

Victorian surgical services strategy

Background paper

April 2008

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1. Introduction

The availability of timely and good quality emergency and elective surgery is critical to the functioning of the public health system and a high priority for the community.

As with other areas of healthcare, surgical services in Victoria's public hospitals are under pressure to meet growing demand and increasing public expectations. Improving access to elective surgery is a key focus of planned health reforms, which the Commonwealth and state governments are undertaking collaboratively to tackle the many challenges facing the health system. The renewed impetus and increased investment in reform will bring many opportunities to improve service availability and quality of care for patients. This will not be accomplished easily, however, and will happen in an environment of strong competition for resources and a focus on achieving the best value for health expenditure.

In this context, the Victorian Government wants to articulate a clear vision and plan for the future of surgical services in the state's public hospitals. The Victorian surgical services strategy will set short, medium and longer term directions for the sector, enabling surgical services to contribute to and benefit from broader health reforms.

The Department of Human Services (the department) will lead the development of the strategy in collaboration with the Ministerial Advisory Committee on Access to Elective Surgery (ACAES). The success of the strategy will depend on the involvement of people who deliver and manage surgical services, and other stakeholders and opinion leaders in the field.

As a first step in the consultation process, the department is holding a workshop on 9 April 2008 to discuss issues and opportunities for reform in the provision of public hospital surgical services.

This paper sets the scene for the workshop. It provides an overview of Victoria's public hospital surgical services, and background information on:

- the role of the department and ACAES
- the purpose, proposed scope, and policy context for the strategy
- relevant current initiatives.

The paper also provides a brief commentary on some of the issues that stakeholders have identified to date. A fuller analysis of issues and challenges for the sector will be developed through the workshop and other consultation and review processes.

2. Role of the Department of Human Services

The department plans and funds a wide range of health, community and housing services. Its mission is to enhance and protect the health and wellbeing of all Victorians, emphasising vulnerable groups and those most in need. The department lays the foundation for governance of health services through its legislative, funding, performance management, and policy frameworks.

The department's Metropolitan Health and Aged Care Services Division manages the performance of all metropolitan health and aged care services. The division has statewide policy and program responsibility for acute, sub-acute and ambulance services. The work of other parts of the department, such as the Statewide Quality Branch and the Workforce Policy Branch, is also relevant to the surgical services strategy.

Further information about the department's roles and functions can be found at www.dhs.vic.gov.au.

3. Role of the Ministerial Advisory Committee on Access to Elective Surgery

The Ministerial Advisory Committee on Access to Elective Surgery was established in 2000 to advise the Minister for Health and the department on priority issues relating to public hospital patients' access to elective surgery. The committee's members include senior clinicians and managers from metropolitan and rural health services, and representatives of the Royal Australasian College of Surgeons, the Victorian Division of General Practice and the Australian Medical Association.

The committee provides expert clinical advice on a range of issues, such as the appropriateness of particular surgical interventions and models. It has taken a lead role in developing a number of initiatives, such as the Elective surgery access policy (see section 8), an implementation tool kit for 23-hour surgical units, and has explored theatre benchmarking opportunities.

4. The surgical services strategy

The Victorian surgical services strategy will set future directions to enable Victoria's public health system to best meet the community's surgery needs.

The strategy will be informed by a wide range of stakeholders, including individuals and professional groups representing surgeons, anaesthetists, emergency medicine practitioners, nurses, allied health clinicians, theatre and hospital managers, general practitioners (GPs), and providers of relevant community services.

The department welcomes workshop participants' feedback on the proposed goals, principles and scope of the strategy, as outlined below.

4.1. Proposed goals

The proposed goals of the strategy are to:

- provide a consistent understanding of key issues and challenges in the current system
- identify good practices and innovations already occurring in the system
- articulate a vision for the future of public hospital surgical services
- identify broad strategies and specific actions to improve surgery access and outcomes
- inform service planning on the level, configuration and mix of services
- support efficient, effective and equitable use of available resources.

4.2. Proposed scope

The scope of the strategy will be refined in discussions with stakeholders. However, it is planned that the strategy will encompass both emergency and elective surgery. The strategy will also consider the impact of procedures that fall outside the National Health Data Dictionary's¹ definition of surgery but which use theatre capacity (for example, colonoscopies) and of new procedures that may impact on theatre capacity (for example interventional radiology).

