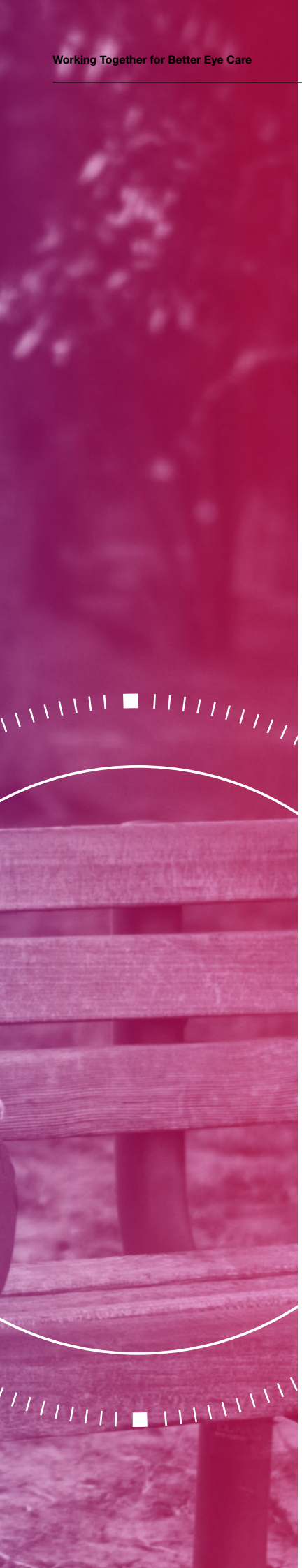
Working Together for Better Eye Care

Optometry AUSTRALIA



"Our ageing population and the increasing prevalence of chronic health conditions mean we need concerted action across the healthcare system to address Australia's eye-health challenges. The time to act is now."

Darrell Baker – National President, Optometry Australia

Working Together for Better Eye Care

The purpose of *Working Together for Better Eye Care* is to remind government, the vision sector and consumers about Australia's serious eye health challenges and their impact on individuals and the broader community, and to recommend practical ways in which these issues can be tackled by working together with a renewed sense of urgency and genuine collaboration.

The root causes and impacts of deficient eye care are well understood. The solutions are proven and readily implementable; however they will only be achieved if policy makers, funders, regulators, eye health professionals and consumer bodies work together with a renewed level of common purpose.

Working *Together for Better Eye Care* is a collective **call for action** to make this shared commitment to implementing practical changes that will deliver better eye care for all Australians, particularly our senior citizens, the economically, socially and geographically disadvantaged, and our First Nations peoples.

Recommendations

Working Together for Better Eye Care recommends **six readily achievable actions** that utilise optometrists, working collaboratively with other health professionals, to make a genuine difference in providing timely eye care for Australians:

1. Integrate successful collaborative care models between ophthalmologists and optometrists into the mainstream health system for patients with stable glaucoma, pre and post-operative cataracts, paediatric eye care and early-stage diabetic retinopathy.
2. Permit optometrists to prescribe oral medications for eye health conditions.
3. Develop and pilot models of care that utilise optometrists to enhance access for patients requiring intravitreal injections for AMD and DMO, starting in outer metropolitan areas and regional, rural and remote communities.
4. Develop a national strategy to ensure that people with diabetes receive eye examinations from their optometrists to enable the early detection and treatment of diabetic retinopathy.
5. Implement consistent ophthalmology referral guidelines, templates and pathways for common eye health conditions, with a facilitated transition to electronic referrals.
6. Introduce telehealth MBS items for brief optometry consults where face-to-face visits are impractical and to enable ophthalmology reports and advice to be relayed to patients.


AT 900

Contents

Foreword from the National President

Dear Friends

On behalf of Optometry Australia, I am pleased to present 'Working Together for Better Eye Care'.

Its purpose is to ignite an important conversation about the timely diagnosis and treatment of eye disease in Australia. With an ageing population, eye disease is increasing but unfortunately our health system is failing too many Australians who are unnecessarily impacted by vision loss or blindness because they do not have access to timely and affordable eye-health care.

It is time we did something about this. Loss of vision can have a profound and often devastating impact on individuals, and a major economic and social effect on the broader community. An estimated 90% of blindness or vision loss is preventable or treatable, if detected early. Yet over 100,000 Australians are blind or have severe vision loss, and the numbers are rising.

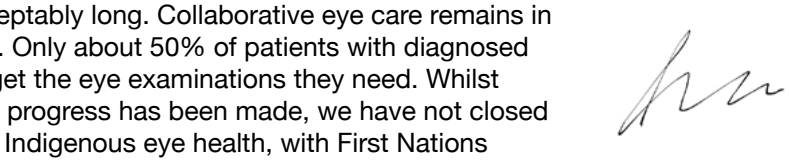
As a nation, I fear we may have become indifferent to the serious impact of eye disease. While we have frameworks, plans, reports, and surveys, we are still struggling with issues that were identified a decade or more ago – and many of them have arguably gotten worse. Public ophthalmology wait times in areas like cataract surgery are unacceptably long. Collaborative eye care remains in its infancy. Only about 50% of patients with diagnosed diabetes get the eye examinations they need. Whilst significant progress has been made, we have not closed the gap in Indigenous eye health, with First Nations Peoples three times more likely to be blind or visually impaired; and a tsunami of age-related macular disease is rapidly approaching.

Optometrists have a crucial role to play. Australia's 6,000 registered optometrists perform 10 million eye checks annually. Optometrists are appropriately the first port of call for 80% of people, often identifying eye disease in asymptomatic patients. Increasingly, optometrists are working in collaboration with ophthalmologists and other health professionals in treating, managing and triaging patients with eye disease, as well as filling gaps where there is not timely access to care.

