Victorian ophthalmology service planning framework
An overview of recommendations
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**Victorian ophthalmology service planning framework**

The *Victorian ophthalmology service planning framework* (the framework) provides a planning framework for the provision of high quality and accessible public ophthalmology services for all Victorians. It has been developed in response to the *Metropolitan Health Strategy, Directions for your health system*, which recommends that service planning frameworks for a range of clinical specialties be established, including ophthalmology services.

The framework guides the provision of public ophthalmology services through system design and workforce development, and addresses long–standing and emerging issues for ophthalmology service delivery in Victoria until 2016. The Department of Human Services (the department) developed the framework in consultation with key stakeholder groups, including service providers and users.

The term ‘ophthalmology services’ refer to medical and non-medical eye care and related services provided by a range of health care professionals. It includes services provided by specialist and sub-specialist ophthalmologists, general practitioners, orthoptists, optometrists, ophthalmic nurses and health care professionals working in emergency department settings.

**System strengths**

Characteristics of the Victorian ophthalmology system include a:

- high level of service provision across Victoria when compared nationally and internationally
- highly trained and skilled eye care workforce
- distributed service system with many public hospitals providing some ophthalmology services
- strong track record in service delivery
- professional education program provided at the Royal Victorian Eye and Ear Hospital (RVEEH) as well as research networks of high national and international significance.

These strengths position Victoria well to provide the highest quality ophthalmology services, however, demographic and technological changes will challenge the current system. The recommendations in the framework have been developed to build on the strengths in the system while taking into account the future challenges. These recommendations form the basis of the framework from which ophthalmology services will be planned in Victoria into the future.

*The complete Victorian ophthalmology service planning framework is available online at www.health.vic.gov.au/ophthalmology.*
Discussion and recommendations

Improving access and equity

Improving service delivery

Victoria’s management of ophthalmology elective surgery compares well to other Australian states and territories. Data reported by the Australian Institute of Health and Welfare indicates that Victoria has the one of the lowest proportions of patients waiting more than 12 months for surgery in Australia.

Despite these comparisons, waiting times have been identified as a barrier to people trying to access public ophthalmology services. In particular, variations in waiting times between organisations have created some inequity in access across the state.

Long waiting times for initial outpatient consultation has been identified as a key barrier to accessing public services. While there are no routine collections of waiting times for outpatient appointments, a survey of Victorian hospitals that provide public ophthalmology services in January 2004, revealed variation in the waiting times for non-urgent ophthalmology appointments.

There is a view amongst providers that there is too much system-wide emphasis on cataract surgery to the detriment of some rare and treatable diseases. There are concerns that people with cataract may wait less time for surgery than people with other more serious conditions who require services provided in the outpatient setting.

To ensure equitable and appropriate access to public outpatient services and elective surgery, the department has developed elective surgery management policies outlining how elective surgery is to be managed. The Elective Surgery Waiting List Referral Policy and Elective Surgery Access Policy are available online at www.health.vic.gov.au/elective_surgery.

Recommendation

1. Develop consistent guidelines and practices for accessing public ophthalmology outpatient services and elective surgery to ensure that access is equitable, appropriate and based on clinical need.
Improving eye care literacy and referral pathways

Access to information about a particular condition is important in any high quality health care system. It empowers consumers and carers to make well informed decisions about their health and course of treatment. Access to information also enables providers and consumers to gain a better understanding of the role of different health care professionals and to therefore provide, or seek, appropriate care pathways.

Stakeholders have suggested that current eye care information is not reaching as many people as it should be. Evidence suggests that many people on low incomes do not prioritise eye care and are unaware of the benefits of a regular eye examination. Moreover, many patients, particularly the elderly, are said to be unaware that their vision is capable of correction, or do not want correction. Inadequate monitoring of conditions such as diabetes, reflects a lack of patient understanding of the need for services or poor referral practices, rather than a lack of available services.

