot printing) and put in place an appropriate strategy for emission reduction and offsetting to reach net-zero emissions within this decade.

Engagement and education on sustainability

Sustainability will become part of the training curriculum for future ophthalmologists. For current RANZCO members, sustainability will be encouraged as a topic for CPD. This will require the provision of tools and information for fellows to measure their carbon footprints, offering inspiration for opportunities to reduce the footprint, and encouragement to connect with those members of the surgical facility who can enact change. Regular RANZCO communications and presentations will continue to signal the importance of sustainability for the College and its members. Initiatives such as the development of Sustainable Practice Guides for reducing waste in cataract surgery and intravitreal injections, respectively, have already been developed based on international best practice standards.

Version control history

As of December 2023, the following changes have been made to RANZCO's Te Kitenga Vision 2030:

Section	Description of changes
Throughout the document	Minor edits made in relation to grammar, syntax and punctuation
Acknowledgements	Acknowledgement of key authors included in the document
Table of contents	Added another key area of focus
Executive Summary	Re-ordered recommendations under service delivery
	Added Pacific Peoples Healthcare as another key foci, separate to Māori Healthcare
RANZCO's Vision	Changed principles one and two
Focus on service delivery	Kāwanatanga (Partnership) re-prioritized
Focus on preventative healthcare	Added information on childhood vision screening
	Added information on diet as a risk factor for eye disease
	Added information on smoking as a risk factor for eye disease
	Added information on vaccination and vaccine-preventable illness
Focus on workforce and training	Included information on the critical role of the collaborative care team in delivering outpatient and inpatient eye care services

As of November 2024, the following changes have been made to RANZCO's Te Kitenga Vision 2030:

Section	Description of changes
Throughout the document	Removed the term "Pasifika" and replaced it with "Pacific" or "Pacific Peoples" in accordance with the Te Whatu Ora guidelines on appropriate use of Pacific terminology.

The document was reviewed and updated significantly in July 2026.

Section	Description of changes
Throughout the document	This updated version has been developed to respond to the changing political, policy and healthcare environment, drawing on extensive feedback from eye health sector stakeholders, in particular through partnership with Eye Health Aotearoa, the peak body for the eye health care sector and its member organisations

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Appendices

Appendix A: Progress report on the implementation of RANZCO's Te Kitenga Vision 2030 and beyond Aotearoa New Zealand

The Royal Australian and New Zealand College of Ophthalmologists (RANZCO) has made substantial progress in implementing its Te Kitenga Vision 2030 and beyond Aotearoa New Zealand strategy. The progress to-date reflects a sustained focus on transforming eye health systems, strengthening partnerships, and ensuring that equity remains at the centre of service design and delivery. While some initiatives remain in development, the overall trajectory is positive, with significant achievements in influencing policy, training, advocacy and clinical practice.

Advancing equity through Te Tiriti o Waitangi and Fonofale principles

One of the most significant achievements of Te Kitenga Vision 2030 has been the integration of Te Tiriti o Waitangi and Fonofale principles into RANZCO's core business. Key achievements include:

- Establishing and supporting Māori and Pacific eye health leadership structures such as ensuring Māori and Pacific representation in trainee selection processes.
- Developing pathways to encourage greater Māori and Pacific participation in ophthalmology and the wider eye health workforce, including through scholarships, grants and mentoring events.
- Implementing cultural safety requirements and educational initiatives across training and professional development programs.
- Strengthening advocacy for equitable eye health outcomes for Māori and Pacific communities by developing and formalising partnerships with stakeholders including Eye Health Aotearoa, Kāpō Māori Aotearoa and the Pasifika Medical Association.

Strengthening workforce development

RANZCO has made considerable progress in building a sustainable ophthalmology workforce. Achievements include:

- Supporting initiatives, such as implementing National Standing Orders to better utilise ancillary staff and reduce the burden on clinicians, to attract and retain ophthalmologists in regional and rural communities.
- Promoting collaborative models of care involving ophthalmologists, optometrists, orthoptists, nurses and allied health professionals, to improve workforce planning.
- Establishing stronger pathways for Māori and Pacific medical students and junior doctors to pursue careers in ophthalmology, for example through sponsorships that encourage attendance at the annual conference.
- Enhancing mentoring, support and professional development opportunities across the training continuum.
- Developing a national NZ Qualification Authority approved training program for ophthalmic technicians that can be accessed remotely from anywhere in New Zealand. A nationally approved, decentralised training program offered virtually in multiple departments to provide a more secure pathway and ensure appropriate skills are developed where they are required.

These efforts contribute to a more resilient workforce and improved access to specialist eye care services.

Leading advocacy for better eye health systems

RANZCO has continued to play an important advocacy role in promoting improvements across the eye health sector. Notable achievements include:

- Advocacy for a national eye health plan, with the ultimate goal of improving service coordination.
- Contributions to discussions around the need for a National Eye Health survey to support future service design.
- Improving access to cataract surgery by recommending that the national Clinical Priority Assessment Criteria score be reduced to 46.
- Support for innovative service delivery models designed to bring care closer to communities.
- Strengthened collaboration with government agencies, organisations and community stakeholders to put eye health on the agenda.
- Established a number of national subspecialty services including retinopathy of prematurity (ROP), retinoblastoma, ocular oncology and genetics.
- Facilitated a public awareness campaign explaining the lifestyle changes that can lessen myopic progression.
- Completing a Keratoconus Action Plan to advocate for screening for keratoconus for at-risk young people, particularly Māori and Pacific peoples and those with trisomy 21/Down syndrome.

Through these efforts, it is clear that Te Kitenga Vision 2030 has already delivered meaningful change across workforce development, cultural safety, equity, advocacy and service improvement. As implementation continues, RANZCO remains focused on working collaboratively with government, the Eye Health National Clinical Network, Māori and Pacific partners, and the broader eye health sector to ensure that all communities have access to high-quality, culturally safe and equitable eye care.

The progress achieved to date provides a strong platform for the remaining actions and reinforces the College’s leadership role in shaping the future of Aotearoa New Zealand.

Appendix B: Collaborative Care Models

Glaucoma collaborative care models currently used or that would be considered by some ophthalmology departments

'In the department' is defined as within a facility run by the department and may be a hospital outpatient clinic, an ophthalmology local community clinic or a mobile clinic.

'In their practice' is defined as within an optometry private practice.

a. Optometrists working concurrently with ophthalmologists in glaucoma clinics.
b. Optometrists working autonomously in the department seeing follow-up glaucoma patients with each case subsequently reviewed by an ophthalmologist.
c. Optometrists working autonomously in the department seeing follow-up glaucoma patients and requesting review with an ophthalmologist for any concerning cases.
d. Optometrists running autonomous virtual glaucoma clinics in the department for new patients reviewing history, intraocular pressure (IOP), photos, VFs and OCTs and ranking patients by priority: e.g. discharge back to community optometrists, see ophthalmologist but non-urgent, see ophthalmologist more promptly.
e. Optometrists running autonomous virtual glaucoma clinics in the department for routine follow-up patients reviewing history, IOPs, photos, VFs and OCTs and deciding on any treatment changes and follow-up interval.
f. Optometrists reviewing follow-up glaucoma cases in their practice at intervals while the patient remains under hospital care. For each visit a report is sent to an overseeing ophthalmologist for review. May be managed long term in the community.
g. Optometrists reviewing follow-up glaucoma cases in their practice at specific intervals while the patient remains under regular hospital review as well. For example, alternate visits with a community optometrist.
h. Optometrists seeing follow-up glaucoma cases independently in their practice with hospital review only if concerned but funded by the department and still nominally under the department's care and with the follow-up schedule defined by the hospital.
i. Optometrists seeing follow-up glaucoma cases in their practice with review only if concerned. Self-funded and discharged from hospital care. This includes patients having treatment and not just normal tension glaucoma suspects or ocular hypertension.
j. Optometrists seeing follow-up glaucoma cases in their practice with review only if concerned. Self-funded and discharged from hospital care. This does not include patients having active treatment.
k. Optometrists independently seeing patients in their practice who are deemed low enough risk based on the initial referral information that they do not need to see a hospital ophthalmologist. They do still require regular review and would otherwise have been seen in the hospital system. Visits to the optometrist are funded according to the follow-up schedule recommended by the hospital. This is to be distinguished from a declined referral.
l. Glaucoma nurse specialists working concurrently with ophthalmologists in glaucoma clinics.
m. Glaucoma nurse specialists working autonomously in the department seeing follow-up glaucoma patients with each case subsequently reviewed by an ophthalmologist.
n. Glaucoma nurse specialists working autonomously in the department seeing follow-up glaucoma patients and requesting review with an ophthalmologist for any concerning cases.
o. Glaucoma nurse specialists running autonomous virtual glaucoma clinics in the department for new patients reviewing history, IOPs, photos, VFs and OCTs and ranking patients by priority: e.g. discharge back to community optometrist, see ophthalmologist but non-urgent, see ophthalmologist more promptly.