The strategy will examine how care elements at all stages of the patient journey—from referral by a general practitioner or other medical practitioner to discharge, rehabilitation and follow-up—impact on the provision of surgery. The department is preparing a separate strategy on outpatient services and will ensure appropriate linkages and alignment between the two pieces of work.

The Victorian surgical services strategy will identify the roles and responsibilities of the various stakeholders—including the surgical workforce, professional organisations, hospital management, health service boards, the department and government—and will consider how to build commitment to shared objectives.

1. Australian Institute of Health and Welfare, National Health Data Dictionary Version 13.3, METeOR (Metadata online registry) <http://meteor.aihw.gov.au/content/index.phtml/itemId/367274>, accessed 26 March 2008.

4.3. Proposed principles

Draft principles to underpin the strategy are listed in box 1 below.

Box 1: Draft key principles for the Victorian surgical services strategy

As key principles, surgical services in Victoria's public hospitals should:

- deliver care that focuses on the needs of patients
- deliver care in a way that encourages patient and carer involvement
- deliver timely and accessible care that is prioritised on the basis of clinical need
- deliver safe and evidence-based care
- support continuous improvement, collaboration, innovation and research
- support integration of surgical services with broader hospital services
- support coordination of surgical services with relevant providers and agencies in the community
- ensure the supply of an appropriately skilled workforce
- ensure efficient and effective use of available resources.

5. Overview of Victoria's public hospital surgery services

Victorian public health services provide comprehensive emergency and elective surgical services, including more than 15 separate surgical specialties and many more subspecialties. In 2006–07 public hospitals in Victoria conducted:

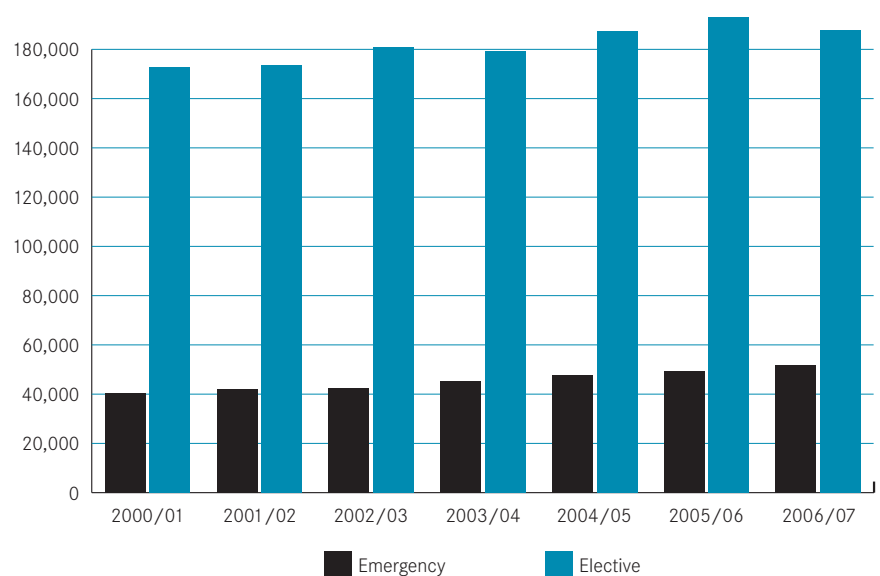
- 51,800 emergency surgery procedures
- 187,600 elective surgery procedures (defined as surgical care for which admission can be delayed for more than 24 hours)
- 15,350 other surgical procedures (mainly caesareans).

Emergency surgery accounted for 4.8 per cent of separations from major acute hospitals, with elective and other surgical procedures accounting for a further 12.2 per cent of these separations.

Figure 1 shows the growth in the number of surgery-related separations in recent years. Emergency surgery has grown more strongly than elective surgery and within elective surgery most growth has been in the urgent and semi-urgent categories. The number of non-urgent surgical separations declined slightly in 2005–06 and again in 2006–07 relative to the preceding three financial years.

Victoria also has a well-developed private hospital system that provides elective surgery to over 260,000 privately insured patients each year. There are significant differences between the public and private systems in terms of casemix, and the capacity to access various forms of treatment. For example, most emergency surgery is performed in the public sector. Compared with public hospitals, private hospitals have more same day admissions.