Concerns were raised about variations in referral pathways and the appropriateness of some referrals by health care professionals. Variations in referral pathways were suggested to be due to a lack of understanding of the roles of different eye care professionals by other health care professionals and consumers, and the fragmentation between certain professional groups. Consumer consultation confirmed that consumers generally have only a vague understanding of the distinction between the roles and responsibilities of various ophthalmology professionals and support services.

Referral to low vision services has also been highlighted as an issue. Low vision services aim to optimise vision and provide aids and assistance to improve quality of life of people with permanent low vision. Providers believe that improved referral to low vision services is required, given that utilisation rates for low vision services are universally low.

The Victorian Government funded Vision Initiative, which commenced in 2003, is an eye health promotion and education program that aims to reduce the incidence of preventable blindness and the impact of severe vision loss. It aims to educate both consumers and providers about the roles of different eye care professionals and to improve consumers’ eye health literacy.

Recommendation

2. Improve eye health education and promotion programs for consumers and providers through support of the Vision Initiative.
Improving access to low cost glasses

Affordability of eye care, and the cost of glasses in particular, has been identified as a barrier to people accessing treatment to correct poor or deteriorating vision. The government funded Victorian Eyecare Scheme (VES) provides low cost glasses to concession card holders and their children under 18 years. The VES is funded through the department and is run by the Victorian College of Optometry (VCO).

It has been found that people living in supported residential services, aged care facilities, homeless people, young people and culturally and linguistically diverse communities, particularly newly arrived immigrants and refugees, need additional support to access VES services. Barriers to accessing low cost glasses through the VES include:

- perceived and actual waiting times for consultations
- eligibility for the scheme
- limited selection of glasses
- withdrawal of some practices in rural areas because of perceived excessive bureaucracy and opportunity costs
- lack of promotion of the VES by participating optometrists due to a lack of incentive.

The government recognises the importance of the VES program in providing glasses to low income earners. In the 2005-06 budget, it announced an additional $334,000 to expand the capacity of VES to provide glasses at low cost to pensioners and other low income earners. This funding will provide eye care and subsidise glasses for 3000 extra clients. A further $250,000 was allocated for the development of a new service model that will target eye care in aged care, disability accommodation and supported residential services. A review of VES services will be undertaken in 2005 which will consider the service model, linkages to other elements of the public eye care service system and future demand. The review will provide recommendations on the future extension of services.

It was suggested by stakeholders that opportunities for the provision of low cost glasses to patients following ophthalmology care, in particular cataract surgery, be reviewed. The VES was suggested as a possible provider, however, this would need to take into account the potential impact on overall demand for services. Improved linkages between the VCO and the RVEEH were also suggested as improvements to increase access to low cost glasses. Opportunities such as improving access to services in metropolitan areas, improved awareness of the service and developing more streamlined processes for consumers and providers were also highlighted.

Recommendation

3. Improve and promote access to low cost glasses.
Improving service distribution

Geographic access

Ophthalmology services are well distributed with ophthalmology inpatient separations reported through the Victorian Admitted Episodes Dataset (VAED) by 102 public hospitals and 76 private hospitals. Cataract procedures were performed at 46 public hospitals, including 21 metropolitan and 25 rural.

The box on the right provides a snapshot of ophthalmology service provision in Victoria in 2002-03.

Summary of Victorian ophthalmology service provision in 2002–03

Inpatient separations

- 49,700 separations statewide
  - 70 per cent cataract procedures
  - 84 per cent same day
  - 96 per cent elective
  - 22,031 separations at public hospitals

Non-admitted services

- 91,480 outpatient encounters provided by 12 public hospitals
- 35,001 emergency presentations to 35 public hospitals
- 660,507 ophthalmology MBS claims
  - 513,105 consultations
- 1,078,180 optometry MBS claims

1 MBS data provided from the HIC. Data includes claims for private inpatient procedures captured in VAED.
The degree to which people can access services close to home is an important measure of service equity and accessibility, this measure is known as ‘self-sufficiency’. Self-sufficiency varies across the state. In 2002-03, 99.7 per cent of metropolitan residents received inpatient ophthalmology services within metropolitan Melbourne while 77 per cent of rural residents received services within rural Victoria. The Hume and Gippsland regions were the least self-sufficient with 60 per cent and 63 per cent respectively.

