

National Framework for Action to Promote Eye Health and
Prevent Avoidable Blindness
and Vision Loss

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Australian Health
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Prevent Avoidable Blindness and Vision Loss

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Introduction

In July 2004 the Australian Health Ministers' Conference agreed on the need to develop a National Eye Health Plan for Australia to promote eye health and reduce the incidence of avoidable blindness. This initiative represents Australia's response to World Health Assembly resolution WHA56.26 on the elimination of avoidable blindness in member countries.

This document sets out a strategic National Framework for Action for the promotion of eye health and the prevention of avoidable blindness. It aims to provide a blueprint for nationally coordinated action by governments, health professionals, non-government organisations, industry and individuals to work in partnership.

The National Eye Health Framework does not focus on any one specific eye condition, but rather seeks to cover the underlying issues that are common to the prevention and treatment of eye disease and vision loss in general. It outlines five key action areas that have the potential to lead to the prevention of avoidable blindness and low vision.

They are:

- reducing the risk of eye disease and injury;
- increasing early detection;
- improving access to eye health care services;
- improving the systems and quality of care; and
- improving the underlying evidence base.

The National Eye Health Framework is accompanied by a Background Paper which provides background information about eye disease in Australia, including the epidemiology of eye disease and injury, current treatments and the economic and social impact of blindness and vision loss.

In addition, the Background Paper provides an overview of the international and national policy context, the Australian eye health workforce, major eye health programs and services, eye health research capacity and related public health strategies. The Background Paper is by necessity broader in scope than that of the National Eye Health Framework, which has as its primary focus the promotion of eye health and prevention of avoidable blindness.

These two documents are intended at this stage to form a starting point for the coordination of national action on eye health. Implementation of the strategies outlined in the National Eye Health Framework will be up to government agencies, health care professionals, non-government organisations, training institutions, the private sector and other interested parties working in collaboration.

The National Eye Health Framework has been developed by the Australian Government Department of Health and Ageing and the Victorian Department of Human Services in consultation with all other Australian state and territory governments. Many organisations and individuals in the non-government sector have also contributed to the development of the Framework. Appendix Four in the Background Paper sets out details of the consultation process and the names of organisations and individuals who have provided input and comment to the Framework.

Part one: Background

In May 2003 the 56th World Health Assembly passed resolution WHA56.26 on the elimination of avoidable blindness in recognition of the fact that 45 million people in the world today are blind and that a further 135 million people are visually impaired. The resolution urged member states to develop a national Vision 2020 plan in collaboration with non-government organisations and the private sector to prevent avoidable blindness.

In Australia the main causes of blindness and vision loss are macular degeneration, cataract, glaucoma, diabetic retinopathy, uncorrected or under-corrected refractive error, retinitis pigmentosa, eye injuries and trachoma, which is present in some remote regions of Australia.

In accordance with the World Health Assembly resolution, the focus of the National Eye Health Framework is on the elimination of avoidable blindness and vision loss in Australia, rather than the provision of rehabilitation services. Avoidable blindness and vision loss refer to visual impairment due to conditions that are potentially preventable through the modification of known risk factors, or for which effective treatments exist to restore sight or prevent further vision loss.

The prevalence of eye disease in Australia

Based on the results of the 2001 National Health Survey, 9.7 million Australians or 51% of the population had at least one sight problem. The most commonly reported eye disorders were refractive errors, such as long-sightedness, short-sightedness, presbyopia and astigmatism. Cataract was reported by 2% of respondents and glaucoma by 1%. The prevalence of sight problems increases rapidly with age, reaching 87% by ages 45-54 and 96% by ages 75 and over, and is more common in females (55%) than males (47%).¹

¹Australian Institute of Health and Welfare 2004. *Australia's Health 2004*. Canberra: AIHW

Vision impairment and blindness are among the major causes of disability. According to the 1998 Survey of Disability, Ageing and Carers “loss of sight” was the reason or part of the reason for disability given by 1,349,800 persons in Australia.

It is estimated that in Australia 116,000 people present to hospitals or general practitioners each year with unintentional eye injuries. Many people do not wear eye protection when performing high risk activities, such as welding and grinding, particularly in the home environment. Injuries also occur when eye protection is ill-fitting or not worn at appropriate times.²

The social and economic costs of eye disease

Recent independent economic analysis undertaken by Access Economics for the Centre for Eye Research Australia estimated the total cost of vision disorders in Australia to be \$9.85 billion per annum.³ Direct and indirect costs include health system costs, early entry into supported accommodation or an aged care facility, early reliance on home and community care and social welfare systems, carer costs, loss of participation in the community including employment, as well as individual costs such as mobility devices, transport, building modification and lower employment rates.

Groups at particular risk

Certain population groups are at particular risk of developing eye disease, including Aboriginal and Torres Strait Islander Peoples, older people, people with a family history of eye disease, people with diabetes and marginalised and disadvantaged people.

Although in Australia the number of children at risk of blindness is small, prevention of avoidable childhood blindness and vision loss is particularly important, because of the years of sight lost that ensue and the severity of implications for child development.