However, Australia's optometrists are seriously under-utilised compared to their counterparts in similar developed nations like the United States, the United Kingdom and New Zealand. 'Working Together for Better Eye Care' identifies readily achievable actions that better utilise the skills of optometrists to enhance patient access and increase the efficiency of Australia's eye-health system.

With the next Federal election looming and the Aged Care Royal Commission highlighting the health and wellbeing issues faced by older Australians, now is the time to demand concerted action.

Yours sincerely



Darrell Baker
National President

"In Australia we know the challenge of eyesight is that over 50% of Australians, about 13.2 million Australians, have one or more long-term eye conditions that can affect eyesight in some way, shape or form."

Hon Greg Hunt MP, Federal Health Minister, World Sight Day 2019

Incidence of vision impairment in Australia

With an ageing population, the number of people with vision impairment in Australia is increasing.

Economically and socially disadvantaged Australians are more likely to have vision impairment.

All the main causes of vision impairment are most prevalent in older Australians, potentially impacting their ability to live independently in the community.

The prevalence of vision impairment and blindness in Indigenous Australians is three times higher than non-Indigenous Australians.[v]

People with a range of chronic diseases, including diabetes, high blood pressure, auto-immune disease and liver disease are also more susceptible to eye problems.[vi]

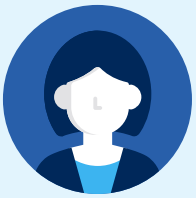
People in regional Australia are more susceptible to vision impairment as they are, on average, older with higher rates of diabetes and have less access to specialist eye-care services.[vii]

"Macular disease affects people of all ages. It is the leading cause of blindness and severe vision loss in Australia. It is estimated there are approximately 8.5 million people over the age of 50 years at risk of macular disease and over 1.7 million Australians with some evidence of macular disease."

MDFA, Strategic Action Plan for Macular Disease, March 2019

It is estimated that **over 13 million Australians** have one or more long-term eye condition, and that chronic vision disorders affect 93% of people aged 65 and over.[i]

The National Eye Health Survey reported that, in 2016, more than 453,000 Australians were **living with vision impairment or blindness.**[iii]



Across all age groups, **59% of women** have a chronic eye condition compared with 51% of men.[ii]

Nearly 85% of Australians with vision impairment are **aged 50 years and over.**[iv]

Five conditions are primarily responsible for vision impairment in Australia:[viii]

- Uncorrected Refractive Error
- Cataract
- Age-related Macular Degeneration
- Diabetic Retinopathy
- Glaucoma

Over 60% of vision impairment is due to the four types of Uncorrected Refractive Error:

- Myopia (short-sightedness)
- Hyperopia (long-sightedness)
- Astigmatism (uneven focus)
- Presbyopia (loss of near vision with age)

Main causes of vision impairment

Refractive Error can be corrected by spectacles or contact lenses or through refractive surgery using lasers or implanting a replacement intraocular lens.

About 15% of vision impairment is due to **cataracts**, a clouding of the lens in the eye that causes blurred or distorted vision. Cataracts are treated by surgery to remove and replace the cloudy lens with an intraocular lens.[ix] Cataracts are the leading form of blindness in Indigenous Australians.[x]

"People living in Aboriginal and Torres Strait Islander communities wait around 57% longer for cataract surgery than other Australians, with some people waiting years for surgery."

Judith Abbott, CEO, Vision 2020 Australia

Around 12% of vision impairment is due to two different retinal conditions: **Age-Related Macular Degeneration (AMD)** and **Diabetic Retinopathy**.

AMD is the most common macular disease affecting 1.3 million Australians and is the nation's leading cause of blindness and severe vision loss. The main risk factors are age, family history and smoking. Neovascular (or "wet") AMD is treated mainly with regular eye injections and with laser therapy.[xi] There is currently no treatment for atrophic (or "dry") AMD.

Between 300,000 and 400,000 Australians have some degree of **Diabetic Retinopathy**, which is a complication of diabetes. The treatments include eye injections, laser therapy and surgery.[xii]

Glaucoma refers to eye diseases where vision loss is due to damage to the optic nerve. The main risk factors are increased eye pressure, age and family history. Vision loss is usually gradual beginning with peripheral vision loss. Early diagnosis and treatment can delay or halt progression of the disease. Treatments includes eye drops, oral medications, laser therapy and surgery.[xiii]

Social and economic cost of vision loss in Australia

Blindness or severe vision loss has a profound impact on the health, quality of life, independence, and overall wellbeing of affected individuals.

Over 1,000 deaths every year are attributable to vision loss and research has found that even mild vision impairment **increases the risk of death more than two-fold**.[xv]

In its 2009 analysis, Access Economics found that vision loss prevents healthy and independent ageing and results in a:[xiv]

2×
increase in the risk of falls

2×
increase in the use of health services

3×
increase in the risk of depression

4 to 8x
increase in the risk of hip fractures

3 years
earlier admission to nursing homes

In its report, Access Economics estimated the **total economic cost of vision loss to be $16.6 billion** or $28,905 per person with vision loss aged over 40. This was made up of:

$3 billion
in health system costs

$4.2 billion
in other financial costs including $2.3 billion in productivity losses

$9.4 billion
in loss of wellbeing

(nearly) **$1 billion**
in indirect costs such as carer opportunity losses, aids and modifications.[xvi]

"Most Australians (90%) say that sight is their most valued sense, so we need to make sure everyone has access to the eye care they need."

Australian Government Department of Health

A more recent study by Deloitte Access Economics in 2015 found that the economic impact of Diabetic Macular Oedema (DMO), a type of Diabetic Retinopathy, was over $2 billion for the 72,000 affected Australians. The number of people with DMO is projected to grow to over 100,000 by 2030.[xvii]

Total allocations of health expenditure to treating vision loss are estimated to have increased from just under $3 billion in 2009 to nearly $5 billion in 2020.

