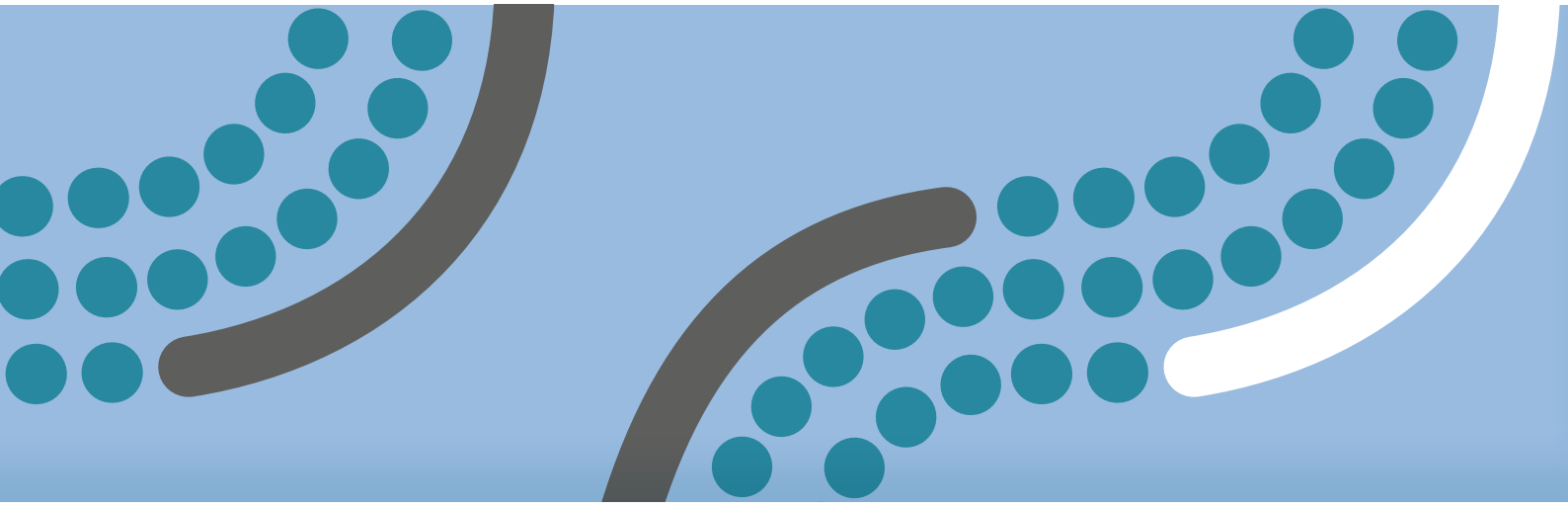
RACGP | *EY16 Eye medicine contextual unit*



Rationale

The burden of visual impairment is not distributed uniformly throughout the world. The least developed regions carry the largest share, with 87% of blindness occurring in developing countries.[1] Visual impairment is also unequally distributed across age groups, with the highest prevalence occurring in adults 50 years of age and older.[1] Approximately 51,000 Australians are blind (this includes 1.2% of adults who are aged over 55 years), and 119,000 of our population have low vision.[2,3]

At 1.9%, the rate of blindness in Aboriginal and Torres Strait Islander adults is 6.2 times higher than in the non-Indigenous population.[4] At 9.4%, the low vision rate is 2.8 times higher in Aboriginal and Torres Strait Islander adults.

Aboriginal and Torres Strait Islander children, especially in remote areas, have better vision than their non-Indigenous peers. Overall, low vision occurs in 1.4% of Aboriginal and Torres Strait Islander children (age-standardised rate), which is five times less common than in non-Indigenous children. Indigenous children in very remote areas have better vision and less refractive error, but continue to experience preventable conditions such as trachoma.[5]

General practice eye consultations account for about 2.2 out of every 100 consultations, and about 4.8% of medical specialist referrals are to an ophthalmologist.[6] Identification and appropriate management of acute eye injuries and infection and of acute and progressive visual loss are essential skills for general practitioners. Identification of individuals at risk of common conditions such as diabetic retinopathy, glaucoma and age-related macular degeneration is important to enable the commencement of appropriate screening and preventive strategies.

