

## RURAL AND REGIONAL SERVICES

# Taking eye care to the people

**P**eople living in Australia's rural and remote communities benefit from better access to primary eye health care due to the Visiting Optometrists Scheme.

The scheme, established in 1975, was implemented because people living and working in these areas were not receiving timely eye care or were never gaining access to it.

Optometrists receive funding through the scheme to visit isolated communities and provide outreach services, sometimes flying from capital cities and then taking a light aircraft or off-road vehicle to their destination.

They perform patient consultations and test for various eye conditions using equipment provided through the scheme. The scheme encourages enhanced collaboration between optometrists, local health providers and other visiting health professionals, such as eye surgeons.

It has a strong focus on Aboriginal and Torres Strait Islander health, as there is a

higher incidence of eye disease in remote indigenous communities. These diseases include diabetes, cataract, glaucoma and trachoma.

The scheme is administered by the

Australian Government's Department of Health and Ageing. Additional funding of \$6.5 million has enabled the scheme to better target rural and remote indigenous communities.



Photo: Brien Holden Vision Institute

YOUR OPTOMETRIST





Photo taken by Peter Casamento

# Bionic eye

BVA is developing two bionic eye models. One features 98 electrodes to allow patients to distinguish large objects, while the second consists of 1,000 electrodes and should help patients to recognise faces and read print. The 98-electrode model is being tested in animals and is due for human trialling in 2013.

The Monash University group's model features electrodes implanted on the surface of the brain's visual cortex. This method should provide vision for most patients regardless of their disease. It may offer higher visual resolution due to the larger surface of the visual cortex compared with the retina, allowing for more electrodes to be implanted.

The group aims to conduct human trials of its bionic eye within four years and hopes that its device will provide patients with the ability to move around independently and read large text.

One of the most exciting developments in vision research is the race to develop the world's first bionic eye. Several research teams in Australia are working to create their own devices to restore vision in blind patients.

The Australian Government will give \$42 million to Bionic Vision Australia (BVA) to further bionic eye research and development; another group led

by Monash University researchers will receive \$8 million.

The BVA device involves a camera attached to a pair of spectacles, which sends visual input to a small computer worn by the patient, which generates electrical signals to stimulate electrodes implanted in the retina (at the back of the eye). This allows patients to perceive spots of light, which the brain turns into an image.

## Glaucoma Sneak thief of sight

Glaucoma is the world's leading cause of blindness. It is a disease that affects the optic nerve, which is located at the back of the eye and responsible for transmitting visual information from the eye to the brain.

This nerve can be damaged by increased pressure inside the eye, resulting from poor circulation or drainage of the eye's aqueous fluid. Although less common, the optic nerve can suffer damage in other ways, such as from poor blood supply or a weak structure.

People with glaucoma do not suffer ocular symptoms until irreversible vision

loss has occurred in the eye. This is because damage occurs gradually and one eye may compensate for the loss of vision in the other. By the time someone notices a problem, many of their optic nerve fibres may be damaged and a large portion of their vision lost.

The disease is often referred to as the 'sneak thief of sight'.

Several factors increase the risk of developing glaucoma, in particular age, with 10 per cent of people over 80 years of age developing the disease. Also at higher risk are diabetes and migraine sufferers; those with a family history of glaucoma;

people with myopia, eye injuries, and high blood pressure; cortisone drug users and females.

It is recommended that people who fall into these categories should have regular eye examinations at least every two years.

More than 300,000 Australians have glaucoma but about half of them remain undiagnosed. These statistics reinforce the importance of visiting your optometrist for regular eye examinations to detect glaucoma before ocular damage progresses. Optometrists can test for glaucoma quickly and painlessly.



## aids performance

**L**ibby Kosmala discovered by accident that she had a talent for air rifle shooting. She was an archer when she was invited to a rifle range in her role as secretary of the Wheelchair Sports Society.

While there, Libby shot through the middle of the target on her first attempt and to prove it was not a fluke, repeated the feat on her second shot. She dropped archery to focus solely on her shooting career.

Good vision is extremely important in air rifle shooting. Its demands on near- and long-distance vision, coupled with the extraordinary focus and concentration required, make it imperative that your vision is functioning at full capacity.

Libby has been a competitor for 40 years and is an eight-time Paralympic gold medallist. She has visited her

optometrist Neil Murray annually for 20 years to maintain good near vision. 'It is important to see the sight on my rifle clearly; it is about one metre away from my eye,' she said.

Neil was recommended to Libby as he has a strong interest in sports vision and has been a shooter. As Libby practises, Neil goes onto the rifle range with her to find the best lens to suit her needs.