With an estimated 1.7 million Australians predicted to have AMD by 2030 and similar percentage increases in the numbers of people affected by Diabetic Retinopathy, health expenditure on eye disease and the total economic impact of vision loss will continue rising in the foreseeable future.[xviii]

Timely Diagnosis and Treatment

It is estimated that **90% of blindness and vision loss among both Indigenous and non-Indigenous Australians is preventable or treatable**, if detected early.[xix]

Approximately 80% of vision impairment can be treated either by spectacle provision/correction or through cataract surgery.[xx]

Our eye-health professionals are world-class with access to the most up-to-date technologies and drugs. Yet too often, Australians with eye disease are not diagnosed or treated in a timely manner.

The 2016 National Eye Health Survey found that more than half of those with vision impairment or blindness attributed to one of the five main causes of vision loss **were not aware that they had the attributed condition**.[xxi]

It is estimated that some **50% of people with glaucoma are undiagnosed**.

In Western Sydney, **median cataract surgery wait times are more than 300 days**.[xxii] Indigenous Australians wait more than 50% longer for cataract surgery than non-Indigenous Australians.[xxiii]

Only about **half of all Australians with diabetes get the eye checks they need**.[xxiv]

In a 2018 Galaxy Poll, **only 33% of people understood that their eyes can be affected by diabetes** with only 36% of those actually diagnosed with diabetes mentioning eyes as being affected.[xxv]

There is a 20% drop out rate in intravitreal injection treatment, even though good outcomes for macular disease depend on early diagnosis, immediate commencement of injections when indicated, and regular ongoing injections at a frequency depending on individual response.[xxvi]

With the right commitment, policies and investment, these issues are addressable.

Optometrists perform 10 million eye checks annually, and 80% of people consult an optometrist about their eye health, underlining their importance in the screening, detection and referral of eye disease.[xxvii] Studies also highlight the opportunistic detection by optometrists of eye disease during routine consultations, with 26% of asymptomatic patients requiring ophthalmology referral.[xxviii]

Optometrists have a key role to play in:

- Solving the refractive error problems
- Detecting and referring appropriately for cataract surgery and AMD treatment
- Monitoring diabetic eye disease
- Co-managing glaucoma patients.

"It has been shown that optometrists are able to correctly classify disease activity with the same accuracy and errors as ophthalmologists. It is also shown that these changes can be implemented with high levels of patient satisfaction and increased throughput of retinal clinics."

Optometry Australia, Federal Budget Submission, February 2021

Why do we have these deficiencies?

There is no magic bullet that will address Australia's eye-health challenges.

However, the reasons for the deficiencies in diagnosis and treatment have been consistently identified in policy frameworks, surveys, research, and advocacy papers for more than a decade.

The primary causes for Australians losing sight due to primarily preventable conditions are:

- A lack of sufficiently strong messaging about the importance of regular eye examinations, particularly as Australians get older or are diagnosed with diabetes
- Inconsistent referral guidelines and processes
- Long wait times and waiting lists in the public health system for eye-health procedures
- An overall lack of connectedness within the eye-health system, characterised by siloed approaches, buck passing and last-century information technology systems
- Ophthalmology workforce shortages and maldistribution, particularly outside the large capital cities, and associated high costs for services.
- A failure to roll out scalable collaborative care approaches with effective triaging that enhance patient access and enable eye health professionals to practice to their full scope
- An overall lack of focus by government, industry, and health professionals on the fundamental importance of eye health as a public and population health issue.

Australia has a clear choice as a nation. Either we give eye health the priority it deserves or face a future with increasing numbers of Australians unnecessarily having to live with the personal, social, and economic impacts of blindness and vision loss.

"One thing I have noticed is how few people know that a family history of the disease brings with it a high risk of macular degeneration. When I tell them that I have a 50% chance of getting it too, most people are usually shocked."

Ita Buttrose AC, OBE, Patron, Macular Disease Foundation of Australia

Public Ophthalmology Wait Times

Ophthalmology consistently has one of the longest median and maximum public wait times of the medical specialties.

While wait times vary between the states and territories, a significant number of ophthalmology patients wait beyond the clinically recommended times of 30 days for urgent cases, 90 days for semi-urgent cases and within a year for non-urgent cases.

It is not unusual for less urgent patients to wait more than 300 days for their initial ophthalmology outpatient appointments in the public health system.[xxix]

The COVID-19 pandemic has exacerbated the long wait times for semi-urgent and non-urgent ophthalmology patients across most states and territories, with leading ophthalmologists pointing to cataract patients facing a loss of vision as a result.

Cataract surgery is a major bottleneck requiring wait list management and monitoring of patients, especially those in rural and remote areas. At the same time, there is increased demand for other health treatments, including intravitreal injections for AMD and diabetic retinopathy.Many patients have no choice but to get treated in private clinics, often with significant out-of-pocket costs. Only about 17% of intravitreal injections in these clinics are bulk-billed.[xxx]

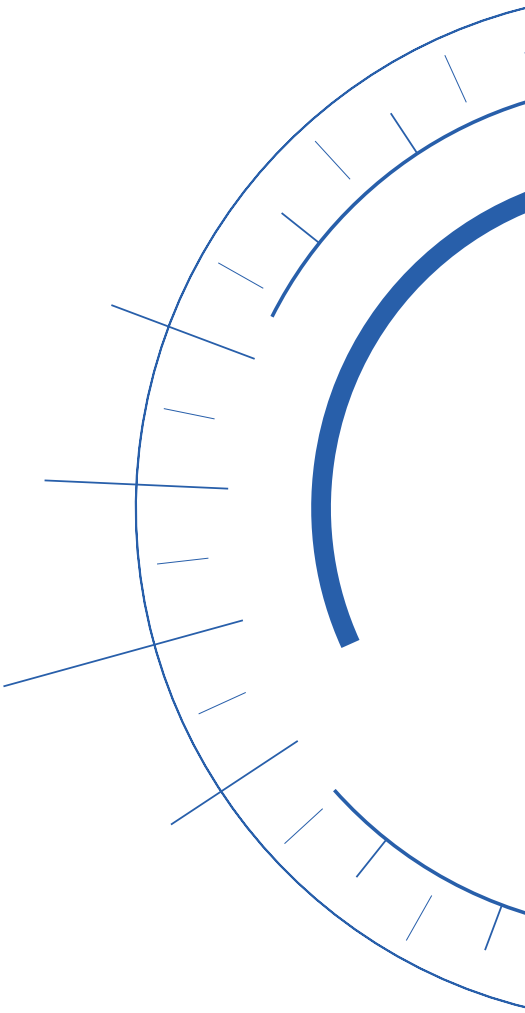
Patients who cannot afford the out-of-pocket costs are forced to wait in long queues for public ophthalmology clinics that are underfunded, under-resourced and in limited supply.[xxxi] Those in rural and remote areas must travel or rely on outreach clinics with limited ophthalmologist access.