General practitioners (GPs) are ideally placed to coordinate care of individuals with visual impairment to enable them to access appropriate community supports and necessary services.

Based on studies that have included an eye examination, cataract is the most common eye disease among Australians aged 65 years or older, affecting over 1.2 million people (almost half of that population). This is followed by age-related macular degeneration, diabetic retinopathy and glaucoma. A further 398,400 older Australians are estimated to have early-age related maculopathy, which is usually asymptomatic, and are therefore at risk of developing age-related macular degeneration (ARMD).[3] The increasing rate of type 2 diabetes in the Australian population will also contribute to the total future burden of eye disease in Australia.[2] Early identification, provision of health promotion and education and regular review are important for individuals at risk of conditions such as glaucoma, ARMD and type 2 diabetes to minimise the risk of future loss of vision. GPs are in an ideal position to carry out these important roles.

Major causes of blindness in Aboriginal and Torres Strait Islander adults include cataract (32% of cases of blindness), optic atrophy (14%), refractive error (14%), diabetic eye disease (9%), trachoma (9%), trichiasis and trauma. Aboriginal and Torres Strait Islander adults in very remote areas have a higher prevalence of untreated cataracts and are less likely

to wear glasses, but diabetic eye disease, untreated cataracts and poor reading vision are problems across the whole of Australia.[4,5]

General practitioners need to take into account their own skill level (in assessment of vision and eye anatomy), the availability of specialised equipment, such as slit lamps, that they are competent to use, the likelihood of patient injury from either the condition or intervention, and the appropriateness of referral before treating ocular conditions.

Related contextual units

CO16 Care of older people

DB16 Individuals with disabilities

References

1. World Health Organization. Prevention of blindness and visual impairment. Data and maps. Geneva: WHO, 2010. Available at www.who.int/blindness/data_maps/en/index.html [Accessed 11 November 2015].
2. Australian Institute of Health and Welfare. Eye health facts. Canberra: AIHW, 2015. Available at www.aihw.gov.au/eye-health-facts [Accessed 11 November 2015].
3. Department of Health and Ageing. Final report – Risk factors for eye disease and injury. Canberra: DoHA, 2011.
4. Australian Institute of Health and Welfare. Eye health in Aboriginal and Torres Strait Islander people. Cat. no. IHW 49. Canberra: AIHW, 2011.
5. Centre for Eye Research Australia. National Indigenous eye survey: Minum barreng (tracking eyes): Full report. Carlton, Vic: University of Melbourne, 2009.
6. Britt H, Miller GC, Henderson J, et al. General practice activity in Australia 2013–14. General practice series no. 36. Sydney: Sydney University Press, 2014. Available at http://ses.library.usyd.edu.au/handle/2123/11882 [Accessed 11 November 2015].

Useful eye medicine resources and tools

Vision Australia, www.visionaustralia.org

Glossary

Applied professional knowledge and skills appropriate for common eye conditions can include:

- appropriate use of an ophthalmoscope, visual acuity testing, visual field testing and manoeuvres for everting the upper lid
- appropriate use of vision charts, pinholes for visual acuity, Ishihara charts for colour vision, Amsler grid for macular degeneration
- prevention and treatments for age-related macular degeneration
- red flag symptoms (eg flashes and floaters)
- removal of foreign bodies, including any residual corneal ulcer or rust
- use of ocular cycloplegic and topical anaesthetic medications, and use of fluorescein for diagnostic purposes.

Eye emergencies requiring general practice management include assessment and management of unilateral red eye, trauma, corneal and intraocular foreign body, acute glaucoma, sudden visual loss, herpes zoster ophthalmicus, uveitis, and orbital cellulitis.