p. Glaucoma nurse specialists running autonomous virtual glaucoma clinics in the department for routine follow-up patients reviewing history, IOPs, photos, VFs and OCTs and deciding on any treatment changes and follow-up interval.

AMD Collaborative Care Models for assessment either currently used or that would be considered by some ophthalmology departments.

'In the department' is defined as within a facility run by the department and may be a hospital outpatient clinic, an ophthalmology local community clinic or a mobile clinic.

'In their practice' is defined as within an optometry private practice.

a. Optometrists working concurrently with ophthalmologists in AMD clinics.
b. Optometrists working autonomously in the department seeing follow-up AMD patients with each case subsequently reviewed by an ophthalmologist.
c. Optometrists working autonomously in the department seeing follow-up AMD patients and requesting review with an ophthalmologist for any concerning cases.
d. Optometrists running autonomous virtual AMD clinics in the department for new patients reviewing history and OCTs and ranking patients by priority: e.g. discharge back to community optometrist, see ophthalmologist but non-urgent, see ophthalmologist more promptly.
e. Optometrists running autonomous virtual AMD clinics in the department for routine follow-up patients reviewing history and OCTs and deciding on any treatment changes and follow-up interval.
f. Optometrists reviewing stable follow-up AMD cases (not having IVIs) in their practice at intervals while the patient remains under hospital care. For each visit a report is sent to an overseeing ophthalmologist for review. May be managed long term in the community.
g. Optometrists reviewing stable follow-up AMD cases (not having IVIs) in their practice at specific intervals while the patient remains under regular hospital review as well. For example, alternate visits with a community optometrist.
h. Optometrists seeing follow-up AMD cases independently (not having IVIs) in their practice with hospital review only if concerned but funded by the department and still nominally under the department's care with the follow-up schedule defined by the hospital.
i. Optometrists independently seeing AMD patients in their practice deemed low enough risk based on the initial referral information that they do not need to see a hospital ophthalmologist. They do still require regular review and would otherwise have been seen in the hospital system. Visits to the optometrist are funded according to the follow-up schedule recommended by the hospital. This is to be distinguished from a declined referral.
j. AMD nurse specialists working concurrently with ophthalmologists in AMD clinics.
k. AMD nurse specialists working autonomously in the department seeing follow-up AMD patients with each case subsequently reviewed by an ophthalmologist.
l. AMD nurse specialists working autonomously in the department seeing follow-up AMD patients and requesting review with an ophthalmologist for any concerning cases.
m. AMD nurse specialists running autonomous virtual AMD clinics in the department for new patients reviewing history, photos and OCTs and ranking patients by priority: e.g. discharge back to community optometrist, see ophthalmologist but non-urgent, see ophthalmologist more promptly.
n. AMD nurse specialists running autonomous virtual AMD clinics in the department for routine follow-up patients reviewing history, IOPs, photos, OCTs and deciding on any treatment changes and follow-up interval.

Diabetic retinopathy monitoring collaborative care models currently used or that would be considered by some ophthalmology departments.

'In the department' is defined as within a facility run by the department and may be a hospital outpatient clinic, an ophthalmology local community clinic or a mobile clinic.

'In their practice' is defined as within an optometry private practice.

a. Hospital optometrists working concurrently with ophthalmologists in DR clinics in the department.
b. Hospital optometrists working autonomously in the department seeing follow-up or photo-monitoring DR patients with each case subsequently reviewed by an ophthalmologist.
c. Hospital optometrists working autonomously in the department seeing follow-up or monitoring DR patients and requesting review with an ophthalmologist for any concerning cases.
d. Hospital optometrists assessing new patients autonomously in virtual/photo-screening DR clinics in the department reviewing history photos + OCTs and ranking patients by priority: e.g. discharge back to community optometrist, see ophthalmologist but non-urgent, see ophthalmologist more promptly.
e. Optometrists in their practice reviewing/photo-monitoring stable follow-up DR cases at intervals while the patient remains under hospital care. For each visit a report is sent to an overseeing ophthalmologist for review. May be managed long term in the community.
f. Optometrists in their practice reviewing/photo-monitoring stable or treated follow-up DR cases at specific intervals while the patient remains under regular hospital review as well. For example, alternate visits with a community optometrist.
g. Optometrists in their practice reviewing/photo-monitoring stable or treated follow-up DR cases independently with hospital review only if concerned but funded by the department and still nominally under the department's care with the follow-up schedule defined by the hospital.
h. Optometrists in their practice independently assessing and photographing new and follow-up DR patients as part of a screening program with distant oversight by an ophthalmologist and hospital referral only if deemed necessary.
i. Optometrists in their practice independently assessing and photographing new and follow-up DR patients as part of a screening program with no oversight by an ophthalmologist and hospital referral only if deemed necessary.
j. DR nurse specialists working concurrently with ophthalmologists in DR clinics.
k. DR nurse specialists working autonomously in the department seeing follow-up/phot-monitoring DR patients with each case subsequently reviewed by an ophthalmologist.
l. DR nurse specialists reviewing/photo-monitoring follow-up DR patients autonomously in the department and requesting review with an ophthalmologist for any concerning cases.
m. DR nurse specialists assessing new DR patients autonomously in virtual/photo-screening DR clinics in the department reviewing history, photos + OCTs and ranking patients by priority: e.g. discharge back to community optometrists, see ophthalmologist but non-urgent, see ophthalmologist more promptly.
n. Photo-screening/monitoring in the community with review by other trained medical staff (e.g: GPs) with ophthalmic review only if abnormal
o. Photo-screening/monitoring in the community with review by other trained non-medical staff (e.g.: trained technicians) with ophthalmic review only if abnormal.

Models of collaborative care that are currently used or that some departments would consider for the provision of intravitreal injections.

a) Trained nurses giving intravitreal injections in the department or outreach/mobile clinic.

b) Trained nurses giving intravitreal injections in a community facility (not a hospital outreach clinic but perhaps an appropriate GP or urgent care facility)

c) Trained community medical staff (e.g.: GPs) giving intravitreal injections in the department or outreach/mobile clinic.

d) Trained community medical staff (e.g.: GPs) giving intravitreal injections in a community facility (not a hospital outreach clinic but perhaps an appropriate GP or urgent care facility)

RANZCO

Te Tiriti o Waitangi
Action Plan

RANZCO The Royal Australian and New Zealand College of Ophthalmologists
THE LEADERS IN COLLABORATIVE EYE CARE

Kāpō Māori Aotearoa New Zealand Inc.