Addressing the longstanding problem of public ophthalmology wait times requires a combination of government investment, workforce enhancements, enhanced interprofessional collaboration, and more efficient referral and triage processes.

> *Queensland pensioner Gillian Attewell carries a magnifying glass wherever she goes just so she can see. The 77-year-old waited for three years to have a cataract removed from her left eye, and is still waiting for surgery on the right."It is really hard to go through life not being able to do what you like to do. I love to read, which is really difficult to do at the moment," she said. "It's just very hard."*
>
> **ABC News, 6 December 2018, upon release of AIHW wait time statistics**

"The problem is waiting lists are endemic, not from the pandemic."

Dr Mark Chehade, Insight March 2021, Elective Surgery Post-COVID



Eye-Health Workforce

There are around 1,000 registered ophthalmologists in Australia with 84% practising in metropolitan areas (where 72% of people live). Some 21% of ophthalmologists are female, the average age of the specialty is 53 years old, and 16% of ophthalmologists work in the public sector.[xxxii]

There are 6,175 registered optometrists. Working in 1,200 communities across Australia, their demographic distribution largely reflects the population with some shortages in more rural and remote areas. Some 56% of optometrists are female and about 72% are aged under 50.[xxxiii] The majority practise in community settings, with smaller numbers in clinics and hospitals.

Orthoptists and ophthalmic nurses play important roles in eye health practising across various settings, including hospitals and ophthalmology clinics as well as in rural outreach programs.

In 2013, the Health Workforce 2025 report identified:[xxxiv]

> "**a maldistribution of ophthalmologists** with most working in urban locations, a higher-than-average reliance on international medical graduates, an impending critical shortage of paediatric ophthalmologists and a lack of funded training positions in the public sector."

In 2018, the Department of Health's Future Health Workforce Report for Ophthalmologists found there would be:[xxxv]

> "**an undersupply of ophthalmology specialists** throughout the entire projection period (through to 2030)".

Both these reports supported **shared care models between ophthalmology and optometry** to reduce wait times, deliver high quality care more efficiently and provide more timely follow-up, reducing the adverse consequences of chronic diseases.

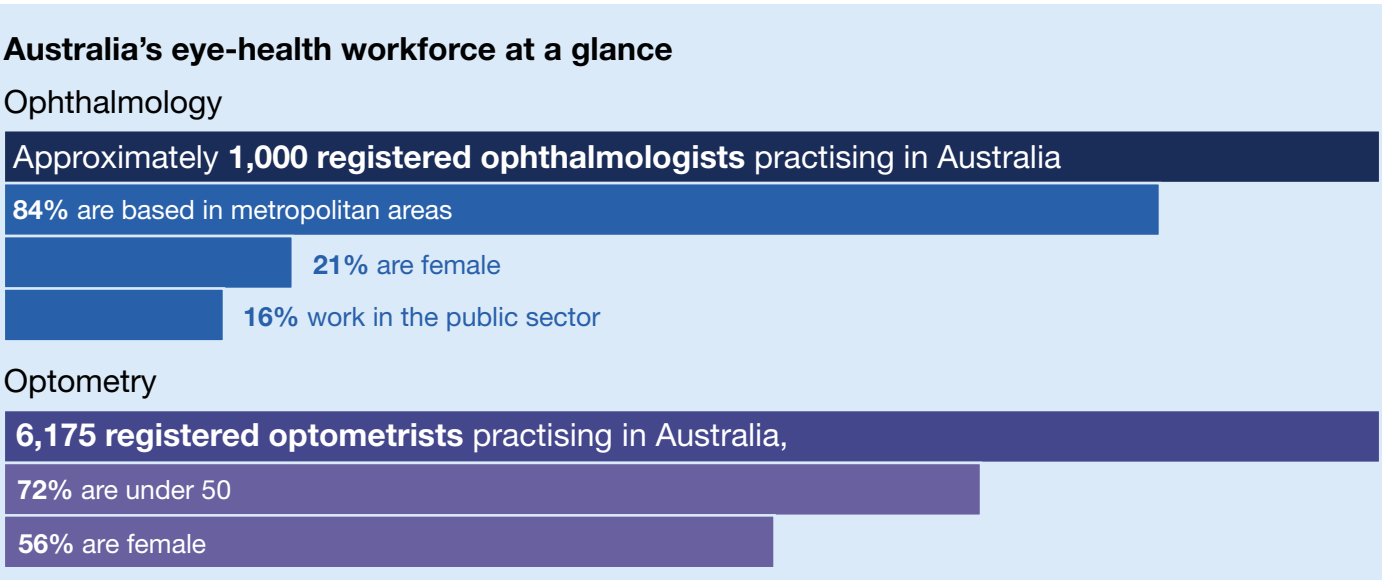
In December 2020, the MBS Review Taskforce Report for Ophthalmology recommended an "**expansion of intravitreal injections to include appropriately trained nurse practitioners and optometrists**, working to updated guidelines", citing the impact on patient access of the ongoing undersupply of ophthalmologists through to 2030.[xxxvi]

> "The Taskforce recommends a specific focus to assess the expansion of intravitreal injections to include appropriately trained nurse practitioners, optometrists and general practitioners, working to updated guidelines."
>
> **MBS Review Taskforce, Final Ophthalmology Report, December 2020**

In spite of these well-known workforce issues, it is not unusual for ophthalmologists to be required to spend time undertaking eye care for which other eye health professionals, such as optometrists, have the training and regulatory authorisation to deliver safely, efficiently and effectively.