Figure 1: Public hospital elective and emergency surgery separations, 2000–01 to 2006–07



5.1. Demand for surgical services

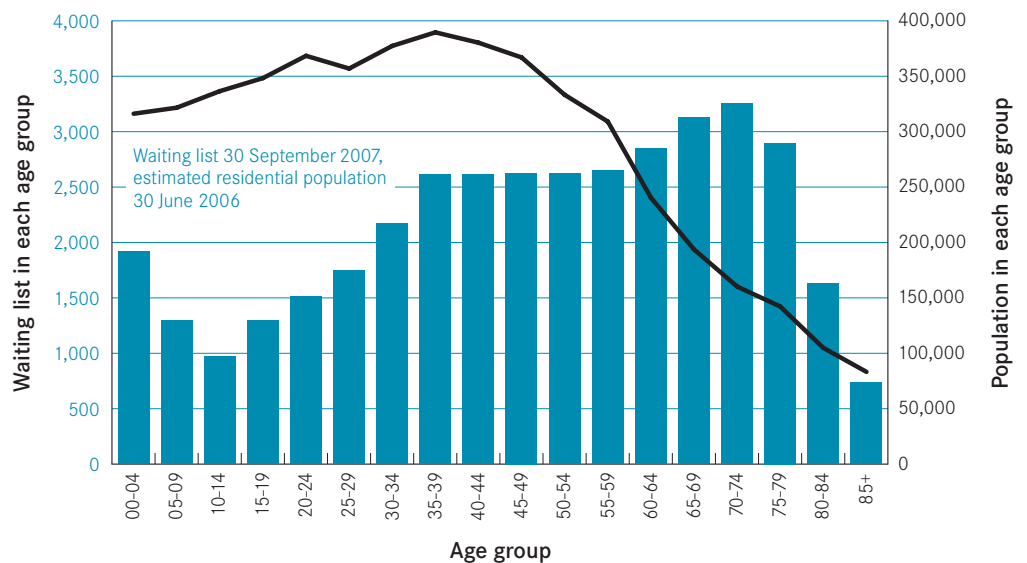
Many different factors are driving the growing demand for surgery. The ageing of the population has had a major impact. As shown in figure 2, older people are over-represented on elective surgery waiting lists relative to their presence in the population. Age driven demand will continue to increase as population ageing accelerates, and will particularly affect the need for surgery relating to joint replacement, cataracts, urology, and some cancers.

Other factors creating extra demand for public hospital surgery include:

- overall population growth
- new technologies that enable treatment of previously untreatable conditions
- increasing community awareness, knowledge and expectations of health care
- increasing prevalence of certain ‘lifestyle’ conditions, such as obesity and its associated comorbidities, some types of cancer, heart disease and diabetes.

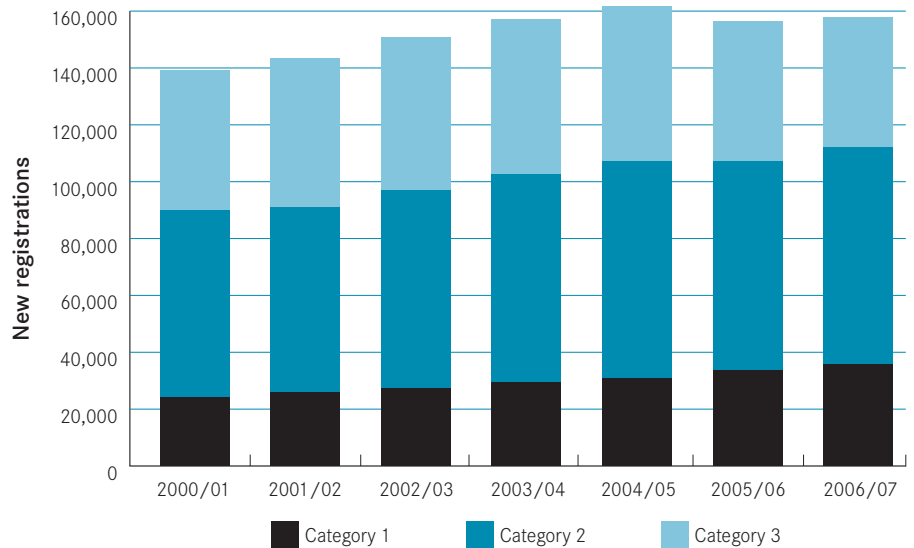
Although the overall trend is for increased demand for surgery, some factors are reducing demands on surgery-related resources. New and less invasive surgical procedures have led to faster recovery times and hence shorter hospital stays for many surgical patients. There are also examples of new medicines and conservative management approaches that are now being used in preference to traditional surgical treatments.