Tawai Te Rangi and Nigel Ngahiwi, Te Papa, Wellington Photo Courtesy of Kāpō Māori Aotearoa

Introduction

Mā tō rourou
Mā tōku rourou
Ka ora ai te iwi
With your knowledge
With my knowledge
We all will prosper

The Royal Australian and New Zealand College of Ophthalmologists (RANZCO) is the medical college responsible for the training and professional development of ophthalmologists in Aotearoa/New Zealand and Australia. We seek to improve eye health across Aotearoa/New Zealand and Australia, as well as further afield, by providing best quality education, training, and continuing professional development; by promoting eye health care and the work of ophthalmologists; and through collaboration with others involved in the delivery of eye health care.

Kāpō Māori Aotearoa (KMA) is a national Indigenous, member-based and led society open to all people: disabled, able-bodied, Māori and non-Māori. Through utilising ngā taonga tuku iho o Te Ao Māori (the treasures of the Māori world), we seek to educate, inform and support tangata whaikaha (people with disabilities), whānau (extended family) and tangata whenua (Indigenous people) generally, to thrive and prosper. We offer hope, self-determination, independence, and individual and whānau well-being.

Mā te whakapono, mā te tūmanako me te aroha mātou e whakatūtuki ai i ngā moemoea kia puta ki te whai ao ki te ao mārama.

With truth, hope and love we will realise our dreams and bring them to the world of enlightenment.

RANZCO's Te Tiriti o Waitangi Action Plan aims to address eye health inequities for Māori in Aotearoa.

It has been carefully considered by RANZCO's Māori and Pacific Peoples Eye Health Committee in partnership with KMA representing Māori vision impaired and in consultation with other key stakeholders.

There are 5 kaupapa:

1. Governance
2. Workforce
3. Data collection and management
4. Cultural safety
5. Service delivery

RANZCO and KMA understand the need to work with others to turn this plan into reality. The support of Te Aka Whai Ora and Te Whatu Ora will be particularly crucial but so will help from our colleagues in optometry and nursing and the assistance of our Māori patients and their whanau. The plan is ambitious but also clearly articulates the steps we believe need to be taken in order to achieve equity. By working together we can make a difference.

Foreword

Karanga, karanga, karanga rā

Nau mai e te ata hapara e kawea mai te rangi hou! Me maumahara tonu ki a rātou mā, e moe nei i te moenga roa, nō reira, moe mai, moe mai, moe mai rā.

Ka rere tonu ra ngā kupu whakamihi ki tēnā, ki tēnā, ki tēnā o tātou ngā ringa raupaa e tautoko kaha nei ki tēnei kaupapa whakahirahira.

Ma te whakaaro ko te korero, ma te korero ko te wānanga, ma te wānanga ka tau mai te matauranga hei oranga mā tātou katoa.

As we call to the dawning of a new day, we acknowledge those whom have gone before us and now are at rest in heavenly slumber. Rest on in love and peace.

The words of gratitude and appreciation will forever flow to the many whom supported this significant collaboration! From thought comes language, from language comes learning, from learning comes knowledge for one and all!

Kāpō Maori Aotearoa (KMA) is honoured to write the Foreword for the Te Tiriti o Waitangi Action Plan. We start with acknowledging the courage of the New Zealand RANZCO Māori and Pacific Peoples Eye Health Committee members, who in 2018 announced their intent to initiate change to Māori eye health in Aotearoa. In January 2021, they shared their vision with Kāpō Māori Aotearoa and in July 2022 representatives from our respective organisations came together in Auckland. Together we confirmed our collective commitment to each other and our ongoing relationship through the signing of Te Tatau Pounamu/Memorandum of Understanding.

Te Tiriti o Waitangi Action Plan is the child of this relationship, a road map of how KMA and RANZCO aim to change the trajectory of Māori eye health care in Aotearoa. KMA is very proud of this document because the foundation upon which it is built is the doctrine that our tupuna envisioned when they signed Te Tiriti o Waitangi. This Action Plan is rangatiratanga, kawangatanga and oritenga in action!

KMA and RANZCO equally share the helm of our waka, paddling towards a transformational future. Te Tiriti o Waitangi Action Plan offers practical solutions. As a 'living' document it is fluid and responsive because we understand that we live in an ever changing world. This document will stand us in good stead when we encounter challenges on our journey to realise our vision and arrive at the shores of Rangiatea,

The whakatau-a-ki we have chosen to conclude with illustrates our partnership, our commitment to Te Triti o Waitangi, the RANZCO/KMA Action Plan and our future to create transformational change. This whakatau-a-ki was spoken by Kingi Tawhiao Potatau Te Wherowhero to rally his people and encourage unity and forward thinking.

Ki te kahore he whakakitenga ka ngaro te iwi

Without vision the people will be lost.

Christina (Chrissie) Cowan
Kāpō Māori Aotearoa New Zealand Inc.

Christina (Chrissie) Cowan
- Ngāti Kahungunu, Ngāti Kahungunu ki Rangitane, Ngāti Porou

Chrissie is the Chief Executive for Kāpō Māori Aotearoa, a national kāpō led member based society that provides Indigenous health and disability support services to kāpō Māori and their whānau and has strong relational links with disabled Māori and their whānau across Aotearoa. Firmly embedded within te Ao Māori, Chrissie has extensive experience working with community organisations and in advocating for the need for health, education, and social service sectors to prioritise kāpō Māori voices. She has research experience with qualitative methods and applying Kaupapa Māori principles in research practice, as well as expertise about regional, national and global Indigenous and disability human rights.

St Joseph's Māori Girl's College - Kāpō Māori Aotearoa Biennial Conference, Napier Photo Courtesy of Kāpō Māori Aotearoa'

Māori Eye Health Inequity in Aotearoa

More data is required on the prevalence of eye disease among Māori; hence the emphasis on data acquisition and management in the Te Tiriti Action Plan. However, the information that is available paints a clear picture of inequity.

Type 2 diabetes is experienced disproportionately by Māori and Pacific Peoples who are up to three times more likely to have diabetes compared to other New Zealanders[1] and develop the disease at a younger age. A review of nine studies that included reporting by ethnicity found that Māori had higher rates of sight-threatening disease and lower rates of screening attendance compared to Europeans.[2]

There is increasing evidence that Māori face barriers in access to primary and secondary health services.[3, 4]

Māori are less likely to have strabismus surgery.[5] They are both more likely to have keratoconus and to have more severe disease.[6]

Cataract-related vision loss is 1.5 to 2 times more prevalent in Māori in comparison to non-Māori up to age 84.[7] Māori develop cataracts on average 10 years earlier than Pakeha New Zealanders and have worse vision at presentation.[8]

I ore ate tuatara ka puta ki waho

A problem is solved by continuing to find solutions

RANZCO's journey

In July 2021, the RANZCO Board endorsed the Te Tiriti o Waitangi (Treaty of Waitangi) principles following earlier endorsement by the New Zealand Branch:

- **Tino rangatiratanga:** The guarantee of tino rangatiratanga, which provides for Māori self-determination and mana motuhake in the design, delivery and monitoring of health and disability services.
- **Equity:** The principle of equity, which requires the Crown to commit to achieving equitable health outcomes for Māori.
- **Active protection:** The principle of active protection, which requires the Crown to act, to the fullest extent practicable, to achieve equitable health outcomes for Māori. This includes ensuring that it, its agents and its Treaty partner are well informed on the extent and nature of both Māori health outcomes and efforts to achieve Māori health equity.
- **Options:** The principle of options which requires the Crown to provide for and properly resource kaupapa Māori health and disability services. Furthermore, the Crown is obliged to ensure that all health and disability services are provided in a culturally appropriate way that recognises and supports the expression of hauora Māori models of care.
- **Partnership:** The principle of partnership which requires the Crown and Māori to work in partnership in the governance, design, delivery and monitoring of health and disability services. Māori must be co-designers, with the Crown, of the primary health system for Māori.