More efficient referral and triaging practices and a commitment to allowing all eye health professionals to practice to their full scope would have the added benefit of freeing up the limited and specialised time of ophthalmologists.

Australia's eye-health workforce at a glance



Collaborative Eye Care

There are a growing number of successful formal and informal collaborations between optometry and ophthalmology around Australia.

These collaborations seek to reduce public ophthalmology wait times and enhance access by using optometrists to assess and manage patients who would otherwise be seen by ophthalmologists.

Examples of ophthalmology/optometry collaboration include:

- The **Centre for Eye Health (CFEH)** which operates a shared care glaucoma clinic and an optometrist staffed retina clinic linked to the Prince of Wales Hospital in Sydney.[xxxvii]
- The **Community Eye Care (C-Eye-C)** project for the management of newly referred glaucoma and diabetic retinopathy patients through the C-Eye-C clinic or community optometry, developed by the NSW Agency for Clinical Innovation led by Westmead Hospital.[xxxviii]
- The **Queensland Children's Hospital Paediatric Optometry Alignment Program**, where community optometrists manage and monitor stable, discharged paediatric patients.[xxxix]
- The **Australian College of Optometry** operated glaucoma clinic which works with the Royal Victoria Eye and Ear Hospital (RVEEH) in Melbourne.[xl]
- The **Glaucoma Community Care Project**, also run by the RVEEH, with selected community optometrists co-managing patients with glaucoma and after cataract surgery.[xli]

Independent evaluations have found that:

- The C-Eye-C program delivered a 62% avoidance of hospital appointments, 22% cost savings for the health system and a **10-month reduction in median wait times**.[xlii]
- The collaborative glaucoma clinic led by the Australian College of Optometry and the RVEEH **reduced the new patient glaucoma wait list by 32% at 17 months and 92% at 28 months**.[xliii]
- The **CFEH led retina clinic** addressed known barriers to eye assessment, including access, and assistance for patients who are unable/unwilling to organise eye checks.[xliv]

Hospitals and state governments are working with ophthalmology, community optometry and general practice **developing consistent referral information standards, guidelines and templates**, some of which can be communicated electronically. A good example is the Royal Hobart Hospital which has restricted access for patients who do not meet defined clinical thresholds.[xlv]

Increasingly, optometrists are working in **public hospitals** taking pressure off ophthalmologists, in **private ophthalmology clinics** preparing patients for retinal injections, and as members of collaborative teams that deliver **Indigenous eye-health services** in clinics and remote communities.

In addition, many optometrists across the country work collaboratively with private ophthalmologists in the management of chronic eye conditions, most notably glaucoma. This is most advanced in rural and regional areas.

RECOMMENDATION 1

Integrate successful collaborative care models between ophthalmologists and optometrists into the mainstream health system for patients with stable glaucoma, pre and post-operative cataracts, paediatric eye care and early-stage diabetic retinopathy.

Case Studies

Case Study 1

Community Eye Care(C-Eye-C) collaborative care model in NSW

Community Eye Care (C-Eye-C) is a collaborative care model established as an Agency for Clinical Innovation project by the NSW Government. Patients with glaucoma who have been referred to the Westmead ophthalmology outpatient clinic are triaged to community optometrists who are responsible for history-taking, clinical examinations and recommended imaging procedures, as wel as preliminary decisions regarding management plans and diagnosis. Patient records are then reviewed by the hospital ophthalmologist to confirm or amend diagnosis and management, including booking into the hospital glaucoma clinic as needed. An independent evaluation of the C-Eye-C program found that it reduced appointment wait times from 386 to 89 days, increased attendance rates from 69% to 81% and reduced health system costs by 22%. The evaluators concluded that upscaling of the model should be considered to future improve the capacity of the public eye services in Australia.

Case Study 2

Qld Children's Hospital Paediatric Optometry Alignment Program

The Paediatric Optometry Alignment Program provides community optometrists with the knowledge, skills, communications strategies, continuing education and resources to enable them to examine and treat children's eyes confidently. Optometrists who have completed the education program and meet other criteria are invited to align with the Qld Children's Hospital, enabling them to care for stable, discharged patients. They are supported by a direct line of communication with the hospital ophthalmology department, as well as events and newsletters to keep them updated on paediatric treatment and the program itself. The collaboration with aligned community optometrists helps manage the workload of the ophthalmology department ensuring only patients needing specialist ophthalmic care are required to attend the hospital.

Case Study 3

Royal Victorian Eye and Ear Hospital

Based on RANZCO guidelines, the Royal Victorian Eye and Ear Hospital (RVEEH) established a collaborative clinic with the Australian College of Optometry (ACO) in 2016. The collaboration integrated ophthalmologists, optometrists and orthoptists in the care of low-risk glaucoma patients on the RVEEH wait list with a clinic that operates part time at the ACO. More than three-quarters of the patients seen at the collaborative clinic are discharged to community-based optometry review and 16% re-referred to the RVEEH. The RVEEH new patient waitlist was reduced by 32% at 17 months and 92% at 28 months. An independent evaluation found the collaborative clinic provided effective patient-centred care, facilitated community-based follow-up when appropriate and reduced hospital glaucoma wait lists, improving access for higher risk patients.