Self-sufficiency for rural regions is summarised below:

<table>
<thead>
<tr>
<th>Region</th>
<th>Self-Sufficiency</th>
<th>Treatment in Rural Victoria</th>
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<tbody>
<tr>
<td>Hume</td>
<td>60 per cent</td>
<td>62 per cent</td>
</tr>
<tr>
<td>Gippsland</td>
<td>63 per cent</td>
<td>63 per cent</td>
</tr>
<tr>
<td>Loddon-Mallee</td>
<td>71 per cent</td>
<td>79 per cent</td>
</tr>
<tr>
<td>Grampians</td>
<td>76 per cent</td>
<td>82 per cent</td>
</tr>
<tr>
<td>Barwon South Western</td>
<td>90 per cent</td>
<td>91 per cent</td>
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**Metropolitan services**

Most public metropolitan health services provide access to a range of ophthalmology services. The largest providers of inpatient separations in 2002–03 were the RVEEH, Cranbourne Integrated Care Centre and the Royal Children’s Hospital.

Several large metropolitan public hospitals have ceased direct provision of a full range of ophthalmology services and developed partnerships or linkages with other health services for service provision. These include St Vincent’s Health, Eastern Health and Peninsula Health.

Twelve Victorian hospitals, nine metropolitan and three rural, provide publicly funded outpatient services through the Victorian Ambulatory Classification System (VACS). Public outpatient services are concentrated centrally with 70 per cent of the state’s services provided at the RVEEH. There are no VACS funded outpatient clinics in western metropolitan areas.

The majority of providers agree that a range of specialist ophthalmology services including emergency, consulting and surgical should be locally accessible in all general metropolitan hospitals. It was suggested that staff would not be attracted to general hospitals if they did not have the opportunity to provide a range of consulting and surgical services. Elective surgical services were considered to be essential to attracting ophthalmologists to provide other medical and emergency services.
Ensuring provision of primary and secondary services for patients treated in all public general tertiary hospitals will increase local access to services and reduce the need for referral to other health services for care. These services can be either through direct provision or partnerships with other local services. This is particularly relevant to rural residents who often have long travel times and costs if required to travel to Melbourne.

**Rural services**

Ophthalmology services are well distributed in rural Victoria with 70 public hospitals providing some level of eye care. Most regional centres provide a range of ophthalmology services, with visiting surgical services available in many sub-regional and small rural hospitals. In 2002-03, 20 rural and regional hospitals treated over 100 ophthalmology separations each.

Four regional centres provided 39 per cent of all rural separations. These included Barwon Health, Ballarat Health Services, Bendigo Health Care Group and Latrobe Regional Hospital. Variations in regional service delivery were identified. The cessation of ophthalmology surgical services at Goulburn Valley Health (Shepparton) in 1993 was highlighted.

It was also noted that access to ophthalmology outpatient services is variable. There are three VACS funded outpatient departments in rural Victoria, Ballarat Health Services, Bendigo Health Care Group and Barwon Health. Together they treated a total of five per cent of the state’s public outpatient services in 2002-03. Data is not reported to the department for outpatient services provided through non-admitted patient grant funding or through the Medicare Benefits Schedule (MBS), making patient access to outpatient services in rural Victoria difficult to determine. Where public outpatient consultations are not available locally, consulting services are generally provided by private ophthalmologists in private consulting rooms.

Variations in regional service provision are seen to relate to a range of factors including availability of some staff, particularly ophthalmologists, and the costs associated with equipment and employing or contracting an ophthalmologist.