In July 2022, RANZCO signed an Tatau Pounamu/Memorandum of Understanding with Kāpō Māori Aotearoa New Zealand, a national Indigenous, member-based and led society, to work collaboratively to improve Indigenous eye health in Aotearoa New Zealand.

The partnership requires Kāpō Māori and RANZCO to work constructively in developing, implementing, monitoring and evaluating a Te Tiriti o Waitangi Action Plan (aka 'Māori Action Plan') focused on eye health care. Underpinning this work are three guiding principles:

- Genuine partnership with Māori
- Cultural competence
- Improving Māori representation within the eye care workforce.

Tē tōia, tē haumatia

Nothing can be achieved without a plan, workforce and way of doing things

Dr Justin Mora, FRANZCO – Ngāi tahu

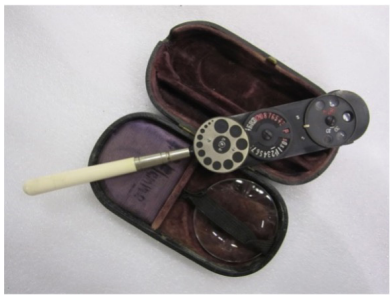
Chair of the RANZCO Māori and Pacific Peoples Eye Health Committee, Justin is an ophthalmologist in Auckland with a particular interest in paediatric eye disorders. He is a past chief examiner, head of education and RANZCO Board member. He is leading the development and implementation of *RANZCO's Vision 2030 and beyond – Aotearoa* strategy.

The Partnership

Te Tiriti o Waitangi
Action Plan

The image representing the RANZCO Te Tiriti Action Plan is symbolic of the partnership between Kāpō Māori Aotearoa and RANZCO. The partnership itself reflects each organization's desire to be a united voice and work together on the governance, design, delivery and monitoring processes that will help ensure Māori eye health equity in the future.

RANZCO and KMA representatives at the signing ceremony of Te Tatau Pounamu/Memorandum of Understanding on 15 July 2022



The image was created by blending the koha exchanged between KMA and the MPEHC to celebrate the signing of the memorandum of understanding between us.

The pounamu koru resembles the unfurling frond of the native silver fern where the spiral represents new beginnings, life and hope and the outer coil symbolizes growth and conveys perpetual movement and everlastingness.

The 100-year-old ophthalmoscope is an antique from the RANZCO museum. An ophthalmoscope is used to see inside the eyes and allows us to visualize things that would otherwise remain hidden. This device is therefore a symbol of both our past, where RANZCO has come from, and also represents our expectation of a brighter future together with KMA than we could have envisaged alone.

Acknowledgements

We acknowledge the hard work from members of the Māori and Pacific Peoples Eye Health Committee (MPEHC), and the Te Tiriti Action Plan Working Group into developing this Te Tiriti Action Plan (TAP) and their ongoing advocacy efforts in advancing eye health equities for Māori in Aotearoa.

Kāpō Māori Aotearoa

- Ms Christina (Chrissie) Cowan: Ngāti Kahungunu, Ngāti Kahungunu ki Rangitane, Ngāti Porous
- Ms Natasha Swann: Ngāti Maniapoto
- Ms Tarewa Cowan: Tahitian/Cook Island, Ngāti Kahungunu, Ngāti Kahungunu ki Rangitane, Ngāti Porou
- Mr Wiremu Kohere: Ngāti Porou

RANZCO:

- Dr Alistair Papali'i-Curtin - Samoan
- Dr Derek Sherwood
- Dr Edward Hutchins - Ngāi tahu, Waitaha
- Dr Harris Ansari
- Dr John Rawstron
- Dr Justin Mora - Ngāi tahu
- Dr Rachael Niederer
- Dr Simone Freundlich – Ngāti Whatua, Ngāpuhi, Tainui
- Dr Will Cunningham (past Chair of MPHC) - Samoan
- Dr Eugene Michael (past MPHC member) – Ngāti Kahu

We are grateful for ideas and feedback received from the RANZCO membership and external stakeholders and the guidance from Te Ururoa Flavell and his team during the development of the TAP.

We look forward to ongoing engagement and collaboration in implementing the TAP.

Kāpō Māori Aotearoa Biennial Conference, Invercargill Photo Courtesy of Kāpō Māori Aotearoa'

Te Tiriti o Waitangi Action Plan

The following strategic goals were set under the TAP, with specific actions and deliverables outlined to achieve the goals.

Kaupapa 1: Te Tiriti is activated in our relationships and our organisation

- RANZCO is committed to building and formalising Tiriti based relationships with tangata whenua and has established the partnership through a Memorandum of Understanding with Kāpō Māori Aotearoa, a national Māori visually impaired member-based and led society. The two organisations are working collaboratively to improve Māori eye health in Aotearoa New Zealand.
- RANZCO is incorporating Tiriti o Waitangi guiding principles into the College governance, processes and protocols that are relevant to Aotearoa.
- RANZCO will further engage our membership and stakeholders, to raise internal and external awareness of our TAP across the College and eye sector.

Kaupapa 2: Expand the Māori Eye Care Workforce

- To encourage more Māori doctors into a career in ophthalmology, RANZCO has adopted a centralised recruitment process that targets and offers additional selection points to Māori applicants and automatically allocates an interview to qualified applicants who identify as Māori.
- RANZCO provides multiple scholarships and other grants for Māori medical students or junior doctors who wish to pursue a career in ophthalmology.
- RANZCO will continue the efforts to increase the number of ophthalmologists who identify as Māori through existing and new measures.
- RANZCO recognises the additional challenges Māori trainees face and is committed to provide additional flexibility and culturally safe support as appropriate, whilst continuing to maintain standards. We will develop a whanaungatanga care program to support Māori trainees.
- RANZCO supports the training of more Māori optometrists, nurses, technicians and kaiāwhina and will offer assistance and resources to our eye care partners to assist them with this.

Kaupapa 3: Ensure adequate data on Māori eye health

- In New Zealand, the extent of inequity in eye health is largely unknown. However, New Zealand has never had a population-based eye health survey.

  In collaboration with Eye Health Aotearoa (which represents all eye health related organizations within Aotearoa New Zealand), RANZCO has been advocating for our first National Eye Health Survey. This aim to collect national data on the prevalence of vision impairment and its main causes, as well as information on the access to eye care services for Māori, Pacific People, and all other New Zealanders. This information will guide future policy formulation, eye health service delivery planning and economic analysis.
- RANZCO will advocate for a long-term program for ongoing data acquisition and analysis and dissemination to support Māori health equity.

Te Tiriti o Waitangi Action Plan

Kaupapa 4: RANZCO trainees and Fellows embrace Te Tiriti o Waitangi principles and are culturally safe

- RANZCO has taken the following measures to increase cultural safety amongst RANZCO fellows and trainees:
    - Cultural safety training is embedded at multiple points in the RANZCO training program.
    - RANZCO Fellows have access to the RANZCO Cultural Safety Module as a component of CPD for ophthalmologists.
    - A number of Māori specific cultural safety training courses, e.g., MIHI 501 and Te Ao Māori training were provided to RANZCO Board members, New Zealand Branch Executives, Committee members and College staff.
    - Cultural safety training courses will become mandatory for all branch executive and education committee members and will be encouraged for all trainee supervisors and Fellows on an ongoing basis.
- RANZCO is committed to continuous improvement and evaluation of the cultural safety learning modules in the RANZCO curriculum.
- RANZCO will continue to introduce measures, i.e., training course and resources, that enhance and maintain cultural competency in the healthcare workforce.

Kaupapa 5: Equitable access to eye health and outcomes for Māori

- RANZCO will collaborate with stakeholders to develop a Māori model of eye health care and will advocate for the government to adopt the model.
- RANZCO supports a Te Tiriti o Waitangi based eye health wellbeing plan for New Zealand.
- RANZCO will, through its workforce and services committee, lobby for more equitable geographical access to eye assessments and care by encouraging the development of satellite and mobile clinics to take services to the locations where they are needed.