Case Study 4

Hospital Optometry in South Australia

In 2019, an optometry pilot program ran out of a public hospital ophthalmology department in South Australia looking at how Optometrists can be utilised to reduce patient wait times. An optometrist was employed 1-2 days a week. Referrals were triaged by consulting ophthalmologists and allocated where appropriate to the optometry clinic. This included post-operative cataract patients, stable glaucoma, diabetes screening and medication toxicity screening. The program enabled hundreds of patients that were referred to the public hospital to be seen earlier, reducing the waiting lists for outpatient appointments. Many of these patients were discharged to be managed in the community or added to the surgical waiting list. The pilot showed that optometry services can be successfully integrated into public hospitals to reduce waiting lists and enable effective utilisation of hospital resources. Further research and analysis into the most efficient way of integrating these services more broadly is recommended.

Case Study 5

Lions Eye Institute Lions Outback Vision in Western Australia

The Lions Outback Vision is part of the Lions Eye Institute in Western Australia and has been providing teleophthalmology services to rural and remote communities since 2011. The teleophthalmology services work with outreach ophthalmologist and optometrist clinics as well as local optometry practices. They connect patients in real time with optometrists and ophthalmologists, increasingly utilising eye imaging technologies such as Optical Coherence Tomography (OCT) to fast-track diagnoses and place patients on surgery waiting lists on a timely basis. Three audits found that the Lions Outback Vision significantly increased the number of patient consultations performed with an increasing focus on chronic eye disease and significantly improved management of patients requiring surgery. Patient attendance rates increased markedly with no reduction in the accuracy of diagnoses. To enhance the program, the North West Hub has been funded by the Western Australian Government to enable delivery of ophthalmology and optometry services through a hub based in Broome with telehealth enabled outreach into multiple regional nodes. The Lions Outback Vision is supported by two teleophthalmology MBS items, with the potential for further enhancements through the addition of new MBS items for short optometry consultations and the transfer of ophthalmologist reports to patients through participating optometrists.

Oral Therapeutic Prescribing

In all states and territories, **optometrists with general registration** can: "obtain, have in their possession and use scheduled medicines in the course of their practice for diagnostic purposes".[xlvi]

Endorsed optometrists can prescribe topical scheduled medicines for the treatment of eye conditions and diseases.[xlvii] About two-thirds of registered optometrists are endorsed, including all current and recent graduates.[xlviii]

However, optometrists in Australia are not able to prescribe oral medications.

This is in **stark contrast to similar countries where optometrists have been prescribing oral medication for many years**:

United Kingdom
(since 2008)

New Zealand
(since 2014)

United States
(in 45 of 50 states)

In New Zealand (NZ), therapeutically endorsed (or TPA) optometrists can prescribe oral medications for eye conditions such as bacterial and viral infections, inflammatory conditions, and ocular allergies.[xlix]

In all other aspects, the scope of practice of optometrists in Australia and NZ is comparable and notably optometrists trained in Australia in the use of topical medicines can gain registration in NZ automatically and prescribe oral medicines.

Since 2014, the NZ Optometrists and Dispensing Opticians Board has found no evidence of optometrists over-prescribing or any adverse incidents related to optometrist oral prescribing reported to relevant authorities.[l]

"Despite the range of medications prescribed, the Optometrists and Dispensing Opticians Board (ODOB) has not been alerted to any out-of-scope prescribing of oral medications. Further, there have not been any adverse incidents specifically relating to the issuing of therapeutic prescriptions by optometrists in New Zealand reported to the Accident Compensation Corporation or Health and Disability Commission."

Turnbull PRK, Craig JP. Oral medication prescribing by optometrists in New Zealand. *Clin Exp Optom* 2021; 104: 425-427.

There are significant community benefits in enabling qualified community optometrists to prescribe oral medications such as antibiotics, anti-inflammatories, and anti-viral agents. Currently, optometry patients needing oral medications must be referred to a GP or ophthalmologist.

The need to visit a second health practitioner for a simple prescription can mean **additional patient cost as well as a loss of convenience**. In some cases, patients will not access the oral medication, potentially putting their eye-health at risk.

These issues are more pronounced for rural and remote patients where there are fewer GPs, longer wait times, a lack of after-hours services and challenges accessing specialist ophthalmology services.

Any decision to allow optometrists to prescribe oral medications would follow a **detailed consideration of the public benefits and risks** by the Australian Health Practitioner Regulation Agency (AHPRA) and the Optometry Board of Australia (OBA).

RECOMMENDATION 2

Permit optometrists to prescribe oral medications for eye health conditions.

Intravitreal injections

Intravitreal injections have revolutionised the management of retinal disease, becoming the standard of care for neovascular AMD and diabetic macular oedema (DMO), and enabling many Australians to avoid vision impairment.[li]

They have also significantly increased the demand on Medicare and the PBS and, with an ageing population and the increasing prevalence of chronic eye disease, the number of patients requiring treatment via intravitreal injections is expected to continue increasing.

There are significant barriers to care, including geographic access, especially outside the metropolitan centres, and substantial out-of-pocket patient costs as most intravitreal injections are administered in the private system, with low rates of bulk-billing.[lii] As a result, the necessary numbers of injections that are required for effective treatment are not always administered.

Intravitreal injections are administered by ophthalmologists. Given the undersupply and geographic maldistribution of the ophthalmology workforce, the Federal Government's MBS Taskforce Review has recommended enabling intravitreal injections to be administered by appropriately trained nurse practitioners, optometrists, and general practitioners.[liii]

In countries like the United Kingdom, the United States and New Zealand, non-ophthalmologists are playing an enhanced role in enabling access to intravitreal injections, with high levels of patient satisfaction and increased throughput in retinal clinics.[liv]

Enabling appropriately trained optometrists to have an enhanced role in treating patients requiring intravitreal injections would deliver real benefits to patients. This would particularly be the case in outer metropolitan areas and regional, rural and remote communities where there is not always ready access to injecting ophthalmologists.