People with diabetes are at increased risk of developing eye disease, particularly diabetic retinopathy, cataract and glaucoma. It is estimated that as many as one million Australians have diabetes, though many are unaware of it. Age at onset and duration

² A.L. Imberger, A.E. Altmann, W. Watson 1998 *Unintentional Adult Eye Injuries in Victoria* (Monash University Accident Research Centre 1998 unpublished report)

³ Eye Research Australia 2004 *Clear Insight: The Economic Impact and Cost of Vision Loss in Australia* A Report prepared by Access Economics Pty Ltd. The Centre for Eye Research Australia, Melbourne 2004

of diabetes are key factors influencing the prevalence of eye disease in people with diabetes. For example, in young people with diabetes (aged less than 30 years at diagnosis) the prevalence of diabetic retinopathy is 25 percent during the first 5 years after diagnosis, rising to 50 percent after 15 years since diagnosis.⁴

After the age of 40 the amount of visual impairment and blindness increases threefold with each decade of age.⁵ It is estimated that as the population ages, vision impairment will emerge as the most prevalent health condition amongst older people. Blindness and vision loss restrict mobility and increase morbidity amongst older people, leading to a greater risk of depression, falls and hip fractures with an associated rise in hospital admissions and demand on community health and welfare services.

As with many other health conditions, Aboriginal and Torres Strait Islander people are potentially at increased risk of developing avoidable blindness and vision loss and are less likely to access eye health care practitioners than other Australians. Uncorrected refractive error, correctable with spectacles, is a leading cause of visual impairment in Aboriginal and Torres Strait Islander Communities, followed by cataract, diabetic retinopathy and trachoma. Australia is the only developed country with trachoma that persists in some regions.

⁴ Australian Institute of Health and Welfare 2002. *Diabetes: Australian Facts 2002*. AIHW Cat.No. CVD 20 (Diabetes Series No 3) Canberra: AIHW

⁵ Hugh R Taylor 2001 *Eye Care for the Community* Centre for Eye Research Australia 2001 (unpublished report)

Principles to guide the development of the National Eye Health Framework

The National Eye Health Framework has taken the following principles as its starting point. Actions should:

1. take a consumer-oriented approach, recognising that current and future consumers are the starting point for policies and programs aimed at preventing blindness and vision loss.
2. focus on high risk groups, recognising that specific population groups are at particular risk of avoidable blindness and vision loss.
3. focus on primary prevention, recognising that many of the risk factors of eye disease are modifiable.
4. take a holistic approach, recognising that eye health can be linked to a person's general health status and that, in turn, vision loss may impact on a person's emotional, social and physical wellbeing.
5. take a life course approach, recognising that complex interactions between life events, biological risks and health determinants produce varying patterns of vision function, eye disease and vision impairment at each stage of an individual's life.
6. be based on evidence, ideally from peer-reviewed research and evaluation, that the proposed actions will lead to a decrease in preventable blindness and vision loss; and where research is not available, the potential of the action items, judged on the basis of current knowledge and experience, to reduce blindness and vision loss.
7. be based on a partnership approach, recognising that the best outcomes will be achieved through all players working in partnership towards commonly agreed objectives.
8. maximise linkages across the health and eye care sector to relevant national and state based public health strategies and initiatives.

Part two: Key areas for action

Goal

The overarching goal of the National Eye Health Framework is:

to promote eye health and reduce the incidence of avoidable blindness and vision loss in Australia.

The key areas for action for the National Eye Health Framework are the following:

- reducing the risk of eye disease and injury;
- increasing early detection;
- improving access to eye health care services;
- improving the systems and quality of care; and
- improving the underlying evidence base.

For each key area the National Framework sets out a brief outline of the challenges to be addressed and a series of actions that may be utilised to meet these challenges.

It should be acknowledged that by international comparison, Australia already has excellent eye care services. It is important therefore to build on the important work done to date. Action items are therefore designed to complement and build on the extensive range of eye health related activities already being undertaken by the Australian Government and state and territory governments, professional associations and other non-government organisations. For example, the National Framework takes account of the development of eye health programs delivered in a more collaborative and coordinated approach as identified through the initiatives of the National Aboriginal and Torres Strait Islander Eye Health Program which was introduced in 1997.

Developing strategic partnerships and maximising linkages to relevant national strategies and initiatives that impact on eye health is an integral part of each action item. Accordingly for each key area for action the relevant national strategies and initiatives are indicated.

In particular, the National Eye Health Framework will need to link into the work currently underway to develop and implement a National Chronic Disease Strategy to maximise the potential for achieving more focused and coordinated action in priority areas common across health plans. In addition, since the major sight-threatening conditions in Australia are the age-related eye diseases, strategies to promote eye health need to be linked to initiatives and approaches targeted at population ageing. More information about related national strategies and initiatives is provided in the Background Paper 'Eye Health in Australia'.

Key area for action 1: Reducing the risk

Objective:

Eye disease and vision loss are prevented, where possible, through addressing known modifiable risk factors.

Challenges:

The development of preventive approaches to eye disease and injury is crucial to the elimination of avoidable blindness and vision loss. A range of universal, selective and targeted preventive measures need to be put in place that collectively address the known modifiable risk factors for eye disease and injury. Strategies aimed at reducing the risk of eye disease and injury occurring are broad ranging and involve many different players from different portfolio responsibilities, professional groups and sectors.

Raising general public awareness about eye health is the first line of defence in reducing the risk of avoidable blindness and vision loss. Better integration of population based eye health promotion with broader public health promotion activity will ensure greater coordination of activity around modifiable risk factors that are common to eye disease and related chronic disease. Greater collaboration between eye care agencies will help to ensure that clear consistent messages about eye health and risk factors are promoted through coordinated activity.

Health care providers, both specialist eye health and generalist medical, nursing and allied health workers, have many opportunities to inform and advise the public about eye health in their day to day work with clients, especially high risk groups with chronic disease. Other professional groups with a role in promoting eye health include teachers, child care workers, counsellors, social workers, pharmacists, and the aged care workforce.

Over 95% of general practitioners are members of the Divisions of General Practice. Divisions, as part of local health infrastructure, are well placed to participate in community-based strategies to promote eye health and prevent eye disease and injury.