Patric Cowan (KMA), Nigel Ngahiwi (KMA), Damian Griffiths (FPDNA - First Peoples Disability Network Australia) and Ben Riemer (FPDNA)
Photo Courtesy of Kāpō Māori Aotearoa'

The timeline in this table is as of January 2025, and will be regularly reviewed and updated.

Kaupapa 1: Tikanga and Te Tiriti o Waitangi principles are activated in our relationships and our organization				
Action		**Deliverables**		**Timeline/Progress**
1.1	**Build and formalise Tiriti based partnerships with tangata whenua.**	1.1.1	Explore formalized partnership with Kāpō Māori Aotearoa (KMA).	Complete
		1.1.2	Establish a Tiriti o Waitangi Action Plan Working Group (TAPWG) with Kāpō Māori Aotearoa and consult with relevant stakeholders representation on the TAPWG.	Complete
		1.1.3	RANZCO acknowledge and participate in Te Tiriti o Waitangi (ToW) and Mataraiki celebrations and promotion.	Ongoing from Q4 2023
		1.1.4	Extend an invitation to tangata whenua in the health sector to share their Tiriti justice experiences or stories. Staff can then share them through print and digital media.	Ongoing from Q4 2023
		1.1.5	Encourage staff and senior leaders to participate in external events to recognise and celebrate ToW and Matariki.	Ongoing from Q4 2023
		1.1.6	Display the Tino Rangatiratanga flag in the Sydney College office.	Complete
		1.1.7	Ensure adequate resources to seek Māori cultural advice to provide a ToW perspective on relevant College policies and processes.	Ongoing with KMA
1.2	**Develop and adopt a Tiriti o Waitangi Guiding Principles & incorporate within RANZCO Governance**	1.2.1	Co-develop guiding principles aligned with the articles of Te Tiriti o Waitangi, that inform the RANZCO Tiriti o Waitangi framework, in consultation with appropriate Māori advisors and relevant stakeholders.	Complete
		1.2.2	Ratify the Tiriti o Waitangi principles related to health by the NZ Branch of RANZCO and by the RANZCO Board.	Complete
		1.2.3	Consider incorporating Tiriti o Waitangi guiding principles in the constitution of Federal RANZCO.	For consideration by the RANZCO Board at the next constitutional review
		1.2.4	Tiriti o Waitangi articles and health related guiding principles reflected in organization processes, protocols as they are relevant to Aotearoa, e.g. Fellow application criteria, pathway, expectations.	In progress
		1.2.5	Support Te Ohu Rata (Te Ora) and contribute to their meetings.	Ongoing since 2022

Action		Deliverables		Timeline
1.3	**Raise internal and external awareness of our TAP across our business and sector.**	1.3.1	Develop and implement a strategy to communicate the RANZCO TAP to College members, staff, and external stakeholders.	Complete
		1.3.2	Communicate our commitment to Te Tiriti action publicly.	Complete
		1.3.3	Implement the Communications plan developed at 1.3.1, promoting collaboration through ongoing active engagement with all stakeholders.	Complete
		1.3.4	Develop culturally appropriate resources with involvement of Tangata Whenua to promote the TAP.	Complete
		1.3.5	Implement strategies to engage our staff and members in Te Tiriti o Waitangi, and in policy development, activities and events.	Ongoing from Q1 2024
		1.3.6	Raise a 'call to action' among fellows and staff to work towards addressing eye health inequities.	Ongoing from Q1 2024
Kaupapa 2: Whakatipu - Expanding the Māori Eye Care Workforce				
2.1	**Ensure more Māori ophthalmologists**	2.1.1	Recognize Māori applicants in selection with additional selection points and a guaranteed multiple mini-interviews.	Complete since 2020
		2.1.2	Ensure there is a member of the Māori and Pacific Peoples Eye Health Committee on the NZ Selection Panel.	Complete since 2020
		2.1.3	Work with the medical schools' Indigenous admissions schemes, careers events and education sessions to promote ophthalmology as a career.	Complete
		2.1.4	Offer scholarships to Māori medical students.	Ongoing since 2020
		2.1.5	Offer scholarships to Māori junior doctors.	Ongoing since 2020
		2.1.6	Develop with our partners a mentorship and whanaungatanga program for medical students and junior doctors considering a career in ophthalmology.	Ongoing since 2022
		2.1.7	Develop with our partners a mentorship and whanaungatanga care program to support Māori trainees once they are on the program.	Ongoing since 2023
		2.1.8	Undertake regular progress reviews of the above programs and update them as required.	Ongoing from Q1 2024

Action		Deliverables		Timeline
2.2	**Support the training of more Māori optometrists**	2.2.1	Share resources with New Zealand Association of Optometrists (NZAO) and the University of Auckland Optometry School to facilitate similar access pathways and whanaungatanga for Māori optometrists.	In progress
		2.2.2	Make available to NZ Optometry any RANZCO resources that might facilitate inclusion of tikanga into their training program.	In progress
2.3	**Support the recruitment of more Māori nurses and technicians**	2.3.1	Through RANZCO Fellows encourage ophthalmology departments to establish access pathways and whanaungatanga for Māori nurses and technicians.	In progress
2.4	**Support kaiāwhina**	2.4.1	RANZCO recognise and support the involvement and contribution of the kaiāwhina workforce in the eye health.	In progress
Kaupapa 3: Rangahau Māori – Ensuring there is adequate data on Māori eye health				
3.1	**Facilitate the collection of data to support Māori health equity**	3.1.1	Facilitate the establishment of a Māori Eye Health Data Working Group (DWG) with relevant stakeholders.	Complete
		3.1.2	Prepare a scoping paper on what data is required and how it might best be collected, how it will be managed and propagated and data sovereignty - kaitiakitanga.	In progress
		3.1.3	Consider data security and management in line with Te Tiriti o Waitangi articles and health principles.	In progress
		3.1.4	Encourage and support preparation for funding applications for data acquisition and analysis in identified areas of needs.	In progress
		3.1.5	Encourage data to be published data in formats that can be accessed by all relevant stakeholders	In progress
		3.1.6	RANZCO and KMA together advocate for the National Eye Health Survey (NEHS) with the support of Eye Health Aotearoa (EHA).	Ongoing since 2022
		3.1.7	Advocate for a long-term program for ongoing data acquisition and analysis and dissemination.	In progress
		3.1.8	Provide data support to the Māori Model of Care Eye Health Working Group (MoCWG).	In progress

Kaupapa 4: Te Ao Māori - RANZCO trainees and Fellows embrace Te Ao Maori and are culturally safe				
Action		**Deliverables**		**Timeline**
4.1	**Cultural safety in training**	4.1.1	Cultural safety training prior to induction and in the RANZCO trainee induction program.	Completed since 2022
		4.1.2	Mandatory on-line cultural safety modules during training.	Completed since 2022
		4.1.3	Mandatory trainee attendance at a cultural safety course approved by the Māori and Pacific Peoples Eye Health Committee (MPEHC) within the first two years of training.	Completed since Q1 2023
		4.1.4	A mandatory cultural safety critical reflection task in 4th year.	Completed since Q1 2023
		4.1.5	Mandate that all training supervisors must attend a cultural safety course approved by the MPHC within the first 3 years of commencing supervisor role.	In progress
		4.1.6	Encourage all NZ RANZCO Trainees to use the kaupapa Māori framework in eye examination settings to enhance Māori experience	In progress
4.2	**Cultural safety for Fellows and RANZCO staff**	4.2.1	With our partners develop and make available a ToW and tikanga learning module for RANZCO staff and Fellows.	In progress
		4.2.2	Facilitate opportunities for and encourage introduction level Te Reo Māori me ngā tikanga Māori wananga for all trainees, Fellows and staff.	In progress
		4.2.3	Facilitate access to and encourage more advanced level Te Reo Māori me ngā tikanga Māori wananga for those wishing to extend their skills.	In progress
		4.2.4	Mandate that all NZ Branch executive members must have already attended the approved cultural safety course approved by the MPEHC or are scheduled to attend within 12 months of joining the executive.	In progress
		4.2.5	Mandate that all NZ QEC members must have attended a cultural safety course approved by the MPHC or are scheduled to attend within 12 months of joining the committee.	In progress
		4.2.6	Encourage all federal RANZCO Board members to attend a cultural safety course approved by the MPEHC.	In progress
		4.2.7	Encourage all NZ RANZCO Fellows and interested Australian Fellows to attend a cultural safety course approved by the MPEHC with appropriate CPD credits.	Ongoing from Q1 2024