Collaborative care models that utilise and build upon existing local inter-professional relationships should be developed, piloted, evaluated and rolled out more broadly. For example, there is a ready opportunity for optometrist to be more effectively utilised in treatment planning and implementation.

Other initiatives like bulk-billing regional clinics and the greater utilisation of ophthalmology students are complementary – however they are unlikely to be sustainable long-term solutions given the increasing patient demand and the ongoing shortage of ophthalmologists over the next decade.

RECOMMENDATION 3

Develop and pilot models of care that utilise optometrists to enhance access for patients requiring intravitreal injections for AMD and DMO, starting in outer metropolitan areas and regional, rural and remote communities.

Case Studies

Case Study 6

New Zealand Oral Prescribing

In 2014, the New Zealand Medicines Act was amended giving optometrists the status of authorised prescribers. Registered optometrists with therapeutic accreditation were able to prescribe any medication within the scope of practice of optometry as defined by the Optometrists and Dispensing Opticians Board. Since 2014, the 14 most frequently prescribed oral medications belonged to eight unique medicine classes, with antibiotics comprising 60% of all oral medications prescribed. Fifty-three per cent of optometrists with prescribing rights who were registered at the end of 2019 had prescribed at least one oral medication and the proportion of oral medications continues to grow year on year. Despite the range of medications prescribed, the Board has not been alerted to any out-of-scope prescribing by optometrists or any adverse incidents specifically related to the issue of therapeutic prescriptions by optometrists reported to relevant authorities.

Case Study 7

United Kingdom Intravitreal Injecting

In the UK, the Royal College of Ophthalmologists (RCO) commissioned The Way Forward project to identify innovative methods of working to help meet the increasing demand in ophthalmic services. The Way Forward focused on high-volume areas of eye care including glaucoma, cataract, emergency eye care and medical retina encompassing macular degeneration and diabetic eye disease. In 64% of clinics, non-ophthalmologists were performing intravitreal injections. While the injectors were mainly nurses, optometrists were undertaking assessments and reviewing images, while nurses and optometrists were working together under the remote supervision of consultant ophthalmologists. Significant benefits were being achieved through more efficient referral and triaging, including collaborations with community optometrists.

Diabetes Eye Care

"Diabetes is the leading cause of blindness in working age Australians. There are around 600,000 Australians with diabetes who are missing out on the recommended eye checks that would enable early detection and early treatment to prevent blindness."

Professor Greg Johnson, CEO, Diabetes Australia, July 2018

An estimated 1.7 million Australians have diabetes, including 1.2 million who have been diagnosed.[lv]

Diabetic eye disease, particularly diabetic retinopathy, is one of the most common conditions associated with both Type 1 and Type 2 diabetes. Over time, virtually all Type 1 and 60% of Type 2 diabetes sufferers are affected by diabetic retinopathy.[lvi]

It is estimated that 300,000 to 400,000 or about 30% of people with diabetes have some level of diabetic retinopathy.[lvii] Left untreated, diabetic retinopathy can cause blindness but, in most cases, can be successfully managed with laser therapy or injections.

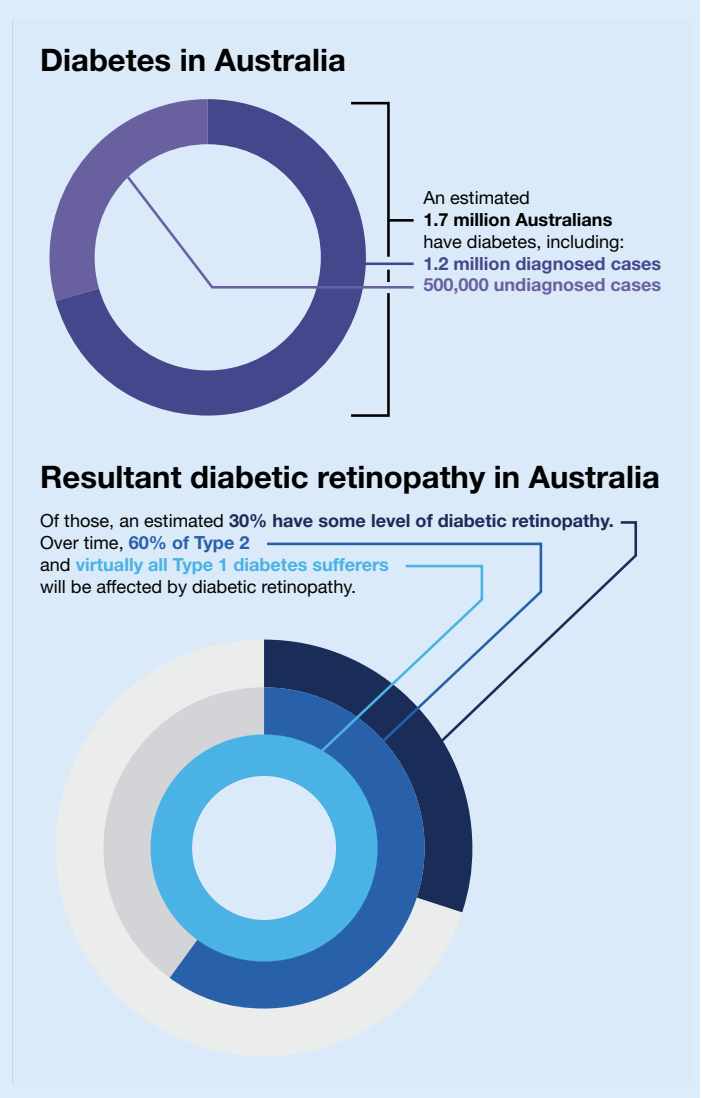
In its earlier stages, diabetic retinopathy is asymptomatic, emphasising the importance of a timely diagnosis. This means that the best way to protect oneself from the impact of diabetic retinopathy is to have regular eye examinations in accordance with the nationally agreed clinical timeframes.