However, awareness raising is only one component of a broad approach to prevention. To maximise effectiveness, eye health education needs to be integrated with other health promotion measures to create enabling environments that support, reinforce and sustain individual behaviour change.

A number of communicable and chronic diseases lead to the development of eye complications, so initiatives aimed at reducing the incidence of communicable and chronic disease will potentially reduce the risk of avoidable blindness and vision loss. The best outcomes are likely to be achieved through the development of linkages with the relevant current national public health strategies and initiatives that impact on eye health through the establishment of partnership and other cooperative arrangements.

There is some evidence that lifestyle risk factors (smoking, poor nutrition, excessive alcohol consumption, lack of physical activity) contribute to the development of eye disease. In particular, there is good evidence that both cataract and macular degeneration are probably due in part to smoking. Eye trauma is often associated with excessive alcohol consumption.

Lifestyle risk factors are also implicated in the development of many chronic diseases such as diabetes mellitus, hypertension and hyperlipidaemia, which are in turn causal factors for, or exacerbate the development of, eye diseases. Eye complications of diabetes include diabetic retinopathy and a greater risk of developing glaucoma and cataract. Obesity and lack of physical activity are thought to be the most important contributory factors to the development of Type 2 diabetes. Accordingly making the link to initiatives aimed at reducing obesity and promoting physical activity has the potential to yield dividends in preventing diabetic retinopathy.

Many infants and young children are at risk of vision problems because of preventable pre-natal or perinatal factors. The foundations of good eye health are established in utero and depend upon the optimum health of pregnant women. Eye development in the fetus may be affected by communicable diseases such as rubella and toxoplasmosis or exposure to teratogenic substances such as alcohol. Factors in the newborn period that affect eye health include retinopathy of prematurity and ophthalmia neonatorum. Amblyopia is a treatable condition that may present in early childhood and, if untreated, can lead to permanent vision loss in the affected eye.

Trachoma remains prevalent in some remote regions of Australia. Predominantly Aboriginal and Torres Strait Islander children may be affected. Untreated trachoma in childhood may lead to increased risk of blindness in adulthood resulting from trichiasis. Trachoma control in endemic regions requires a holistic, coordinated and sustained public health response with the involvement of public health units, primary health care services and housing and essential services in affected geographical regions to reduce

the risk. The Communicable Diseases Network Australia is currently examining the issue of trachoma surveillance and control measures.

Damage to the eye can occur from exposure to high levels of ultra violet radiation and glare. There is potential to work collaboratively with skin cancer prevention initiatives to raise public awareness of the need to protect the eyes as well as the skin from ultra-violet radiation. Video terminals are not thought to cause permanent ocular damage, but the use of good eye care practices needs to be encouraged amongst office workers, as an integral part of occupational health and safety.

The risk of eye injuries can be reduced through awareness raising and the adoption of eye protection measures when high risk activities are being undertaken in the workplace, home environment or at sporting events. Strategies to reduce high risk alcohol consumption may also be of benefit in reducing the number of eye injuries consequent to alcohol related violence.

In summary, there are many opportunities in Australia to address modifiable risk factors for blindness and vision loss. Maximum gains in prevention are likely to be achieved through establishing strong linkages to relevant national public health strategies that impact on eye health and addressing common causes and risk factors for chronic disease.

Actions:

Key area for action 1: Reducing the risk	
Action area	Actions
Raising public awareness	<ul style="list-style-type: none"> • conduct communication activities to raise public awareness about the risk factors for eye disease and injury, the importance of healthy lifestyle behaviours to the prevention of eye disease, and the prevention of chronic diseases (eg diabetes) that can lead to eye complications • develop links to communication activities around lifestyle risk factors at national, state and local levels to ensure that eye health considerations are incorporated into these initiatives • produce targeted eye health communication materials for different audiences such as health professionals, aged and community care workers, teachers, parents, people from culturally and linguistically diverse communities, older people, Aboriginal and Torres Strait Islander communities • build the capacity of the generalist medical, nursing, pharmacist and other allied health workforce to provide advice and information to the public about maintenance of eye health and the prevention of eye disease and injury • encourage the specialist eye care workforce to undertake opportunistic health promotion activities around eye safety and the prevention of eye disease during routine consultations • establish and strengthen partnerships to promote eye health messages, including through other sectors such as transport, education, occupational health and safety

Key area for action 1: Reducing the risk *(continued)*

Action area	Actions
Maternal and child health	<ul style="list-style-type: none"> • develop linkages to communication activities promoting optimum maternal and child health at national, state and local levels to ensure that eye health considerations are incorporated into these initiatives • continue to promote good practice eye care by parents and obstetric and paediatric health practitioners in the perinatal and neonatal period • optimise the immunisation status of women of childbearing age, including migrants • identify the best approach to vision screening for children, the age that such screening should occur and the most appropriate protocols • support trachoma control programs, where relevant, in consultation with local communities and consistent with best practice, and in conjunction with environmental health programs • develop evidence based guidelines regarding the wearing of sunglasses by children
People with diabetes	<ul style="list-style-type: none"> • continue to incorporate eye health into diabetes education regarding the risk of developing eye complications and the need to ensure that blood sugar levels, blood pressure, weight and serum lipids are monitored and controlled to prevent diabetic retinopathy

Key area for action 1: Reducing the risk *(continued)*

Action area	Actions
<p>Eye injury prevention</p>	<ul style="list-style-type: none"> • develop and implement workplace specific protocols and materials to educate workers in high risk industries about the importance of eye safety and eye protection measures • develop and implement workplace specific protocols and materials to educate teachers, lecturers and students using high risk laboratory equipment and chemicals about the importance of eye safety and eye protection measures • promote eye safety to people undertaking “do-it-yourself” and gardening activities in the home environment • promote the use of appropriate personal protective eyewear in high risk sporting and recreational activities • develop linkages to skin cancer prevention communication activities at national, state and local levels to promote the importance of avoiding exposure to high levels of ultraviolet light and glare to avoid possible vision loss • develop linkages to national alcohol and domestic violence strategies to raise awareness of violence related vision loss • encourage and support the use of good eye care practices by office workers
<p>Research</p>	<ul style="list-style-type: none"> • support further research into the aetiology of eye disease and the risk factors associated with eye injury • support research programs that contribute to the compilation of an evidence base for population health approaches to reducing the risk of blindness and vision loss.

