



Managing eye health and vision loss in residential aged care facilities

A resource for management and
health professionals



Our focus is your vision

About this publication

This resource is designed to provide residential aged care facilities with general information about eye health and vision loss.

Vision can deteriorate with age, with many vision problems being the result of conditions which can be treated. However, for people who lose significant vision which cannot be treated with medication, new glasses or surgery, there is a wide range of aids and technologies that can help to maximise remaining sight. The recommendations in this booklet are intended to be easily implemented into your care plans, giving residents greater independence while reducing the risk of serious injury including falls.

This resource has been developed following research conducted by Macular Disease Foundation Australia that showed a knowledge gap in this area.

This research also produced comprehensive recommendations regarding management and administration of eye health and vision loss in residential aged care facilities. Whilst currently not mandatory, the Foundation encourages facilities to obtain the report and review their practices.

About Macular Disease Foundation Australia

Macular Disease Foundation Australia is a charity with a mission to reduce the incidence and impact of macular disease in Australia. The Foundation is committed to working on behalf of the macular disease community through awareness, education, client services, research and representation.

Macular disease, including macular degeneration and diabetic retinopathy, is the leading cause of blindness* and severe vision loss in Australia.

Resources and services are provided free. Please contact the Foundation about any support you may require.

Macular Disease Foundation Australia

Helpline: 1800 111 709

info@mdfoundation.com.au

www.mdfoundation.com.au

* Legal blindness

Contents

About vision loss	1
The magnitude of vision loss in residential aged care	1
Impact of low vision on quality of life	2
Identifying a person with vision loss	2
Assisting a person with vision loss	3
Addressing basic needs	3
Managing eye health	4
Eye health checklist.....	4
Eye exams - recording and follow up	4
Glasses	4
Treatment for eye diseases	5
Injections for eye diseases	6
Low vision aids and services	6
Major eye diseases in the ageing population	7
Age-related macular degeneration	7
Diabetic eye disease	8
Cataract	9
Glaucoma	9

About vision loss

Many eye diseases (including macular degeneration) result in central vision loss, which can greatly affect the ability to read, recognise faces, participate in activities or watch television.

In some cases, the loss of vision can be so significant that the person can be considered 'legally blind'. These people may still maintain a degree of peripheral (side) vision and hence be aware of people or things in the room, but are unable to make out any detail.

People with diabetes are at risk of diabetic eye disease and vision loss, especially if they have had diabetes for some time, or if their diabetes is not well controlled.

Aged care residents commonly have poor self-awareness of their vision and may state that their vision is good, when it is actually quite poor.

Moreover, even residents with minimal memory loss will frequently have very poor recall of any eye diseases or issues they have. This means that the resident cannot be relied on to provide good, objective information about their vision status.



The magnitude of vision loss in residential aged care

Vision issues with residents of aged care facilities are very common.

70% Over 70% will have a vision related condition which may require regular monitoring and/or ongoing treatment.

60% Over 60% will have some degree of age-related macular degeneration (AMD). Most will have either the early or 'dry' forms which currently can't be treated, but normally results in a gradual loss of vision.

10% About 10% of people with dry AMD will develop the 'wet' form, which is aggressive and can lead to sudden vision loss and potentially blindness. Wet AMD can be treated very effectively, but this must be implemented quickly.

25% About 25% will have low vision¹ which can impact quality of life. For many of these people, functional vision can be improved significantly with various aids and technologies.

4% About 4% are likely to be legally blind, requiring additional assistance to perform many routine daily activities.

20% Up to 20% will have untreated cataracts in one or both eyes. If the cataract(s) affects the ability to function, cataract surgery should be considered as it can usually be performed with safety even in old and frail people.

¹ This means that the visual acuity is worse than 6/12 in both eyes, and can't be corrected with glasses or surgery.

Impact of low vision on quality of life

Low vision can have wide-ranging impacts on people, including:



3 x increased risk of depression



2 x increased risk of a fall



4 x increased risk of hip fracture



Greater feeling of social isolation and loss of self-worth



Higher rate of dependency



Loss of confidence to walk and engage in pleasure activities and hobbies



Higher all-cause mortality

Identifying a person with vision loss

Many people with low vision may not recognise that their vision is poor, especially as many eye diseases develop slowly. Even when aware that their vision is poor, many don't want to tell you about it, even when asked, as they "don't want to make a fuss" or else dismiss it as a normal part of getting older.