Figure 2: Victorian population and numbers of patients on elective surgery waiting lists by age group



One indicator of the demand for elective surgery is the number of new patients added to elective surgery waiting lists each year. Figure 3 shows annual additions to the waiting list (for hospitals reporting to the Elective Surgery Information System, ESIS) since 2000–2001. There has been an average annual increase of 2.1 per cent per annum in additions to the elective surgery waiting list.

Figure 3: Additions to elective surgery waiting lists of ESIS reporting hospitals, 2000–2001 to 2006–2007

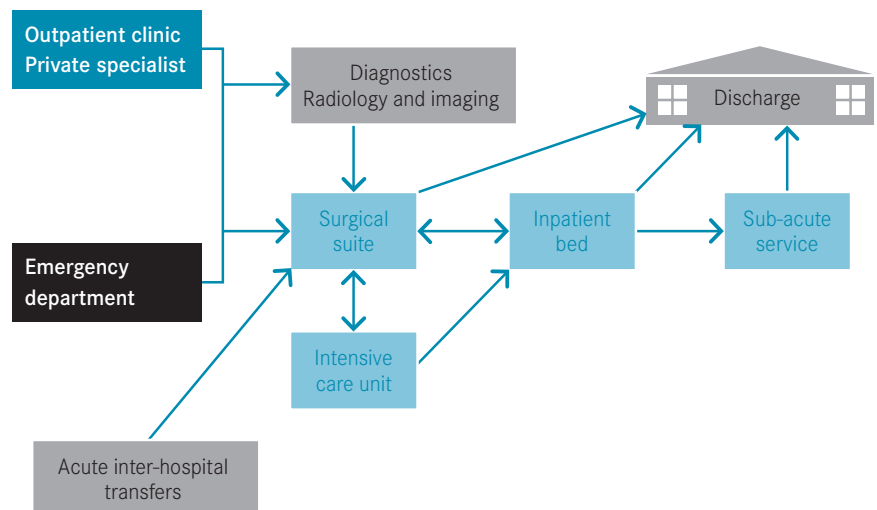


The growth in demand for surgery reflects the growth in demand for hospital services generally. For example, presentations to emergency departments are increasing by approximately five per cent per annum and emergency admissions are increasing by approximately four per cent per annum.

5.2. Surgery as part of the broader health system

Health services’ capacity to conduct surgery and discharge surgical patients in a timely way is dependent on a wide range of other hospital and community-based services. As shown in figure 4, there is a close interface between operating theatres and other areas of the hospital such as inpatient wards, the emergency department, and diagnostic services. Services external to the hospital—including community rehabilitation, sub-acute, aged care, and community support services—are also important enabling an appropriate flow of surgical patients from hospitals.

Figure 4: Linkages between surgery and the broader hospital system



5.3. Access to surgery

While emergency surgery is almost always accessed via an emergency department or hospital ward, there are variable pathways to an elective surgery admission in the public system. Most patient journeys begin when a general practitioner (GP) or medical specialist refers the patient to either an individual specialist or a hospital outpatient specialty clinic, where the patient is assessed and prioritised for surgery. Health services offer a mix of public outpatient services and access to specialists through private consulting suites. Waiting times for outpatient and specialist appointments can have a significant impact on overall waiting times for elective surgery.

Elective surgery patients are assigned to one of three urgency categories. The categories and associated clinically recommended waiting time targets are:

- category one—urgent (admission within 30 days desirable for a condition that has the potential to deteriorate quickly to the point that it may become an emergency)
- category two—semi-urgent (admission within 90 days desirable for a condition causing some pain, dysfunction or disability but which is not likely to deteriorate quickly or become an emergency)
- category three—non-urgent (admission at some time in the future acceptable for a condition causing minimal or no pain, dysfunction or disability, which is unlikely to deteriorate quickly, and does not have the potential to become an emergency).

A range of factors affect access to surgery and where and when it is done. The patient's needs relative to others who may need surgery more urgently is a key factor. In most surgical centres, theatre use is influenced by the presentation and scheduling of emergency cases for unplanned surgery. Maintaining an appropriate focus on elective surgery and avoiding cancellations of scheduled elective surgery, in the context of growing demand for emergency surgery and other hospital services, is a constant challenge for health services.