National initiatives that impact on the reduction of risk of eye disease and injury:

- > National Agenda for Early Childhood
- > National Public Health Action Plan for Children
- > Australian Research Alliance for Children and Youth
- > Immunise Australia Program
- > National Chronic Disease Strategy
- > National Drug Strategy
- > National Tobacco Strategy
- > National Alcohol Strategy
- > National Drug Strategy Aboriginal and Torres Strait Islander Peoples' Complementary Action Plan 2003-2006
- > National Aboriginal and Torres Strait Islander Nutrition Strategy and Action Plan 2000 to 2010
- > National Domestic Violence Strategy
- > Be Active Australia: A Health Sector Agenda for Action On Physical Activity 2004-08
- > Eat Well Australia: An Agenda for Action for Public Health Nutrition 2000-2010
- > Healthy Weight 2008- Australia's Future The National Action Agenda for Young People and their Families
- > National Community Awareness and Infrastructure – Lifestyle Prescriptions Initiative
- > National Diabetes Strategy
- > National Strategic Framework for Aboriginal and Torres Strait Islander Health
- > National Aboriginal and Torres Strait Islander Eye Health Program
- > National Injury Prevention Plan – 2004 onwards
- > National Aboriginal and Torres Strait Islander Safety Promotion Strategy
- > National Occupational Health and Safety Strategy

Key area for action 2: Increasing early detection

Objective:

Treatable eye conditions are detected early, so that interventions can be applied to preserve vision and prevent any further vision loss.

Challenges:

Since there are cost-effective treatments for many eye conditions that prevent further vision loss and blindness, early detection of eye disease is imperative. Early diagnosis is also important for those people with sight-threatening eye conditions for which no treatments currently exist, to enable important career, financial and lifestyle decisions to be made.

Glaucoma, some forms of macular degeneration, diabetic retinopathy and trachoma are examples of eye diseases which can be treated effectively to preserve vision, if detected early. In the case of diabetic retinopathy, early diagnosis and treatment may prevent up to 98% of severe vision loss in people with diabetes.

However, Australian community studies show that a significant amount of eye disease remains undetected and untreated. For example, Australian data indicate that a significant proportion of people with diabetes are not being screened adequately for diabetic retinopathy. Screening can be part of the systematic care of all people with diabetes and can be facilitated by many different professionals. There are many advantages to integrating eye checks and screening for diabetic retinopathy into comprehensive mainstream primary health care services that utilise patient recall and information systems and maintain disease registers.

Many eye diseases and disorders have no symptoms or early warning signs. In addition, people tend to believe that decreasing vision is just part of ageing and have little knowledge about available treatments. It is essential therefore that the community and all health care providers are aware of the importance of good eye health and the need for regular eye tests, particularly for those aged 40 and over, those with a family history of eye disease, or those in other high risk groups.

In their routine work with clients, health care providers and other professionals have the opportunity to prompt and remind people to get their eyes tested. Eye checks can also be built into routine health assessments, such as that carried out by well baby clinics, aged

care assessment teams or during hospital admission procedures. The role of the Royal Flying Doctor Service in delivering primary and community care health clinics in rural and remote areas means that the service is well placed to educate, appropriately refer and do primary eye care.

Many vision problems begin well before children reach school. Parents, care-givers, child and family health nurses, teachers, general practitioners and paediatric health care providers have a role in ensuring that children with potential eye problems are referred appropriately for expert diagnosis and treatment.

Actions:

Key area for action 2: Increasing early detection	
Action area	Actions
Public awareness	<ul style="list-style-type: none"> raise awareness of the symptoms of eye disease, the various roles of eye care practitioners and the importance of having regular eye checks, particularly for those over 40 years and those at risk
Primary health care	<ul style="list-style-type: none"> build capacity amongst the primary health care workforce to identify vision loss, detect eye disease and refer appropriately support appropriate distribution of workforce to ensure access to screening by people in rural, regional and remote locations integrate eye health checks into all general health checks, such as the two yearly adult health check for Aboriginal and Torres Strait Islander people and the yearly Health Assessment MBS item for people aged 75 years and over or 55 years and over for Aboriginal and Torres Strait Islander people establish appropriate referral pathways for those detected with low vision or eye disease

Key area for action 2: Increasing early detection *(continued)*

Action area	Actions
<p>People with diabetes</p>	<ul style="list-style-type: none"> • continue to promote awareness amongst those with diabetes and their health care providers of the need for regular eye examinations • build the capacity of general practitioners, optometrists and physicians to detect and monitor diabetic retinopathy through appropriate education and regular clinical experience • encourage the use of non-mydratic camera to detect eye disease particularly in rural and remote communities • develop and utilise patient information and recall systems to monitor care and remind people with diabetes of the need for regular eye checks • provide opportunity for increased access to routine eye health assessment for Aboriginal and Torres Strait Islander people with diabetes
<p>Childhood screening</p>	<ul style="list-style-type: none"> • encourage practitioners to continue to undertake examination of the eye during the newborn check in the context of adequate early detection programs or systems • support further research into the effectiveness of visual acuity screening in infants, pre-school and school aged children • ensure screening of children includes trachoma in high prevalence regions • support processes to ensure education department staff are aware of visual difficulties, the effect on learning and where and how to seek assistance.