There is a strong view that all regional areas should have comprehensive ophthalmology services, that is, non-admitted consulting, emergency, operating and community based services, although most stakeholders believe that service provision should not be at too higher cost.

There is a role for both large and small rural health services in the provision of ophthalmology services. The challenge is to ensure that services are planned and delivered in a coordinated way within a region or sub region. Regional hospitals will play a lead role in the provision and coordination of services. Further work needs to be undertaken to specifically determine which services need to be delivered at the regional hospitals.
Paediatric services

Children aged 0 to 14 years constitute only 3.8 per cent of ophthalmology separations and 5.4 per cent of ophthalmology MBS claims. Paediatric inpatient services are concentrated centrally with the Royal Children’s Hospital treating 37 per cent of all children presenting with eye problems, and the RVEEH treating 16 per cent, in 2002-03. The Royal Children’s Hospital is the major provider of paediatric ophthalmology services in the state and there is strong support for it to continue its role as the key provider of public specialist paediatric ophthalmology services in the future.
Recommendation

4. The following health services should ensure the provision of primary and secondary services for their tertiary campuses, including 24-hour on call, inpatient, outpatient and emergency consulting and surgery:

- Metropolitan
  - RVEEH
  - Western Health
  - Northern Health
  - Melbourne Health
  - Austin Health
  - Eastern Health
  - Bayside Health
  - Southern Health
  - Peninsula Health

- Rural and regional

  The implications for the five major regional hospitals to provide the range of services specified above will need to be considered in detail. Regional hospitals will play an important role in the provision and coordination of services across their region.

Elective surgery may be provided in alternate settings to the tertiary site or regional hospital, such as in same day and elective surgery centres or other rural hospitals.

The Royal Children’s Hospital should continue its role in specialist provision of paediatric ophthalmology services.

A distributed service system should be maintained through the provision of a range of primary and secondary services at rural hospitals.
Royal Victorian Eye and Ear Hospital

The RVEEH is a specialist teaching, training and referral hospital for ophthalmology and ear, nose and throat services. Internationally, it is one of about 20 major stand-alone specialist hospitals in eye and ear medicine.

The RVEEH plays a key role in teaching and training health professionals in ophthalmology and has an international reputation in medical research through its close association with the University of Melbourne, Department of Ophthalmology and its affiliation with the Centre for Eye Research Australia. Collocation of research institutions with the RVEEH is seen to be greatly beneficial to both parties.

The RVEEH provides a range of general and sub-speciality ophthalmology services. Sub-speciality services include glaucoma, vitreo-retinal, ocular motility, orbito-plastics, corneal, ocular diagnostics, neuro-ophthalmology, medical retinal and ocular immunology. The RVEEH provides 39 per cent of the state’s public cataract surgery and treats a high proportion of specialty surgery.

There is considerable support for maintenance of the multidisciplinary sub-specialty clinics provided by the RVEEH, and for ophthalmology care to be provided in a coordinated fashion with specialist care at other hospitals (for example, diabetic and immunological), ensuring appropriate care for complex patients. There is also support for the maintenance and growth, over time, of integrated services in all metropolitan and regional tertiary general hospitals.

In consultation, consumers often commented on the quality of services received at the RVEEH. It is very highly regarded because it is a public facility with emergency access, provides specialised, high quality treatment and provides teaching and research.

"Yeah they’re fantastic…I’ve been there only to take my grandfather there but not for myself. But he sang their praises highly”

There is strong support for the RVEEH to continue its role as a statewide provider of public tertiary ophthalmology services with a high concentration of highly specialised services, possibly collocated with a general tertiary hospital.

As recommended in the MHS, the RVEEH requires a detailed service plan and review to determine its future role and optimal location. This service plan for the RVEEH will determine its catchment for primary and secondary services as well. This work is currently being undertaken.