Other factors that may affect the timing of surgery include:

- The nature and complexity of the patient's needs. The dynamic character of clinical conditions means that some are more critically time dependant than others. The patient's need for post-operative care, especially if admission to an intensive care unit is required, may also influence when the surgery can be performed.
- The type of surgery required. Some specialties have workforce shortages or more demand growth than others, and hence longer waiting times.
- Other patient characteristics, such as their availability for surgery at the scheduled time, and whether they are ready for surgical care.
- The nature and level of specialties provided at the local hospital. As shown in Appendix 1, hospitals have varying capacity to conduct different types of surgery.

- Physical capacity for the surgery. There are localised infrastructure issues, such as limited theatre capacity in some areas.
- Workforce capacity. The availability of a surgical team (including surgeons, anaesthetists, and nurses) with appropriate skills and seniority is obviously a critical factor in determining access to surgery.

There are some variations in practice between hospitals and between individual surgeons in terms of adding patients to surgical waiting lists and assigning urgency categories.

Managing elective surgery waiting lists is complex and difficult, and the need to manage the timing for emergency surgery introduces additional complexities in scheduling. The department's *Elective Surgery Access Policy* (see Appendix 2) provides guidelines for managing elective surgery patients and waiting lists.

Elective surgery waiting times

Elective surgery waiting times are just one indicator of the community's access to elective surgery, and they do not provide information about surgical quality, appropriateness or outcomes. Nevertheless, waiting time data provide important information about the performance of the system, and are an ongoing focus of government and health service attention.

Commonwealth Government figures comparing 2005-06 waiting time data across the states and territories rank Victoria second nationally in terms of the proportion of public elective surgery patients seen within the recommended time, and show that the state is performing significantly better than the national average.

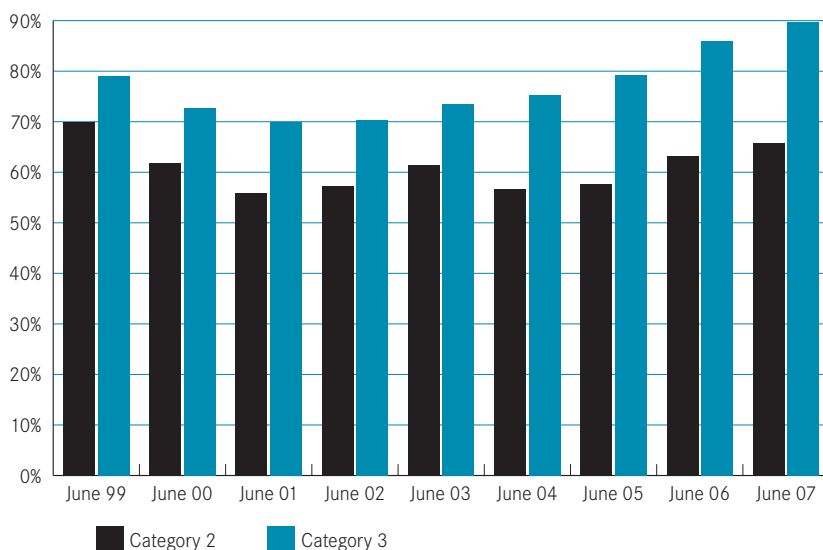
At 30 June 2007, 38,109 Victorians were waiting for elective surgery, which is down 5.4 per cent from the 40,301 people who were waiting for elective surgery at the same date in 1999. As shown in Figure 5, recent years have seen an increase in the percentage of category three patients treated within the clinically desirable time, and a slight improvement in category two performance against this measure.

The results shown in Figure 5 come at a time when annual additions to the elective surgery waiting list are increasing, as mentioned on page 6.

Appendix 2 provides additional performance data relating to elective surgery waiting lists and times.

The Commonwealth Government's Elective Surgery Waiting List Reduction Plan, described on page 19, will bolster the Victorian Government's efforts to reduce the number of 'overdue' patients on the waiting lists.