National initiatives that impact on early detection of eye disease

- > National Early Childhood Agenda
- > National Public Health Action Plan for Children
- > National Chronic Disease Strategy
- > National Diabetes Strategy
- > National Strategic Framework for Aboriginal and Torres Strait Islander Health
- > National Aboriginal and Torres Strait Islander Eye Health Program

Key area for action 3: Improving access to eye health care services

Objective:

All Australians have equitable access to appropriate eye health care when required.

Challenges:

Since effective sight preserving interventions exist for many eye conditions, it is essential that Australians can access eye health care services when the need arises. Where eye disease cannot be prevented or treated, the quality of life for people with low vision can be greatly improved with rehabilitation and support. Many services and devices are available to help people maintain their independence. All Australians should have equitable access to high quality eye health care services, irrespective of geographical location, socio-economic status, ethnicity, age or gender.

Access to ophthalmology services may be required across a range of medical specialities, since eye diseases may be complications of diseases such as diabetes, thyroid disease, neurological and neurosurgical conditions and HIV/AIDS.

Factors influencing access to eye health care include:

- workforce supply
- the availability of services, particularly in rural and remote areas, including regularity of services and appropriate technological support
- affordability of services
- cultural appropriateness of services
- physical accessibility
- public awareness of available services.

The adequacy of the existing eye health care workforce, demand for services and projected workforce requirements need to be monitored to ensure that the availability of trained eye care practitioners is commensurate with need. Eye care practitioners include ophthalmologists, orthoptists, ophthalmic nurses and optometrists.

With the ageing of the Australian population and population increases, as well as the ageing of the ophthalmologist workforce, there may over time be a need for an increase

in funded ophthalmology training positions and trainees. Strategies to address localised shortfalls in supply include providing incentives for remote area work and up-skilling of general practitioners. There is an opportunity to consider alternative and expanded professional roles.

There is potential to significantly improve access to services through the development of new service delivery models supported, where appropriate, by changes to the roles of health practitioners involved in the delivery of eye care. For example, consideration could be given to upskilling nurses and Aboriginal health workers in some areas of preventive and primary eye care, or increasing outreach services when a permanent workforce cannot be maintained. Relevant other professions include orthoptists, optometrists and optical dispensers.

Provision of specialist ophthalmology and optometry services outside capital cities and major urban areas continues to be a major issue in Australia, especially in regard to the effectiveness of incentives for specialists to practise in rural areas. The Medical Specialists Outreach Assistance Program and the Support Scheme for Rural Specialists are examples of two national programs that aim to support the provision of specialist care to people in rural and remote areas. The Visiting Optometrists Scheme (VOS) commenced in mid 1970s to provide access to optometrical services in rural and remote Australia and is administered by the Department of Health and Ageing.

Lack of appropriate training and retraining opportunities together with inappropriate remuneration and indemnity arrangements appear to be some of the barriers to rural and remote general practitioners' obtaining and using ophthalmology skills.

Many rural and remote areas are being serviced by outreach services, with city-based specialists visiting to provide consultation and procedural treatment. Many of these outreach arrangements have developed historically. There is a need for better coordination between programs targeted at populations in isolated areas, for example, coordination between outreach schemes funded under the Regional Health Strategy and Aboriginal and Torres Strait Islander primary health care services. Outreach eye care services integrated into community settings may enhance access by low income and Aboriginal and Torres Strait Islander people. Additional challenges are associated with facilitating access to services by urban Aboriginal and Torres Strait Islander people.

Disparities in services also occur within metropolitan areas, with service development at times lagging behind population growth in newer growth areas. With population growth the distribution of ophthalmic services within metropolitan areas will also require review, to ensure equitable access to local ophthalmology services in metropolitan areas. Outer metropolitan areas and newer services often face similar challenges to rural areas in attracting specialist staff to develop and expand services.

In Australia cataract surgery is one of the most common surgical procedures with well established effectiveness at preventing blindness and low vision. Cataract surgery is a highly cost-effective procedure which leads to improved levels of visual acuity and/or functioning in 80% to 95% of patients. Surgery on a second affected eye results in significant benefit which may be nearly as great as from surgery on the first eye.

It is anticipated that there will be increasing demand for cataract surgery due to the ageing population, the increase in population and the lowering of the threshold for cataract surgery.

The development and implementation of further waiting list management strategies may be of benefit in some states to ensure that Australians do not experience unnecessary delays in the restoration of vision. Waiting list management strategies could include the development and implementation of guidelines for reasonable waiting times as well as standards for prioritisation of cases.

Cultural appropriateness is also important to ensure that eye health services are accessible to people from culturally and linguistically diverse backgrounds. Cultural factors must be determined and included in the planning and implementation phases of services with eye health practitioners acquiring the relevant skills needed to provide services that are sensitive to the specific cultural needs of the client.

Barriers to accessing low vision services are often due to the fact that low vision and vision management services are treated as an add on, rather than part of the continuum of eye care programs. Barriers to accessing available low vision services may also be emotional, such as shock, fear, denial and embarrassment. There is a reported low uptake rate for assisted technology. Many people do not know what is available or what their options are regarding appropriate eye care and therefore may be needlessly dependent on others for care.