St Vincent’s Health should continue to ensure access through linkages with the RVEEH. This arrangement will need to be reviewed within the context of service planning for the RVEEH redevelopment.
Recommendation

5. The RVEEH should continue its role in teaching, research and specialist provision of ophthalmology services. The RVEEH will provide primary and secondary services to its local population and provide elective surgical services to a broader population.

Demand for eye services

The level of visual impairment and blindness increases three fold with each decade of life after 40 years of age and with the ageing population the prevalence of eye disease is set to double by 2020. Therefore, demand for eye care services is also set to increase.

The department’s inpatient forecasts (2003-04) indicate that ophthalmology (public and private) separations will grow 3.4 per cent per annum and bed days by 2.9 per cent per annum to 2016-17. This growth is led by cataract procedures with a forecast growth in separations of 4.2 per cent per annum, or a doubling by 2016-17. With a forecast of increasing demand for services, there is debate over the most appropriate models of care, and which eye care professionals will best provide the services required in the future.

Figures one to three (on right) show ophthalmology separations for Victorian public and private hospitals, 2001-02 to 2016-17.
Meeting future demand

Models of care

Models of care for ophthalmology services have undergone significant changes in the past two decades with an increasing trend toward ambulatory care. Ambulatory care services are those which are provided as a day attendance at a health care facility or at a person’s home.

Within the context of ambulatory care, the emergence of new ophthalmology models of care locally, nationally and internationally, has created debate about the appropriateness and effectiveness of these new models. Models of care for cataract surgery including pre and post operative care, the management of refractive error, and the screening for and management of glaucoma and diabetic retinopathy were highlighted. Debate relates to where services are provided, whether in hospital or community settings, who provides the service, and the clinical care pathway.

There is considerable stakeholder support for high volume elective surgery facilities for ophthalmology services. As a large proportion of eye surgery is done on a same day basis, this would provide significant opportunity for further expansion of services without high capital investment. The use of dedicated elective theatres enables a critical mass of patients to be treated whose procedures will not be cancelled due to priority being given to emergency cases from other specialties.
The role of eye care professionals

Since the mid-1990s, various workforce studies have been undertaken into the supply of eye health care professions in Australia. These studies examined existing workforce numbers and projected workforce requirements, taking into account forecast demand for services. In general, these studies found there was an adequate supply of eye care professionals.

The postgraduate program for the training of specialist ophthalmologists has increased from a four-year to a five-year program. The five-year program incorporates the ophthalmic basic sciences within the training program, rather than require them as a prerequisite for entry. As a result of this initiative, the number of graduates in Victoria has reduced from eight to six each year. Some ophthalmologists believe that the numbers of registrar positions will have to be increased as a result of the new training system, while others believe that the current eye care workforce will be adequate given changes in models of care and the advent of therapeutic optometry.

Nonetheless, there are further opportunities to better utilise the skills of the current workforce through a reconfiguration of workforce models. There is a general recognition that there is a good supply of health care professionals with specific ophthalmic training and skills, including ophthalmologists, optometrists, orthoptists and ophthalmic nurses. Consultations suggest general support for looking at options to make better use of medical and non-medical staff in the delivery of eye care.

Recommendation

6. The following will increase the capacity of the system to provide for future demand:

- establishment and expansion of services in general tertiary hospitals
- development and expansion of models of care that promote effective and efficient delivery of eye care services
- increased utilisation of elective surgery centres for ophthalmology surgery (in particular cataract surgery)
- establishment and/or expansion of workforce models that make best use of the existing workforce in public hospitals and in community settings (that is, optometrists, orthoptists and nurses undertaking greater roles in the provision of eye care).
**Funding**

Public hospitals are funded through a combination of casemix payments and specified grants. The casemix cost weights are developed through an in depth study of hospitals activities, and rural hospitals receive slightly more in recognition of the higher costs of running small hospitals.