Figure 5: Elective surgery waiting list patients who had not yet waited more than 90 days (category 2) or 365 days (category 3), 1998–99 to 2006–07²



5.4 Data collection and performance monitoring

The department collects a wide range of surgical activity and performance data through the following databases:

- **Elective Surgery Information System (ESIS):** The central collection of elective surgery waiting list information for the 29 Victorian hospitals that have more than 3000 elective surgery WIES per year. Improvements to ESIS in 2005 have enabled monitoring of each patient's waiting list history, including any changes in their status.
- **Victorian Emergency Minimum Dataset (VEMD):** Contains de-identified demographic, administrative and clinical data relating to presentations at major metropolitan and regional public hospital emergency departments.
- **Victorian Admitted Episodes Dataset (VAED):** Collects data on all patients admitted to public and private acute hospitals, rehabilitation centres, extended care facilities and day procedure centres.

These databases inform planning, epidemiology and other research, and the administration of Victoria's casemix funding system, and are used to meet Victoria's national reporting obligations. The data has underpinned the development of the following key performance indicators relating to elective surgery:

- per cent of category one elective surgery patients admitted within 30 days
- per cent of category two elective surgery patients waiting less than 90 days
- per cent of category three elective surgery patients waiting less than 365 days

² Based on a snapshot of the waiting list at 30 June each year.

- number of patients on the elective surgery waiting list
- number of hospital initiated postponements per 100 waiting list scheduled admissions.

One important issue relating to elective surgery performance is understanding the way waiting times for surgery are measured. One measure is the waiting time for admitted patients (the time patients who have had their surgery had to wait) and a second measure is the waiting time for patients who are still waiting for their surgery. Results of these two measures differ significantly, and both are important indicators of performance. For example an average waiting time according to the ‘admitted patients’ measure may be relatively low because of preferential treatment for patients who have waited less than average time. An average waiting time according to the ‘still waiting’ measure may be relatively high because it includes the waits of those patients still on the list who have waited extended periods. Both measures are used in Victoria: the ‘admitted’ measure is used to report on health system performance while the ‘waiting’ indicator is used to monitor individual health service waiting list management.

These indicators are monitored through the department’s performance and accountability framework for public health services. The framework includes:

- Annual Statement of Priorities (SoP), which sets out the policy priorities of the government, specific priorities for each health service and expected levels of performance for the financial year.
- Performance monitoring framework (PMF), which reflects both access and financial aspects of performance.
- Bonus funding framework (BFF), which provides health services with a quarterly financial incentive to meet elective surgery and emergency care performance targets.

There is a trend towards greater public reporting of information about the performance of the health system. Victorian public hospital surgery data is published on the department’s ‘*Your hospitals*’ website and in budget papers, while some information comparing Victoria’s performance with that of other states and territories is available in the Commonwealth Government’s ‘*State of Our Hospitals*’ report and in Australian Institute of Health & Welfare publications. At the Council of Australian Governments (COAG) meeting on 26 March 2008, all states and territories agreed to publish ‘report cards’ on their public hospitals as a condition of additional funding.

6. Context for the strategy

The surgical services strategy will be developed in the context of broad Commonwealth and Victorian Government health policies. Examples of key government directions relevant to the surgical services strategy are provided below.

6.1. National health reform agenda

Health care reform is one of the main points of interest of the Commonwealth Government's 2008 Ideas Summit. The federal government has promised to invest \$2.5 billion³ in a National Health and Hospitals Reform Plan, and has established a Health and Hospitals Reform Commission to provide advice on performance benchmarks and practical reforms to the health system. The commission will play a major role in shaping and finalising the next five-year public hospital funding agreement—the Australian Health Care Agreement (AHCA)—which is due to be signed in June 2008.

In the spirit of 'collaborative federalism', the Commonwealth and state/territory governments have agreed to the joint implementation of the Commonwealth Government's health policy commitments, including specific election promises on elective surgery waiting lists (see section 8), aged care accommodation, dental care and super clinics. States and territories have agreed to reduce acknowledged health system inefficiencies and to implement changes, such as expanding post acute care capacity and improving discharge planning, to drive more efficient use of public hospital services.

3. Prime Minister of Australia's website, www.pm.gov.au/topics/health, accessed 31 March 2008

Box 2: National Health and Hospitals Reform Commission: terms of reference⁴

The National Health and Hospitals Reform Commission's long-term reform plan, to be delivered by June 2009, will address the need to:

- reduce inefficiencies caused by cost-shifting, blame-shifting and buck-passing (between state/territory and Commonwealth governments)
- better integrate and coordinate care across all aspects of the health sector, particularly between primary care and hospital services, around measurable outputs for health
- bring a greater focus on prevention to the health system
- better integrate acute services and aged care services, and improve the transition between hospital and aged care
- improve frontline care to better promote healthy lifestyles and prevent and intervene early in chronic illness
- improve the provision of health services in rural areas
- improve indigenous health outcomes
- provide a well qualified and sustainable health workforce.