Appropriate physical location of eye care services is an important consideration for people with low vision. The provision of appropriately darkened rooms and other facilities in aged care services would assist visiting optometrists and other eye health workers. Clear signage and other design features of premises can help to maximise accessibility to consumers.

Access to eye care services may also be affected by a lack of awareness on the part of the public regarding availability of different types of eye health care services and confusion about the specific roles of various eye health practitioners. Awareness raising strategies regarding available services and what to expect may be of benefit in this regard, as may research into the barriers to accessing available services.

Actions:

Key area for action 3: Improving access to eye health care services	
Action area	Actions
Workforce supply	<ul style="list-style-type: none"> • monitor requirements and supply projections for eye care practitioners • explore innovative approaches to addressing distribution issues, including incentives for ophthalmologists, orthoptists, ophthalmic nurses and optometrists to practise in areas of greatest need and shortage • review the number of funded ophthalmology training positions and trainees as required to match the potential future growth in activity due to population growth and population ageing • upskill general practitioners to undertake basic ophthalmic examinations and procedures, particularly in rural and remote areas • develop and trial new eye care service delivery models, including the upskilling of nurses and Indigenous Health Workers in selected areas of preventive and primary care • develop and trial expanded roles of current eye care practitioners and new workforce roles

Key area for action 3: Improving access to eye health care services *(continued)*

Action area	Actions
Rural and remote communities	<ul style="list-style-type: none"> • improve the capacity of the eye health care sector to utilise existing Federal and State mechanisms such as those under the Rural Health Strategy • explore incentives for eye care practitioners to participate in outreach services in rural and remote areas • examine existing programs, such as the Visiting Optometrists Scheme, to ensure that they are appropriately targeted and promoted • explore mechanisms by which low vision and rehabilitation services can be provided to remote and regional areas.
Access to cataract surgery	<ul style="list-style-type: none"> • review models of care for cataract management to identify good practice • implement waiting list management strategies to reduce waiting times for cataract surgery • monitor access to public hospital elective surgery to inform hospital eye health performance information and eye surgery service planning
Affordability	<ul style="list-style-type: none"> • identify effective models of state based programs which provide access to eye health care to disadvantaged and marginalised groups • ensure public awareness that optometrist eye examinations are covered by Medicare • ensure that subsidised spectacles programs are accessible to disadvantaged groups, particularly Aboriginal and Torres Strait Islander peoples who reside in remote locations • review funding and incentive programs for eye care specialists providing visiting and support services to rural and remote locations

Key area for action 3: Improving access to eye health care services *(continued)*

Action area	Actions
Cultural accessibility	<ul style="list-style-type: none"> • facilitate the use of Aboriginal Liaison Officers in mainstream health services, particularly hospitals providing public ophthalmology services, to reduce barriers and maximise access • support cultural awareness training and education programs to ensure the delivery of services that are sensitive to cultural specific needs delivered in a mainstream setting • build the capacity of eye health practitioners to deliver services in partnership with Aboriginal and Torres Strait Islander primary health care services • support research into the barriers to accessing eye care services by disadvantaged and marginalised groups
Public awareness	<ul style="list-style-type: none"> • raise awareness of the types of eye health care services available and the specific roles of different eye care practitioners • raise awareness of low vision management strategies and the availability of special interest, self-help and support groups • improve public awareness of the range of low vision services, rehabilitation, support, counselling and devices available • ensure awareness raising activities cover children, disadvantaged families and high risk youth populations
Research	<ul style="list-style-type: none"> • support further health services research to identify barriers to access and strategies to improve access to eye health care • explore the potential of new technologies such as telemedicine to improve access to specialist eye care in rural and remote Australia.

National initiatives that impact on improving access to eye health care services

- > National Health Workforce Strategic Framework
- > National Health Workforce Action Plan
- > Healthy Horizons: A Framework for Improving the Health of Rural, Regional and Remote Australians
- > Rural Chronic Disease Initiative
- > Aboriginal and Torres Strait Islander Health Workforce Strategic Framework
- > National Aboriginal and Torres Strait Islander Eye Health Program

Key area for action 4: Improving the systems and quality of care

Objective:

Eye health care is safe, affordable, well-coordinated, consumer-focussed and consistent with internationally recognised good practice.

Challenges:

Ensuring consistency in the quality of care provided to people with a vision problem is vital. There may be variations between individual eye health practitioners, between metropolitan and rural and remote regions and between mainstream services and those provided to disadvantaged and marginalised communities.

Variations in quality of care due to modifiable factors in eye health care systems can be addressed through quality improvement measures such as systems analysis, clinical frameworks, clinical risk management, incident monitoring, e-health technology, development and implementation of protocols and standards and accreditation of services.

Professional associations play a central role in implementing protocols and strategies to ensure that eye health practitioners are suitably trained, skilled and equipped to identify eye disorders and to undertake the range of procedures required of them. The use of continuing professional development attendance, certification and credentialing, clinical audit and peer review can all assist to address quality of care issues amongst eye care practitioners and reduce the risk of iatrogenic causes of blindness. The development and wide-scale adoption of clinical practice guidelines could also help to ensure that care provided is evidence based and consistent with internationally recognised good practice.

Historically, the eye health care sector itself has been fragmented, with limited communication across disciplines, duplication of effort and resultant public confusion about the roles of the various eye health care practitioners. A culture of collaboration within the eye health care sector would help to reduce duplication and improve service delivery.

The primary health care setting provides an important area in which the quality of eye health care can be improved. General practice is a health care setting where there are frequent presentations by people with eye disease or injury. A key challenge is how best

to link workforce development and capacity building in general practice in the better management of eye health with the investments already made in better chronic disease management within general practice. Systematic and integrated shared care programs and up-skilling of general practitioners in the area of eye health are some of the ways primary care could be used to address eye health issues.