Twenty-six years after winning four gold medals at the 1984 Paralympics in New York and breaking four world records that year, Libby has won a World Cup event in Turkey.

She is scheduled to compete at the World Championships in Croatia in July, with the goal of qualifying for the 2012 Paralympics in London. It would be her 11th Paralympic Games as a competitor.

# Contact lenses and you

**A**re contact lenses right for you? If you want to find out, there are many things to consider.

Are you physically active? Do you spend time in front of the computer? Are you often outside and exposed to ultraviolet light? Do you suffer from dry, sensitive or allergic eyes? Are you shortsighted or longsighted? Do you suffer from astigmatism, or need multifocals or spectacles for reading?

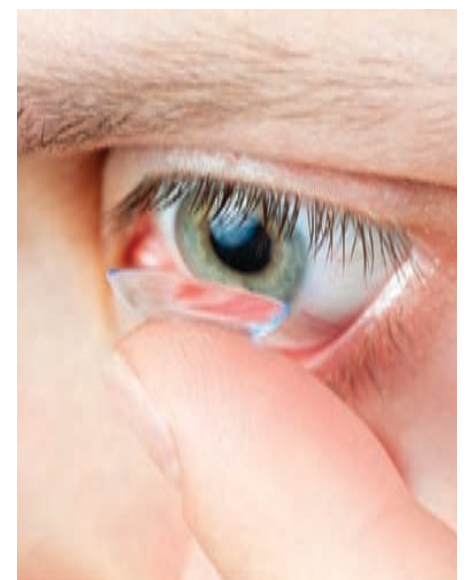
Think about your budget, and your preference for particular types of contact lenses, which include single-use, reusable, overnight-wear and coloured lenses.

Discussing all of these factors with your optometrist will help you to make an informed decision.

Contact lenses have many advantages. They cause less visual distortion than spectacles, and give you freedom to move your eyes, head and body, unlike spectacles that can shift on your face or be accidentally knocked off.

Contact lenses won't get splattered with droplets in the rain or fog up when you sweat, and they can be very comfortable when fitted correctly.

Your optometrist will recommend the contact lens that will best suit your eyes and your lifestyle.





# Hi-tech lenses sharpen vision



**S**tate of the art technology allows spectacle lenses to be tailored to your exact individual specifications, providing you with the best possible vision correction.

Progressive lenses enable the wearer to focus on all distances, because there is a gradual change between distance, intermediate and near focus as they look through different

parts of the lens. They provide the wearer with more natural vision as there is no obvious change in focus, and they are more appealing aesthetically.

Lens manufacturers are no longer constrained by traditional mass production techniques. They can produce lenses that take into account not only the patient's prescription but also the distance and position of their eyes in relation to lenses.

These specific measurements are provided by your optometrist and entered into a computer to generate an individual lens design.

The more complex lens designs associated with progressive lenses mean that they are generally more expensive than single vision lenses. New wearers may also require a period during which their eyes and brain learn to adjust to the new lenses, and may initially experience headaches and dizziness.

Patients who wear these technologically advanced lenses tailored to their specifications are often amazed by the enhanced visual acuity they provide and view the cost of the lenses as an essential investment in quality of life.

## ANCILLARY COVER, YOUR CHOICE

**A**ncillary or extras insurance is offered by health funds to cover health services such as optical, dental and chiropractic care, on top of your hospital insurance.

It is not compulsory to have ancillary cover. The decision to have ancillary cover may depend on your expected needs—will you use these services enough to warrant paying for the cover?

Someone who works in an office and spends hours sitting at a desk may suffer from musculoskeletal pain and might need regular or occasional chiropractic or physiotherapy treatment to relieve their discomfort.

For those who have only an annual dental check-up, do not wear spectacles and who rarely have physiotherapy or chiropractic treatment, it may be a better option to pay for these services when

they are needed, rather than paying extras premiums.

If optical extras are important to you and you are selecting a health fund, it is worth finding the answers to a few questions.

Will the optical rebates you receive match the additional annual premium you pay? Can you claim optical benefits more than once a year or carry unused rebates into the next year? Does your fund allow you to choose your own optometrist? Does

the fund make clear the optical benefits for which you are covered? Will these benefits be adequate for you?

Answering 'no' to any of these questions may indicate that a particular health fund might not suit your needs. With a variety of health factors to consider and several health funds offering different options and benefits, trying to figure out the level of insurance that suits your needs can be confusing.

Health Insurance Consultants Australia (HICA) can provide you with a free no-obligation health insurance assessment.

After you complete a form outlining your details and the level of importance you place on various services that come under ancillary cover, HICA can find for you the most appropriate and affordable cover, with freedom of choice. Visit [www.hica.com.au](http://www.hica.com.au).