Action		Deliverables		Timeline
		4.2.8	Encourage relevant RANZCO office staff to attend a cultural safety course approved by the MPEHC.	Q1 2024
		4.2.9	Encourage all NZ RANZCO Fellows to use the kaupapa Māori framework in eye examination settings, to enhance Māori experiences	Q1 2024
		4.2.10	Establish a Māori health session as a regular component of the annual NZ Branch conference.	In progress
		4.2.11	Include an acknowledgement of ToW at the beginning of all College meetings whether on-line or live.	Ongoing since 2021
		4.2.12	For NZ-based meetings, on-line or live, include karakia whakatimatanga and karakia whakamutunga at all meetings in addition to an acknowledgement of ToW.	Complete
		4.2.13	To facilitate the development of RANZCO Tikanga Māori resources that explains practices of karakia, mihi whakatau, powhiri etc. and include waiata.	In progress
		4.2.14	Include a mihi whakatau in the annual NZ branch meeting and any bi-national Congress held in NZ.	Complete
		4.2.15	Seek regular feedback from relevant stakeholders on our Fellow's cultural safety.	Ongoing
Kaupapa 5: Pae ora - Equitable access to eye health and outcomes for Māori				
5.1	**Advocate for improved Māori eye health care**	5.1.1	Advocate for Māori participation at the senior management/planning level in public ophthalmology	Complete
		5.1.2	Advocate for improved access to and service delivery of ophthalmic care for Māori.	In progress
5.2	**Support the development of a Māori model of eye health care**	5.2.1	Facilitate the establishment of a Māori Model of Care Eye Health Working Group (MoCWG) with relevant stakeholders.	Q2 2024
		5.2.2	The MoCWG to create a scoping paper considering potential models and how they might be established.	Q4 2024
		5.2.3	Develop strategic equity goals in the areas of care delivery (eg. Did Not Attend (DNA) policies to provide equitable access to services) and the following key conditions: Cataract Surgery, Diabetic Retinopathy and Keratoconus.	

Action		Deliverables		Timeline
		5.2.4	Develop Māori and Pacific Peoples Ophthalmic Centres in the community dedicated to providing equitable surgery and clinical care for Māori and Pacific Peoples (eg. dedicated surgical units with public contracts for Māori and Pacific patients delivering high-volume cataract surgery, diabetic intravitreal injections and Panretinal Photocoagulation (PRP) laser, and Corneal Cross-linking; dedicated Multidisciplinary clinics for Māori and Pacific patients.	
		5.2.5	Collaborate with DWG to make recommendations to relevant stakeholders including RANZCO on how eye health equity for Māori can be achieved.	Q4 2025 – dependent on NEHS
		5.2.6	Recommend a ToW-based Model of Care to the Government.	Q4 2025
5.3	**Support a ToW based eye health wellbeing plan for NZ**	5.3.1	Utilize data from the DWG to determine the important factors beyond immediate eye care that contribute to or detract from eye health in NZ.	Q4 2025 – dependent on NEHS
		5.3.2	Collaborate with relevant stakeholders to address the issues identified under 5.2.1.	Q4 2025
		5.3.3	Provide advice to relevant stakeholders including Te Whatu Ora (Health New Zealand on an eye health wellbeing plan for NZ.	Ongoing

Glossary of abbreviations:

DWG	Data Working Group for Māori Eye Health
EHA	Eye Health Aotearoa (represents all eye care stakeholder in Aotearoa New Zealand including KMA, RANZCO, Blind and Low Vision New Zealand, NZAO, Macular Degeneration New Zealand, Glaucoma New Zealand, Vision Impairment Charitable Trust, School of Vision Science
KMA	Kapo Māori Aotearoa
MoCWG	Māori Model of Care Eye Health Working Group
MPEHC	RANZCO Māori and Pacific Peoples Eye Health Committee
NEHS	National Eye Health Survey
NZAO	New Zealand Association of Optometrists
RANZCO	Royal Australian and New Zealand College of Ophthalmologists
TAPWG	Tiriti o Waitangi Action Plan Working Group
Te Ohu Rata	(Te Ora – Māori medical doctors association)
ToW	Tiriti o Waitangi

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RANZCO
The Royal Australian and New Zealand College of Ophthalmologists
THE LEADERS IN COLLABORATIVE EYE CARE

Kāpō Māori Aotearoa New Zealand Inc.

RANZCO

RANZCO Pacific Peoples Eye Health Action Plan (PPAC)

RANZCO
The Royal Australian and New Zealand College of Ophthalmologists
THE LEADERS IN COLLABORATIVE EYE CARE

Introduction

The Royal Australian and New Zealand College of Ophthalmologists (RANZCO) is the medical college responsible for the training and professional development of ophthalmologists in Aotearoa/New Zealand and Australia. We seek to improve eye health across Aotearoa/New Zealand and Australia, as well as further afield, by providing best quality education, training, and continuing professional development; by promoting eye health care and the work of ophthalmologists; and through collaboration with others involved in the delivery of eye health care.

RANZCO's Pacific Peoples Eye Health Action Plan is developed with careful consideration by the Māori and Pacific Peoples Eye Health Committee in collaboration with the Pasifika Medical Association (PMA) and aims to address eye health inequities for Pacific Peoples in Aotearoa.

There are 5 key areas of focus:

1. Governance
2. Workforce
3. Data collection and management
4. Cultural safety
5. Service delivery

The plan, initially developed in April 2023, and revised in January 2025, is ambitious but also clearly articulates the steps we believe need to be taken in order to achieve equity. By working together we can make a difference.

Pacific Peoples Eye Health Inequity in Aotearoa

Pacific People are still considered a minority ethnic group in Aotearoa, and Māori and Pacific populations in Aotearoa experience worse health outcomes compared to other New Zealanders.[1]

Despite Pacific Peoples making up only about 7% of the New Zealand population, 43% of corneal transplants for advanced keratoconus (those with hydrops) performed in the Auckland keratoconus study (2013) were Pacific subjects".[2]

Pacific Peoples also present 10 years earlier with cataracts and have more severe disease progression.[3]

A study conducted in South Auckland revealed that of those who have type II diabetes, the overall prevalence of retinopathy and macular disease was moderate or more severe by 2.80 fold in Māori, and 3.55 times more common in Pacific Peoples compared to NZ Europeans.[4]

Currently there is no national eye health survey in New Zealand, therefore a true picture of inequity is unknown. More data is required on the prevalence of eye disease among Pacific Peoples; hence the emphasis on data acquisition and management in the Pacific Peoples Eye Health Action.

Pacific Eye Health Action Plan

The following strategic goals were set under the PAP, with specific actions and deliverables outlined to achieve the goals.

Goal 1: Recognise Pacific Peoples in our relationships and our organisation

- RANZCO is committed to building and formalising partnerships with key Pacific professional and community stakeholders.

- RANZCO will develop a separate strategy to improve ophthalmic health in the Pacific Region, with a focus on sustainable teaching partnerships with established institutions in the region.
- RANZCO will further engage our membership and stakeholders, to raise internal and external awareness of our PAP across the College and eye sector.