The acute care system is another key interface for eye health care. Generalist hospital staff in accident and emergency departments, intensive care units and other areas are frequently required to care for people with eye diseases or injuries, as well as to prevent eye trauma in people who are comatose or heavily sedated. Appropriate training of hospital staff together with supervised practice in basic eye care are therefore important in addressing quality of care issues.

Demographic change, new technologies and increased consumer participation in health care and health care decision making will require new responses to the delivery of eye health care. Major issues include workforce shortages, workforce ageing, uneven distribution of the specialist eye care workforce, the need to keep up-to-date with the current evidence base regarding good practice, new models of care, quality improvement requirements and continued development of the global community.

Flexible boundaries and roles will enable the future eye care workforce to respond to the demand for new types of skills and new disciplines in response to new technologies and work practices. Electronic technologies will revolutionise care delivery, data storage and communication practices. Greater emphasis on health promotion and prevention and the workforce trend towards sectoral specialisation will also have implications for the types of skills required of eye care practitioners.

Finally, self-management programs have been shown to increase the quality of life and self-efficacy of those with chronic disease. There is potential for self-management interventions to be of assistance to people with age-related vision loss.

In summary, a collaborative, multi-disciplinary approach is required to effectively tackle workforce and quality issues in the delivery of eye health care services. The national investment in eye health can be maximised through better coordination across jurisdictions, service settings, professional groups and the education, training, regulation and industrial sectors.

Actions:

Key area for action 4: Improving the systems and quality of care	
Action area	Actions
Service integration	<ul style="list-style-type: none"> • promote collaboration within the eye health sector itself to improve quality of care and responsiveness to Australian consumers • develop models of care which incorporate multi-disciplinary approaches and broaden the workforce base • identify structures, systems and arrangements that facilitate the engagement of general practitioners and other primary health care practitioners in eye health • integrate eye care into primary health care chronic disease management programs • facilitate the effective delivery of community based programs aimed at addressing priority eye health conditions • assess and promote effective clinical and referral pathway processes and shared care arrangements to ensure continuity of care across services and practitioners • assess viability of increased utilisation of communications technology to provide links from remote communities to central eye specialist services to enhance diagnosis and treatment • strengthen partnerships between the mainstream eye health sector and Aboriginal and Torres Strait Islander primary health care services in urban, rural and remote settings • develop sustainable models for the provision of outreach ophthalmological and optometrical services to remote settings • develop referral pathways that include referrals to vision rehabilitation or low vision services that are available in the community

Key area for action 4: Improving the systems and quality of care *(continued)*

Action area	Actions
<p>Workforce development – specialist workforce</p>	<ul style="list-style-type: none"> • ensure quality of care provided by eye care practitioners continues to be assured through a range of quality improvement strategies, including mandatory continuing professional development, accreditation of services, clinical audit, peer review, certification and credentialing of practitioners, incident monitoring and benchmarking • develop, update, implement and promote evidence based multi-disciplinary guidelines for the prevention, detection and treatment of the most prevalent eye diseases in Australia • establish dialogue with the relevant colleges to provide the opportunity for increased Aboriginal and Torres Strait Islander medical officers in the Ophthalmology Training Program
<p>Workforce development – primary health care workforce</p>	<ul style="list-style-type: none"> • raise awareness in the primary health care sector of the prevalence and burden of disease associated with the most common eye conditions • work with relevant colleges and training institutes to implement and improve professional development programs for primary health care workers in the provision of eye care services • enable training of other health professionals to include basic ophthalmology and screening procedures • improve the range and level of education and training options in eye health for general practitioners with appropriate credentialing and ongoing monitoring of quality of care • explore opportunities to utilise communications technology to provide eye health related training and professional development opportunities to health workers located in remote communities • consider strategies such as the development of National Competency Standards for Aboriginal Health Workers, including eye health competencies for each level of training and qualification.

Key area for action 4: Improving the systems and quality of care *(continued)*

Action area	Actions
Consumer focus	<ul style="list-style-type: none"> • involve people with, or at risk of developing, low vision and blindness in significant service design and delivery decisions, for example through formal consultations and membership of advisory and management committees within the health system • trial and evaluate self-management interventions for people with vision loss

National initiatives that impact on improving the systems and quality of eye care

- > Quality and Safety in Care Initiative
- > National Health Workforce Action Plan National Health Workforce Strategic Framework
- > Aboriginal and Torres Strait Islander Health Workforce Strategic Framework
- > Healthy Horizons: A Framework for Improving the Health of Rural, Regional and Remote Australians

Key area for action 5: Improving the evidence base

Objective:

Eye health care policy, planning and programs are supported by high quality research and data collection systems.

Challenges:

Ongoing high quality epidemiological, clinical, economic, health services and evaluation research is required to underpin eye health policy and practice. Australian eye research to date has been significant, but there is still a pressing need for increased understanding of the aetiology of eye health problems and better prevention and detection methods, early intervention and treatment options.

Prioritisation of new and existing research initiatives combined with collaboration between researchers in Australia and overseas is necessary to maximise returns from investment in eye health research.

The production of high quality eye research products rests upon the skills and capacity of the eye research workforce. Enhanced research capacity can be encouraged through linkages and collaborations both within the eye sector and with other sectors and disciplines, and between researchers, policy makers and funding bodies in the private and public sectors. Optimal dissemination of research findings to target audiences is necessary for research to be relevant and utilised.

High quality eye health data and information systems can guide priorities within eye care delivery, to evaluate eye care and generalist health services and programs, to monitor quality improvement initiatives and to inform consumers, communities and health care practitioners.

