### Policy and Practice Implications...

Funding is needed and could be spent effectively in the following areas:

- A full time eye services regional manager (with administration support and travel) to co-ordinate eye services.
- At least one day a week of a recognised leader in ophthalmology for each state (with local knowledge and respect) financed to oversee significant Indigenous outreach, and to develop sustainable, locally specific services and advocacy for Aboriginal and Torres Strait Islander ophthalmology services.
- Patient awareness programs of eye conditions and treatment options developed and implemented with collaboration of the College, NGOs and government health departments, and disseminated by Aboriginal health workers.

### Research Implications...

Research, evaluation and implementation challenges:

- Clear definition of the co-ordination roles for eye services.
- Research into effective models for eye health co-ordination, such as:
  - Regional feasibility study and evaluation to determine the key characteristics of an eye health co-ordinator and strategies to improve their effectiveness,
  - Funding of a research fellow to investigate the key characteristics and costing model for an effective eye health co-ordinator.
- Outreach surgery: What is the best way to improve uptake of cataract surgery? How could barriers be addressed by improving access to surgical services?
- Funding levels: What effective differential rebates could be introduced to reimburse outreach work, making it comparable to urban practice, recognising challenging case loads, travel time and base-practice costs.
- What is the best way to educate and raise patient awareness of key eye conditions to improve attendance rates and compliance with treatment?
- How can Aboriginal health workers best be engaged in eye care programs?
What do we know?

Outcomes among non-Indigenous Australians

Cataract surgery is safe and very effective, quickly restoring vision and improving quality of life, with a complication rate of only 1-2%. Cataract surgery is very economical, at $A2,800 per quality-adjusted life year (QALY); the World Bank considers interventions in Australia under $A112,000 to be cost-effective.

For age-related cataracts, phacoemulsification gives a better visual outcome than extracapsular cataract extraction (ECCE) surgery; manual small incision surgery provides better visual outcomes than ECCE, but has slightly inferior unaided visual acuity compared to phacoemulsification.

Simple ‘shifted outpatients’ styles of specialist outreach programs improve access to care, however their impact on health outcomes is uncertain. Specialist outreach, as part of a complex multifaceted intervention involving collaboration with primary care, education or other services, leads to improved health outcomes, more efficient and guideline-consistent care and less use of inpatient services. There is little evidence looking at specialist outreach in remote disadvantaged populations.

Outcomes among Aboriginal and Torres Strait Islander peoples

Indigenous patients presenting for cataract surgery have worse presenting visual acuities than non-Indigenous matched controls.

A large proportion of eyes in Aboriginal patients do not correct to 6/12 or better with pinhole approximation. There is a high chance of developing posterior capsular opacification (PCO) within five years after cataract surgery, leading to a decrease in visual acuity. Postoperative eye complications (such as PCO) can be effectively treated.

Follow-up and patient education is vital to patient presentation to health clinics with any post-operative eye problems.

Cataract surgery service delivery

Rural and remote service delivery settings usually lack a resident ophthalmologist, with ophthalmology service levels in some regions up to 19 times below the national average. Regions in which Indigenous people are the majority often have longer waiting times and lower clinic and surgical throughput. Ophthalmic equipment is frequently of poorer quality and there is a reliance on other health professionals, e.g. Aboriginal Health Workers. Cataract surgery is often provided as occasional surgery sessions in country hospitals with a high turnover of medical and nursing staff. Aboriginal community-controlled health services represent an important source of assistance for patients, communities and health care specialists. Improving integration of services and visits between optometry and ophthalmology appears to reduce waiting times, and does not increase costs per patient attendance.

Funding

Regions with a majority of ATSI patients have higher service-delivery costs per attendance. Funding sources and funding levels vary widely across locations and States and are complex to navigate. Fee-for-service funding can significantly improve ophthalmologist efficiency compared to salaried or sessional rates, and is also associated with higher clinical throughput, lower costs per attendance and shorter waiting times.

Cataract eye camps

Cataract eye camps aim to improve the acceptability and accessibility of cataract surgery to ATSI people in remote communities. Although successful in some countries, their effectiveness has not been adequately assessed in Australia.

Implementation Considerations...

Target: Vision 2020: The Right to Sight Australia was launched in October 2000 as part of a global campaign to eliminate avoidable blindness globally by the year 2020. The initiative is a partnership of a wide range of Australian organisations involved in service provision, research, education and community work to promote sight as a basic human right and to respond to problems of blindness and vision impairment.

Current federal efforts to improve the co-ordination of eye health teams, and service integration between the federally funded Visiting Optometric Scheme (VOS) and the regional outreach ophthalmology services, need to be developed in collaboration with several NGOs, including the International Centre for Eyecare Education (ICEE) and the Fred Hollows Foundation (FHF), to avoid duplication of services and excessive management costs.

Barriers to cataract surgery for Aboriginal and Torres Strait Islander people in rural and remote areas include:

- Geographical remoteness
- Lack of transport
- Poverty
- Cultural appropriateness of services
- Poor communication between doctors and patients
- Cost - although cataract surgery is free in Australian public hospitals, there are indirect costs such as carers’ cost of food, transport and loss of income
- Fears of cataract surgery expressed by the family and community.

What don’t we know?

The coordination roles for eye services need to be clearly defined. Currently these range from individual private efforts, to managers under the auspices of a public hospital and regional eye health coordinators.

Research is needed to identify effective models for eye health co-ordination.