Critically, sudden changes in vision may not always be noticed, especially if the change only occurs in one eye, as the brain is often able to compensate by ignoring the bad eye.

Signs to look for in residents that could indicate failing vision are:

Falls: reduced vision is a common contributor to falls. If someone is falling regularly, especially if they had previously been quite stable, a sudden drop in vision should be suspected.

Reduced socialisation: people with vision loss are more likely to withdraw from group activities, and may even be reluctant to join other residents for meals. Loss of socialisation and frustration from being unable to see clearly can also lead to increased sense of hopelessness and even depression.

"Many people with low vision may not recognise that their vision is poor, especially as many eye diseases develop slowly."

Assisting a person with vision loss

People with vision loss should be encouraged to be as independent as possible, while being helped with critical tasks:

Identification:

a) Provide a "I have low vision" badge for residents to wear since it can be difficult to tell that someone has poor vision just by looking at them. Badges are available from Macular Disease Foundation Australia.



b) Staff and visitors should identify themselves when approaching someone with major vision loss.

Medication: assist with oral medication (it is insufficient to place tablets in front of the resident as they may not see them, or may knock them over).

Mobility: although people with vision loss are at a significantly higher risk of falls, they should not be placed in a wheelchair if they are still able to walk. Wherever possible they should be encouraged to walk, with supervision if required, in order to gain as much exercise as appropriate.

Declutter: ensure the resident's room is decluttered. Important items such as glasses, tissues, TV remote etc should be kept in the same place to assist with their identification and location.

Mental health: if there is concern about mental health or depression, a resident should be referred to a GP for further assessment.

Low vision aids and services: there are many low vision aids and technologies that can assist residents with vision loss. See page 6 for more information.

Addressing basic needs

Aged care facilities can assist residents with vision loss by understanding some basic principles:

Bigger, bolder, brighter: these are the first principles of assisting someone with vision loss.

Lighting: having good lighting to read, write or undertake fine work is very important. This applies to overhead lighting as well as good, well positioned task lights. A low vision service provider can also help assist with lighting arrangements for residents.

Glare: controlling glare is important for those with vision loss. Wearing sunglasses and a hat or visor is helpful as is positioning chairs to face away from a window.

Contrast: good contrast makes things easier to see. For example a white plate on a contrasting colour place mat.

Managing eye health

The aged care facility should keep updated records of the vision status of all residents including reports from optometrists and ophthalmologists. All recommendations made by optometrists or ophthalmologists should be recorded in residents' personal files and care plans.

Eye health checklist

The aged care facility should ensure:

- ✓ Residents have a comprehensive eye exam by an optometrist or ophthalmologist at least every 12 months, and more frequently if necessary.
- ✓ Residents with diabetes should have well controlled diabetes to reduce the risk of eye complications. Regular checks by an optometrist or ophthalmologist are critical.
- ✓ Any sudden changes in vision should be followed up as a health priority. It could be due to an eye disease for which immediate treatment is required.
- ✓ Residents check their eyes with an Amsler grid every few days. An Amsler grid is a simple self-monitoring tool to help detect macular degeneration.

Eye exams – recording and follow up

The optometrist and/or ophthalmologist should provide the aged care facility with a written record of findings, including:

- New glasses provided.
- A description of any eye disease present, and the implications of this.
- Clear instructions on the need for, and timing of referral to an ophthalmologist, psychologist, or other health care professional.
- Clear instructions on the timing of the next eye exam or treatment.
- Clear instructions on any eye health management requirements.

In some cases, for example if eye injections are needed for macular degeneration or diabetic macular edema, treatments may be as little as a month apart.

Glasses

Residents can easily lose their glasses, or they may be picked up in error by another resident. It is essential that the facility has a simple and reliable mechanism to identify the correct owners of glasses, such as:

- Engrave glasses with the owner's name.
- Photograph the resident with their glasses and save in the resident's file.
- Periodic inspection by staff to ensure that residents have not accidentally picked up the wrong glasses.





Treatment for eye diseases

Many eye diseases are treatable and aged care facilities need to ensure that the required treatment regime is adhered to.