Goal 2: Expand the Pacific Peoples Eye Care Workforce

- To encourage more Pacific doctors into a career in ophthalmology, RANZCO has adopted a centralised recruitment process that targets and offers additional selection points to Pacific applicants and automatically allocates an interview to qualified applicants who identify as Pacific.

  In addition, RANZCO provides multiple scholarships and other grants for Pacific medical students or junior doctors who wish to pursue a career in ophthalmology.
- RANZCO will continue the efforts to increase the number of ophthalmologists who identify as Pacific through existing and new measures.
- RANZCO recognises the additional challenges Pacific trainees face and is committed to provide additional flexibility and culturally safe support as appropriate, whilst continuing to maintain standards.
- RANZCO supports the training of more Pacific optometrists, nurses, and technicians and will offer assistance and resources to our eye care partners to assist them with this.

Goal 3: Ensure adequate insights and evidence on Pacific Peoples eye health

- In New Zealand, the extent of inequity in eye health is largely unknown. However, New Zealand has never had a population-based eye health survey.

  In collaboration with Eye Health Aotearoa (which represents all eye health related organisations within Aotearoa New Zealand), RANZCO has been advocating for our first National Eye Health Survey. This aim to collect national data on the prevalence of vision impairment and its main causes, as well as information on the access to eye care services for Māori, Pacific People, and all other New Zealanders. This information will guide future policy formulation, eye health service delivery planning and economic analysis.
- RANZCO will advocate for a long-term program for ongoing data acquisition and analysis and dissemination to support Pacific Peoples' health equity.

Goal 4: RANZCO trainees and Fellows are culturally safe

- RANZCO has taken the following measures to increase cultural safety amongst RANZCO fellows and trainees:
  - Cultural safety training is embedded at multiple points in the RANZCO training program.
  - RANZCO Fellows have access to the RANZCO Cultural Safety Module as a component of CPD for ophthalmologists.
  - A number of Māori specific cultural safety training courses, e.g., MIHI 501 and Te Ao Māori training were provided to RANZCO Board members, New Zealand Branch Executives, Committee members and College staff.
  - Cultural safety training courses will become mandatory for all branch executive and education committee members and will be encouraged for all trainee supervisors and Fellows on an ongoing basis.
- RANZCO is committed to continuous improvement and evaluation of the cultural safety learning modules in the RANZCO curriculum.

- RANZCO will continue to introduce measures, i.e., training course and resources, that enhance and maintain cultural competency in the healthcare workforce.

Goal 5: Equitable access to eye health and outcomes for Pacific Peoples

- RANZCO will collaborate with stakeholders to advocate for improved Pacific Peoples eye health care.
- RANZCO supports the development of a Pacific Peoples model of eye health care.
- RANZCO Supports a Te Tiriti o Waitangi based eye health wellbeing plan for New Zealand.

Goal 1: Recognise Pacific Peoples in our relationships and our organisation	
Action	**Deliverables**
1.1 Build and formalise Partnerships with key Pacific professional and community stakeholders.	1.1.1 Establish a Pacific Peoples Action Plan Working Group (PAPWG) that is based on the framework outlined in the 2024 NZ Ministry of Health document, Te Mana Ola: The Pacific Health Strategy. Specific partners will be invited to have representation, including the Pasifika Medial Association consult and seek feedback from other groups including: • Te Whatu Ora (Health New Zealand) & Manatū Hauora (Ministry of Health New Zealand) • Pacific Primary Care Providers in New Zealand • "Pacific Chapter" of the College of General Practice • Fred Hollows Foundation New Zealand
	1.1.2 Support the Global Eye Health Committee to develop a separate strategy to improve ophthalmic health in the Pacific Region, with a focus on the existing programs such as those at the Pacific Eye Institute to ensure sustainable teaching partnerships with established institutions in the region (eg PNG and Fiji).
	1.1.3 Extend an invitation to Pacific Peoples in the health sector to share their experiences or stories. Staff can then share them through print and digital media.
	1.1.4 Encourage staff and senior leaders to participate in external events to recognise and celebrate Pacific events.
1.2 Raise internal and external awareness of our PAP across our college and the sector	1.2.1 Develop and implement a strategy to communicate the RANZCO PAP to College members, staff, and external stakeholders.
	1.2.2 Communicate our commitment to Pacific action publicly, via the established PMA network and general media.
	1.2.3 Implement the communications plan developed at 1.2.1, promoting collaboration through ongoing active engagement with all stakeholders.
	1.2.4 Develop culturally appropriate resources with involvement of Pacific stakeholders to promote the PAP.
	1.2.5 Raise a 'call to action' among fellows and staff to work towards addressing eye health inequities
Goal 2: Expand the Pacific Eye Care Workforce (Pipeline approach)	
Action	**Deliverables**
2.1 Ensure more Pacific ophthalmologists	2.1.1 Recognise Pacific applicants in selection with additional selection points and a guaranteed multiple mini-interviews, with regular process reviews and updates as required.
	2.1.2 Ensure there is a member of the Māori and Pacific Health Committee on the NZ Selection Panel, with regular process reviews and updates as required.
	2.1.3 Work with the medical schools' Indigenous and Pacific admissions schemes, careers events and education sessions to promote ophthalmology as a career, with regular process reviews and updates as required.
	2.1.4 Offer scholarships to Pacific medical students and junior doctors, and advertise these through our stakeholder partners such as the PMA scholarship network, with regular process reviews and updates as required.

Action	Deliverables
2.1 Ensure more Pacific ophthalmologists (cont)	2.1.5 Develop mentorship and care program/workforce ophthalmology training pathways for medical students, medical students, junior doctors and Pacific trainees once they are on the program. Partner with the PMA Pacific Academy in secondary schools, PMA Trainee Symposium for RMOs and webinars to attract Pacific ophthalmologists and other eye health workers, with regular process reviews and updates as required.
2.2 Support the training of more Pacific optometrists	2.2.1 Share resources with New Zealand Association of Optometrists (NZAO) and the University of Auckland Optometry School to facilitate similar access pathways and support for Pacific optometrists.
	2.2.2 Make available to NZ Optometry any RANZCO resources that might facilitate inclusion of Pacific Peoples into their training program.
2.3 Support the recruitment of more Pacific nurses and technicians	2.3.1 Through RANZCO Fellows encourage ophthalmology departments to establish access pathways and support for Pacific nurses and technicians.
Goal 3: Ensure adequate insights and evidence on Pacific Peoples eye health	
Action	**Deliverables**
3.1 Ensure adequate insights and evidence on Pacific eye health	3.1.1 RANZCO to advocate for the National Eye Health Survey with the support of Eye Health Aotearoa (EHA) to gather more data on the level and location of eye health need for Pacific Peoples.
	3.1.2 Advocate for a long-term program for ongoing data acquisition and analysis and dissemination.
	3.1.3 Partner with the Fred Hollows Foundation New Zealand and the University of Auckland agreement to gather data on Pacific in the region.
	3.1.4 Partner with Te Whatu Ora to obtain ethnicity data for ophthalmic conditions throughout NZ.
	3.1.5 Provide data support to the Pacific Model of Care Eye Health Working Group (PMoCWG).
	3.1.6 Develop opportunities for a summer studentship and research opportunities focusing on Pacific eye health.
Goal 4: Cultural Safety	
Action	**Deliverables**
4.1 Cultural safety in training	4.1.1 Cultural safety in training
	4.1.2 Partner with established resource providers (eg PMA, RACS, MCNZ and college of GPs)
	4.1.3 Mandatory on-line cultural safety modules during training, including a mandatory cultural safety critical reflection task in 4th year.
	4.1.4 Mandate that all training supervisors must attend a cultural safety course approved by the MPHC within the first 3 years of commencing supervisor role.