People with diabetes are also at increased risk of glaucoma and cataract underscoring the need for regular eye examinations.

Unfortunately, there is a distinct lack of awareness in the general population and among people with diabetes about the risk of diabetic retinopathy. As a result, only about half of all Australians with diabetes get the eye examinations they need.[lviii]

The proportion of Aboriginal and Torres Strait Islander people with diabetes or pre-diabetes is nearly four times higher than other Australians[lix]. However Aboriginal and Torres Strait Islander people with diabetes self-report 25% lower rates of timely eye examinations than non-Indigenous Australians.[lx]

Initiatives such as the Keep Sight program have been developed to support people with diabetes by sending eye examination reminders.[lxi] However, not all people with diabetes are in the system and reminders can be ignored due to the lack of symptoms or awareness of the risks.



The majority of initial diabetes referrals to eyecare professionals are diagnosed as having no diabetic retinopathy or mild non-proliferative diabetic retinopathy. Such cases require follow-up assessments in 24 or 12 months, which is most efficiently undertaken within community optometry.[lxii]

Most diabetes patients have frequent interactions with general practitioners, pharmacies, podiatrists, diabetes educators and specialists such as endocrinologists.

The consistent provision of information by these health practitioners to their patients and better use of digital systems to emphasise the need for regular eye examinations is necessary to lift the current low levels of compliance, along with a major public awareness raising campaign.

RECOMMENDATION 4

Develop a national strategy to ensure that people with diabetes receive eye examinations from their optometrists to enable the early detection and treatment of diabetic retinopathy.

Technology and Eye Care

The Optometry 2040 research project (undertaken in 2018) makes clear that advances in technology will transform eye care and the role of optometry over the next two decades.

In eye health, major breakthroughs are likely to revolutionise the diagnosis and treatment of patients, building on existing lens, laser and optical coherence tomography technologies.

"Increasingly rapid change, associated with technological, economic, political and demographic influences, is disrupting tried and true optometry practice models, working conditions, patient eye care, and clinician training requirements and communication. Change isn't always positive, yet it brings opportunity if it can be embraced and channelled."

Optometry Australia, Optometry 2040 Project, launched in 2018

Technologies are accelerating existing trends across the health-care system, including:

Increased use of data analytics and artificial intelligence to diagnose common conditions.

Automation of simple tasks and use of virtual technologies to enhance geographic access.

Exponential increases in the flow of digital health information, including remote health monitoring and the use of internet connected wearables and embedded technologies.

Patient directed, information-enabled, team-based health care, becoming the norm.

Health professionals specialising and focusing on complex cases and personal patient care.

Genetic testing will enable and support early intervention to prevent vision loss and lead to more personalised patient care. Science will move from preventing vision loss to facilitating vision restoration with greater understanding of the neural pathways connecting the eyes with the brain.

Those eye-health professionals who embrace advances in technologies will enhance their clinical practices and be increasing acknowledged as adding value to the public health system.[lxiv]

Technology will also fast-track a more collaborative, team-based approach to eye care that is driven by unrestricted access to information and knowledge. It will also help eye-health professionals to practice to their full scope, as simple tasks are outsourced, rendered obsolete or lose their value.

Australians will continue to demand access to the latest health technologies. This will put ongoing pressure on clinicians to be early adopters and increase the overall cost of health care, as well as raise ethical questions about the use of genetic and other technologies.[lxv]

At their core, advances in technology will reward innovative, outcomes driven approaches but will overwhelm inefficient business models that do not deliver for patients.

RECOMMENDATION 5

Implement consistent ophthalmology referral guidelines, templates and pathways for common eye health conditions, with a facilitated transition to electronic referrals.

RECOMMENDATION 6

Introduce telehealth MBS items for brief optometry consults where face-to-face visits are impractical and to enable ophthalmology reports and advice to be relayed to patients.

The Way Forward

With an ageing population and an increasing prevalence of chronic eye disease, Australia has reached a point when we must make eye health a much higher priority in our health-care system.

The main causes of eye disease are well known, with 90% of blindness and vision loss preventable or treatable, if detected early. However, we are not diagnosing and treating eye disease in a timely manner, with too many Australians experiencing unnecessary vision loss as a result.

Optometrists are highly trained and qualified, trusted and accessible eye-health professionals who are ready and able to play an enhanced role in addressing Australia's eye health challenges, working collaboratively with ophthalmologists, general practitioners and other health professionals.

Six readily achievable actions that utilise optometrists, working collaboratively with other health professionals, would make a genuine difference in providing timely eye care for Australians:

1. Integrate successful collaborative care models between ophthalmologists and optometrists into the mainstream health system for patients with stable glaucoma, pre and post-operative cataracts, paediatric eye care and early-stage diabetic retinopathy.
2. Permit optometrists to prescribe oral medications for eye health conditions.
3. Develop and pilot models of care that utilise optometrists to enhance access for patients requiring intravitreal injections for AMD and DMO, starting in outer metropolitan areas and regional, rural and remote communities.
4. Develop a national strategy to ensure that people with diabetes receive eye examinations from their optometrists to enable the early detection and treatment of diabetic retinopathy.
5. Implement consistent ophthalmology referral guidelines, templates and pathways for common eye health conditions, with a facilitated transition to electronic referrals.
6. Introduce telehealth MBS items for brief optometry consults where face-to-face visits are impractical and to enable ophthalmology reports and advice to be relayed to patients.

These six actions should be progressed as a matter of priority with the requisite funding, regulatory and collaborative clinical arrangements put in place. Their timely implementation will remove bottlenecks, reduce wait times, prevent unnecessary blindness and vision impairment, and enhance the overall efficiency of the eye-health system. At the same time, there must be an increased commitment to investing in public ophthalmology and public optometry, and in closing the gap in Indigenous eye health.

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