The most common eye diseases and their treatment are:

Wet age-related macular degeneration (AMD): wet AMD is characterised by a sudden and severe loss of central vision. Current treatment consists of regular and ongoing injections into the eye (often every 4-8 weeks). The treatment is highly effective, with better outcomes when commenced early. Stopping or interrupting treatment can result in irreversible vision loss. Between visits to the eye care professional, the regular use of an Amsler grid is a key way to monitor vision.

Diabetic eye disease: in addition to optimal management of diabetes, some people with diabetic eye disease may require treatment with laser and/or eye injections. Injections are typically given every month for a few months, but then are given less often (or cease) once the condition is controlled. The frequency of injections is based on individual needs.

Cataracts: if the cataract(s) affects the ability to function, surgery should be considered as it can usually be performed with safety even in old and frail people.

Glaucoma: eye drops are the most common form of treatment and must be used as prescribed. The drops are varied to best suit the patient and the type of glaucoma. Treatment may also include a laser procedure, or surgery (to produce drainage flaps or the insertion of drainage shunts). It is critical that resident records accurately reflect their treatment requirements and this is included in their Care Plan.

For more information on these eye diseases refer to page 7.

Injections for eye diseases

Compliance with the injection regimen is critical. Missed, or excessively delayed treatment can result in irreversible vision loss. To assist with compliance, consideration should be given to:

- Ophthalmologist appointments should be checked and co-ordinated by the facility's automated systems to ensure compliance.
- Good communication between health care professionals, family/carers and the facility is critical to ensure no appointments are missed.
- If injections are needed in both eyes, the ophthalmologist should be asked to treat both eyes on the same day if possible to minimise disruption for the resident.
- If a resident is unable to go to the ophthalmologist's rooms, every effort should be made to encourage an ophthalmologist to perform injections in the facility.
- If a resident needs to be admitted to hospital for some other reason, it is critical that the eye injection schedule is maintained while the person is in hospital.

The purpose of injections is to preserve and stabilise vision. Some people may experience an improvement in vision, but this does not always happen. All people receiving injections should be encouraged to stay on treatment unless otherwise advised by their treating ophthalmologist.

It is essential that no-one stops treatment unless they (and their family/guardian) are advised of the possible consequences by an ophthalmologist.

Low vision aids and services

Many people with vision loss will benefit greatly from access to low vision aids and technologies. These can dramatically improve a person's quality of life and in many cases, increase independence.

All people with vision loss that cannot be corrected by new glasses or surgery should be referred to a low vision agency or supplier for assessment of functional vision and discussion on possible aids and technologies to assist in daily activities and possibly mobility.

Low vision aids and technologies range from simple optical magnifiers and improved lighting through to electronic magnifiers (hand held and desktop) and wearable artificial vision devices. In addition, a variety of aids and technologies are available to assist with daily living activities such as talking watches or clocks, large print playing cards, talking books, large button phones and smart phones and tablets with inbuilt accessibility features.

Low vision aids and technologies can be individually tailored to a person's specific needs and level of vision loss.

Details of the most appropriate low vision agency or supplier can be obtained from Macular Disease Foundation Australia by calling 1800 111 709.

Major eye diseases in the ageing population

Age-related macular degeneration

Age-related macular degeneration (AMD) is the leading cause of legal blindness and severe vision loss in older people. It causes a progressive loss of central vision, leaving the peripheral or side vision intact (it does not lead to black blindness).

AMD has two main forms - early, with minimal to no impact on vision, and late stage, which can result in substantial vision loss.

The late stage is further divided into late 'dry' disease (also called geographic atrophy) and late 'wet' disease (also called neovascular AMD).

The dry form is normally very slow in its progression - over a period of many months or years - whereas the wet form can progress very rapidly - even overnight. Importantly, the dry form can turn to wet at any time.

There is no treatment for early AMD or late stage dry disease. Importantly, however, diet and lifestyle modifications can reduce the risk of progression:

Don't smoke

Smoking has a most significant impact on risk of AMD.

Nutrition

In the context of a healthy, well balanced diet, include 'eye' health foods such as:



Fish two to three times per week (for omega-3 intake)



Dark green leafy vegetables daily (for lutein intake)



A handful of nuts each week



Low glycemic index (GI) carbohydrates in preference to high GI.