Actions:

Key area for action 5: Improving the evidence base	
Action area	Actions
Research gaps and priorities	<ul style="list-style-type: none"> • identify eye health research gaps and national priorities in consultation with all key stakeholders • work with established Australian eye health research centres to develop eye health programs which reflect policy and practice needs • facilitate greater communication, coordination and cooperation between relevant research bodies • encourage high quality research products that are relevant and useful and meet the information needs of various stakeholders
Eye research workforce development	<ul style="list-style-type: none"> • continue support for resources, infrastructure and funding to undertake eye research • educate clinicians, public health professionals and epidemiologists about opportunities in eye research • promote a strong evaluation culture amongst eye care practitioners • encourage collaborative research by multi-disciplinary teams • promote inclusion of eye research on other public health and social policy research agendas
Knowledge transfer	<ul style="list-style-type: none"> • develop a range of strategies to make eye research outcomes accessible to eye care practitioners, consumers, policy makers and other stakeholders, including the use of networks, websites, newsletters and journals

Key area for action 5: Improving the evidence base *(continued)*

Action area	Actions
<p>Eye health data</p>	<ul style="list-style-type: none"> • develop a strategic and nationally consistent approach to eye health data collection • improve the utility of existing health data collections in regard to eye health • examine existing health datasets for relevance to eye health and explore opportunities to influence the development of health data systems in order to enhance their relevance to eye health • integrate and link existing databases to improve health monitoring, examination of successful outcomes and health care utilisation • develop performance indicators for the achievement of each key action area outlined in the National Eye Health Framework.

Part three: Roles and responsibilities

Successful implementation of the Framework will rest upon the development of partnerships across and between all levels of government, health professions, including the specialist eye health workforce and the generalist medical and allied health workforce, training institutions, industry bodies and non-government organisations, researchers, communities, families and individuals.

Governments and policy makers

The Australian Government Department of Health and Ageing and the Victorian Department of Human Services are the agencies charged with developing the National Eye Health Framework for Action by the Australian Health Ministers' Conference. The Office for an Ageing Australia has responsibility within the Department of Health and Ageing for the coordination of the development of the Plan.

The Australian Government's responsibilities under the National Eye Health Framework include the following:

- the provision of national leadership on eye health policy development and implementation
- the coordination of collaborative actions across governments to further nationally agreed eye health objectives
- the establishment of formal linkages to related national public health strategies and initiatives and the development and fostering of strategic partnerships
- identifying and utilising opportunities to promote eye health issues in relevant national health planning initiatives and programs
- responding to identified areas of need by commissioning, promoting and sponsoring work that is best done at the national level
- the coordination of Australian health workforce policy and planning
- the promotion of eye health awareness within existing services, including general practice and aged care facilities
- the identification and promotion of good practice approaches nationally across all key action areas in the Framework

- funding through Medicare of optometric, ophthalmological and general practice services
- funding through the Pharmaceutical Benefits Scheme of ophthalmic therapeutic agents
- the development and funding of a range of initiatives to improve access to specialist eye health services for people living in rural and remote Australia
- contributing to the development of nationally agreed research priorities for eye health research and funding of eye health research
- providing advice on the policy related aspects of Australia's international obligations, including representing Australia on a WHO taskforce to monitor the elimination of avoidable blindness globally
- analysing and monitoring eye health data and outcomes and reporting on performance against the Framework at the national level.

State and territory governments are responsible for providing leadership in regard to eye health policy within their respective jurisdictions and according to local needs and priorities. Among the functions state and territory governments may perform under the National Eye Health Framework are the following:

- developing and implementing state based eye health action plans consistent with the nationally agreed framework but based on local priorities
- designing, developing and implementing public health information and education programs aimed at raising public awareness of eye health
- providing public sector eye health services or funding community-based organisations to provide programs to prevent and treat eye conditions
- ensuring that eye health services are provided in a manner consistent with the principles and intent of the National Eye Health Framework
- analysing and monitoring trends in eye health, service utilisation and health outcomes at the jurisdictional level
- contributing to cross-jurisdictional and national surveys, data collection systems and research.

Professional associations

Professional associations can contribute to the elimination of avoidable blindness and vision loss in Australia, through providing the infrastructure for education and training, developing referral pathways and maintaining other professional support activities and networks. Such organisations include the Australian Medical Association and the Australian Divisions of General Practice, the Royal College of Nursing, the Pharmacy Guild and the Pharmaceutical Society of Australia, as well as the Royal Australian and New Zealand College of Ophthalmologists, the Optometrists Association of Australia and the Orthoptic Association of Australia.

Community based organisations

In Australia, a large number of community based organisations, often staffed by volunteers, make a valuable contribution to the elimination of avoidable blindness and low vision by providing information to the public and to health care and other professionals about specific eye diseases and available interventions, as well as offering support to people with vision loss and providing funding for research activities.

Business and industry

Employers and employees are responsible for occupational health and safety in the workplace, including the development of policies to reduce the risk of eye injury occurring, and to ensure good eye health practices amongst office workers.

Families and individuals

The National Eye Health Framework seeks to improve the capacity of individuals and families to promote eye health through raising awareness of strategies to prevent avoidable blindness and vision loss.

Part four: Monitoring and evaluation

It is proposed that jurisdictions be required to report three yearly to the Australian Health Ministers' Conference on progress made on the implementation of the National Eye Health Framework.

It is envisaged that during the implementation phase a comprehensive evaluation strategy based on performance indicators will be developed in collaboration with key stakeholders, including states and territories, to inform and guide the continuous improvement of avoidable blindness and vision loss prevention activities under the Framework.