The cost of service provision varies between hospitals. Through efficiencies in work practices or staffing arrangements, some hospitals achieve costs that differ markedly from the casemix payment. Salary arrangements for surgeons have been noted as a significant factor in whether a hospital is able to deliver the service within the casemix payment, with some hospitals providing sessional payments and others fee-for-service.

This is seen to have particularly large effects in rural hospitals. For example, as public Weighted Inlier Equivalent Separation (WIES) payments for cataracts do not always cover the cost of surgery in rural areas, rural hospitals are sometimes encouraged to admit larger amounts of private patients, or to discontinue service provision altogether.

Most providers consider that fee-for-service for ophthalmologists may be appropriate in some settings, but there is disagreement about the appropriate fee level.

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**Recommendation**

7. Develop a funding model that supports the system structure.
Improving safety and quality

Monitoring performance

A performance monitoring system helps to ensure accountability for the efficient and effective use of resources and involves the development of meaningful performance measures, data collection systems, reporting requirements and mechanisms. A system would include a range of clinical and non-clinical performance measures that would be monitored at a local, regional and statewide level.

Some ophthalmology management measures are already collected by health services, such as waiting times for elective surgery and other activity data. Patient outcomes measures are not routinely collected by health services and require development. These would include monitoring the appropriateness, acceptability, safety and effectiveness of ophthalmology clinical interventions.

The development and operation of a performance monitoring system will require the involvement of clinicians, professional colleges and associations, hospitals and health services.

Recommendation

8. Develop a performance monitoring system for ophthalmology management and patient outcomes.

Consumer involvement

Stakeholders agreed that consumers need much more information about referral pathways, models of care, treatment choices and choice of election as a public or private patient.

While the choice to elect as a public or private patient is currently left almost exclusively to decision making between the patient and ophthalmologist, many providers consider that the public system has a responsibility to ensure appropriate information is available.

Compared with the way in which people spoke of their GP, optometrist and other health professionals, indications were that ophthalmologists, who in many cases were seen only infrequently compared with other health professionals, were perceived to be somewhat remote and rather unapproachable. Hence, there tended to be little questioning of the information or treatment prescribed by them, and rarely any expectations of a personal and open relationship.

Consumers admitted they were reluctant to question ophthalmology professionals, particularly ophthalmologists, as they were with other medical specialists. This appeared partly due to the deference with which most specialists are regarded, as well as a lack of knowledge regarding what questions to ask. The reluctance to ask for information applied not only to their condition and its potential longer-term implications, but also treatment options, fees and what alternatives are available to them.
The department supports a range of initiatives that promote and support consumer involvement in decision making about their own treatment and care, in service development and quality improvement and, more broadly, in health policy developments.

The department is working with hospitals, their consumers and the broader community to develop a consumer participation policy to guide and articulate the responsibilities and expectations of consumer participation in hospitals during 2004–2005.

The work of the Vision Initiative will contribute to improved consumer participation in their care through consumer and provider education of eye care.

**Service leadership and coordination**

Strong leadership is the foundation of a safe and high quality service system. It is generally agreed by stakeholders that the department, hospitals and health care professionals have a shared interest and responsibility in ensuring optimal use of resources within the system, and that leadership capability needs to be developed with more system-wide goal setting and accountability.

It was suggested that health services should provide eye care as part of their core requirements. A review of the care model and outcomes of each group should be built into the system with system-wide peer review being an integral part of the governance model.

Many providers agree that access and elective surgery management should be coordinated across the public system, and that the achievement of performance objectives should be monitored at a local level and possibly also at a regional or central level.

More system-wide leadership from the RVEEH is welcomed, including leading education, formalised support arrangements, academic and service leadership and support with coordinating the care of individuals.

**Recommendation**

9. Develop a capacity for statewide leadership in public ophthalmology service provision to provide ongoing direction in models of care, education and support systems for service providers.