Supplements

a) **Supplementing the diet:** if fish and leafy greens are lacking in the diet, a supplement may be a consideration.

b) **For those diagnosed with intermediate or later stage AMD:** a supplement based on the AREDS formula may be considered in consultation with the optometrist or ophthalmologist.

Wet AMD can be treated with regular injections into the eye. Injections are normally required on an ongoing basis - possibly for life - or else vision will invariably drop. Very few people with wet AMD can stop injections.

Good response to wet AMD treatment is highly dependent on early diagnosis and early treatment. Delays in initiating treatment of longer than 2 to 4 weeks can be associated with inferior outcomes and permanent vision loss.



Diabetic eye disease

Everyone with diabetes is at risk of developing diabetic eye disease. While not as common as macular degeneration, diabetic eye disease can, if managed poorly and left untreated, result in even worse outcomes, including total blindness.

Critically, the longer a person has had diabetes, the more likely it is that eye problems will develop. Even if all previous eye tests have been clear, it is essential that regular eye testing is continued.

Diabetic eye disease has several components:

- transient blurring of vision (possibly due to fluctuations of blood glucose)
- increased risk of developing cataracts (and of developing them sooner)
- increased risk of developing glaucoma which initially affects the peripheral (outer) vision
- diabetic retinopathy, resulting in damage to the retinal blood vessels leading to disturbance of central vision and potentially blindness

Older people with long-standing diabetes should have a comprehensive eye test at least annually, although if any complications or other risk factors exist, this may need to be more frequent.

Anyone who has received a new diagnosis of diabetes should have an eye test immediately to check for the presence of any eye damage. Up to 30% of people will already have some diabetic eye damage present when first diagnosed with diabetes.

Regular eye tests should occur even if the person has no obvious symptoms or if they report their vision is perfect. Diabetic eye disease will commonly have no symptoms until it progresses to the late stage, when permanent damage has already occurred.

Although diabetic eye disease can result in blindness, nearly all vision loss can be prevented through careful management of the diabetes itself, early detection of any eye problem and early treatment in certain cases.

Treatment is available for diabetic retinopathy in the form of laser and/or eye injections. Injections are typically given every month for a few months, but then are given less often (or cease) once the condition is controlled. The frequency of injections is based on individual needs.

Cataract

Cataracts are very common in older people. They develop when the normal lens inside the eye becomes cloudy or opaque. In the early stages, the symptoms are mild, and may not even be noticed. They normally develop over many years, but can form quickly following trauma to the eye, after eye surgery or with certain medications. They normally form in both eyes, but not necessarily at the same time or rate.

As the cataract develops, symptoms include a loss of clarity or acuity, washed out colours, increased sensitivity to bright lights, and glare and haloes around lights. Many people with cataracts say they are looking through a thick fog.

Cataracts do not get better on their own, and when they are having a significant impact on vision, treatment involving surgery to replace the cloudy lens with an artificial lens (called an intraocular lens or IOL) is recommended.

While cataract surgery can usually be safely performed on people of any age, including frail elderly people, there may be some residents for whom surgery is not warranted, especially if their residual vision is still functional.

Glaucoma

Glaucoma is the name given to a group of eye conditions that gradually lead to a loss of peripheral (side) vision due to damage to the optic nerve. If left untreated, glaucoma can also eventually affect central vision.

One in 8 people over 80 years will develop glaucoma². Glaucoma can only be diagnosed and monitored by a qualified eye care professional.

Increased pressure inside the eye is a major risk factor for glaucoma and treatment involves a variety of ways to reduce pressure. Eye drops are the most common form of treatment and must be used as prescribed. Treatment may also include a laser procedure, or specialised surgery.

Anyone with or at risk of developing glaucoma should be monitored regularly in consultation with their eye care professional.

If treated promptly and regularly, most people with glaucoma maintain good functional vision.



Our focus is your vision

Macular Disease Foundation Australia
Helpline 1800 111 709
info@mdfoundation.com.au
Suite 902, Level 9
447 Kent Street
Sydney NSW 2000
www.mdfoundation.com.au

This resource has been produced with funding from the Australian Government Department of Health.



Australian Government
Department of Health

June 2018

² Glaucoma Australia: www.glaucoma.org.au