4.2 Cultural safety for Fellows and RANZCO staff	4.2.1 With our partners develop and make available a Pacific/Fonofale model learning module for RANZCO staff and Fellows.
	4.2.2 Facilitate opportunities for and encourage the acquisition of relevant Samoan and Tongan language for all trainees, Fellows and staff. (eg. Free language papers at the Manukau Institute of Technology; Language Courses via "Drops" Smartphone App). Facilitate access to and encourage more advanced Pacific language skills for those wishing to extend their skills.
	4.2.3 Mandate that all NZ Branch executive and NZ QEC members must have already attended the approved cultural safety course approved by the MPEHC or are scheduled to attend within 12 months of joining the executive or QEC committee. Encourage all federal RANZCO Board members, NZ RANZCO Fellows, interested Australian Fellows and all RANZCO office staff to attend a cultural safety course approved by the MPEHC, with appropriate CPD credits where applicable.
	4.2.4 Require all NZ RANZCO Fellows to use a culturally safe approach in eye examination settings to enhance Pacific Peoples' experiences
	4.2.5 Establish a Māori and Pacific Peoples health session as a regular component of the annual NZ Branch conference.
	4.2.6 Seek regular feedback from relevant stakeholders on our Fellows' cultural competence.
Goal 5: Equitable access to eye health and outcomes for Pacific Peoples	
Action	**Deliverables**
5.1 Partner with the Eye Health network to advocate for improved Pacific eye health care	5.1.1 Advocate for Pacific Peoples participation at the senior management/planning level in public ophthalmology
	5.1.2 Advocate for improved access to and service delivery of ophthalmic care for Pacific.
	5.1.3 Advocate for a national diabetic retinopathy surveillance program with access to monitoring closer to home.
	5.1.4 Advocate for assessment for uncorrected refractive error in underserved locations by optometrists employed by hospitals.
	5.1.5 Advocate for a funded biennial eye health checks for Māori and Pacific Peoples with community services cards from age 55.
	5.1.6 Advocate for funded screening for keratoconus for Māori and Pacific youth.
5.2 Support the development of a Pacific Peoples model of eye health care	5.2.1 Facilitate the establishment of a Pacific Peoples Model of Care Eye Health Working Group (PMoCWG) with relevant stakeholders and Government that acknowledges the 17 different ethnicities in the Pacific. Based the framework around the 2020 NZ Ministry of Health document, Ola Manuia Pacific Health and Wellbeing Action Plan 2020-2025
	5.2.2 The PMoCWG to create a scoping paper on how they might be established within eye care.
	5.2.3 Support ways of reducing barriers for Pacific to access eye health care for example having navigators to reduce DNA's and mobile services to provide equitable access.
	5.2.4 Make recommendations to relevant stakeholders including RANZCO on how eye health equity for Pacific Peoples can be achieved.

5.2	**Support the development of a Pacific Peoples model of eye health care (cont)**	5.2.5 Advocate for the development of Pacific Ophthalmic Centres in the community dedicated to providing equitable surgery and clinical care for Pacific (eg. dedicated surgical units with public contracts for Pacific patients delivering high-volume cataract surgery, diabetic intravitreal injections and PRP laser, and Corneal Cross-linking; dedicated MDT clinics for Pacific Peoples patients.
5.3	**Support a Pacific Peoples focused eye health wellbeing plan for NZ**	5.3.1 Utilise data to determine the important factors beyond immediate eye care that contribute to or detract from eye health in NZ.
		5.3.2 Collaborate with relevant stakeholders to address the issues identified under 5.2.1.
		5.3.3 Provide advice to relevant stakeholders on an eye health wellbeing plan for NZ.

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Glossary of abbreviations:

EHA	Eye Health Aotearoa (represents all eye care stakeholder in Aotearoa New Zealand including KMA, RANZCO, Blind and Low Vision New Zealand, NZAO, Macular Degeneration New Zealand, Glaucoma New Zealand, Vision Impairment Charitable Trust, School of Vision Science
PMoCWG	Pacific Peoples Model of Care Eye Health Working Group
MPPEHC	RANZCO Māori and Pacific Peoples Eye Health Committee
NZAO	New Zealand Association of Optometrists
RANZCO	Royal Australian and New Zealand College of Ophthalmologists
PPAP WG	Pacific Peoples Action Plan Working Group
PMA	Pasifika Medical Association (PMA)

Appendix 1

(Goal 5.2.3):

1. Equity in Cataract Surgery:

- Develop specific equity goals in the areas of Cataract Surgery.
- Pacific Peoples develop more severe cataracts at a younger age compared to non-Pacific Peoples. NZ Surgical Intervention Rates for cataract surgery are one of the lowest in the developed world, ranked 28th of 32 OECD countries (both statistics from article here).
- Create a dedicated National Prioritisation Web Service Category for Pacific Peoples to give automatic access to cataract surgery. Currently, automatic prioritisation pathway is used for patients with Diabetes, Glaucoma, Risk of Angle closure, Risk of worsening macular degeneration, or risk of complication.
- Ring fence minimum numbers of cataract surgery for Pacific Peoples (eg. 20% minimum Pacific).

2. Equity in Diabetic Retinopathy

- Develop specific equity goals in the areas of Diabetic Retinopathy.
- Pacific Peoples have high burden of Diabetes (23% in south Auckland study) and diabetic retinopathy (65%) – article here.
- Create multidisciplinary ophthalmology diabetic clinics with GPs or diabetes nurse specialists from Pacific Primary Care Service Providers to improve education and diabetic management for Pacific.
- (Joint MDT clinics are already established with ophthalmologists and endocrinologists for Thyroid Eye Disease; Neurologist and neurology nurses specialists for Neuroophthalmology; immunologists for Uveitis clinics etc).
- Ensure a minimum number of Pacific Peoples diabetic screening, intravitreal injection and laser clinic interventions.
- Partner with GP and nursing staff from the Pacific Primary Care Providers when staffing the procedural (eg injection clinics) and specialist ophthalmology clinics (eg uveitis).

3. Equity in Keratoconus Care

- Develop specific equity goals in the areas of Keratoconus, with a nationwide secondary schools screening program and a minimum number of Corneal Cross-linking procedures.

  The prevalence of keratoconus appears up to 45x greater in Maori (1 in 45) and Pacific Peoples compared to Pakeha (1 in 2000). Therefore consider prioritising 45x the number of crosslinking performed in Maori and Pacific patients compared to Pakeha (see study here)

Acknowledgements

Pasifika Medical Association:

Debbie Sorensen
Dr Maryann Heather
Sir Collin Tukuitonga
Abel Smith
Dr Jitoko Cama
Dr Kiki Maoate

RANZCO Maori and Pacific Peoples Eye Health Committee:

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Version Control History

As of April 2023, the following changes have been made to RANZCO's Pacific Peoples Eye Health Action Plan:

Section	Description of changes
Throughout the document	Changed all references to 'Pasifika' to "Pacific Peoples" in accordance with the guidelines released by Te Whatu Ora on the use of respectful and inclusive terminology when referring to Pacific Peoples.
Deliverables 1.1.1. and 5.2.1.	Replaced the Pacific Health Strategy link to reflect updated guideline.
Deliverable 1.1.2.	Deliverable changed to acknowledge the work of the Global eye Health Committee in achieving this action item.
Deliverable 2.1.5.	Deliverable updated to remove high school students from the target audience.
Action 3.1.	New deliverable added at 3.1.6.
Action 5.1.	Action item renamed to reflect growing role of the Eye Health Network.
Deliverable 5.2.1.	Amended the deliverable to include an acknowledgement of the different ethnicities in the Pacific.
Action 5.2.	New deliverable added at 5.2.3.
Action 5.3.	Action item renamed.

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THE LEADERS IN COLLABORATIVE EYE CARE