The Commission's health reform plan will maintain the principles of universality of Medicare, the Pharmaceutical Benefits Scheme, and public hospital care.

6.2. Victorian government health directions

Appendix 3 describes key Victorian government health policies and strategies developed since 2000–2001. Key policy themes relevant to the surgical services strategy are outlined below.

Managing demand for health care

The Victorian Government maintains a strong focus on improving health system capacity to respond to increasing demand for health care. Building on earlier substantial investments, such as those provided under the *Hospital demand strategy*, the government is continuing to develop and implement a variety of initiatives designed to:

- achieve targeted growth in hospital activity, including elective surgery
- introduce models of care that use alternatives to traditional inpatient beds or which reduce the time patients spend in acute hospitals
- better manage patients with chronic disease in the community and prevent avoidable hospitalisation in high-risk populations
- provide improved working conditions that will attract and retain skilled staff.

The government also funds a range of health promotion, illness prevention, and chronic disease self-management initiatives aimed at improving quality of life and health outcomes.

4. Australian Government Department of Health and Ageing, National Health & Hospitals Reform Commission: Terms of Reference, www.health.gov.au, accessed 25 March 2008.

Creating high quality and accountable health systems

Better quality, better care (2003), prepared for the department by the Victorian Quality Council, provides an overarching framework for safety and quality improvement in Victorian health services. The department funds and supports a wide range of initiatives that promote:

- awareness and uptake of evidence-based clinical interventions and practices
- effective ways of measuring, monitoring and reporting on patient experiences, outcomes, care standards, and access to care
- clinical leadership and networking of health professionals to provide professional support and sharing of information.

Specific quality initiatives relating to surgery are discussed on page 20.

Fostering innovation and process redesign

The need to respond to demand pressures, manage waiting times and improve service quality has resulted in many new models of health care. New models of care relevant to surgical services are described in section 8. Other examples include observation medical units, medihotels, fast track services in emergency departments, emergency primary care centres, and shared care initiatives between public and private providers. There are also countless examples of new approaches to treatment made possible by technological, medical, surgical or pharmaceutical advances. The department fosters appropriate introduction of new health technologies in a number of ways, notably through the roles and function of the Victorian Policy Advisory Committee on Clinical Practice and Technology.

The potential of new information and communication technologies (ICT) to improve patient management and coordination of care is widely recognised: the HealthSMART program, which is replacing core applications across acute and sub-acute services, will ultimately provide a common ICT platform for these services.

Recognising that most innovation occurs at the local level, one of the main roles of government is to provide resources to help services develop new approaches and to adapt successful innovations that have been developed elsewhere.

In Victoria, the Redesigning Hospital Care Program is being established to encourage public hospitals to implement proven business improvement techniques to redesign specific clinical processes. The program is based on ‘lean thinking’ methodologies, which aim to identify and reduce the time spent on processes that do not add value to the patient’s experience or outcomes.

Prior to full rollout of the program later this year, three pilot projects are using business redesign tools and approaches to improve patient flow along particular care pathways. For example, a project at Western Health is focusing on blockages in the flow of emergency surgery management (using fractured hips as a case study).

The department will use a variety of methods, including its recently established clinical networks, to promote information sharing and dissemination of improvements, developed through the Redesigning Hospital Care Program.

7. Key issues and challenges

The department has engaged DLA Phillips Fox to facilitate the workshop on 9 April 2008. To help identify key issues and themes for exploration at the workshop, DLA Phillips Fox consulted with a limited number of individuals who have different perspectives and experiences of the current surgical system. Stakeholders with backgrounds in policy development, surgery, theatre management, hospital management, general practice, emergency/trauma, and emergency department management were involved in the pre-workshop consultations.

The following issues emerged from these consultations as key points for consideration in the development of the surgical services strategy.

7.1. Demand management

Stakeholders believe that there is scope for better management of demand before patients are placed on elective surgery waiting lists. Key points made in this regard were:

- GPs and patients should be given more information about waiting lists. While the *'Your Hospitals'* website (see page 19) is helpful, it does not give patient-level information. If GPs had an estimated waiting time for the patient, they could better plan pre-surgical care and, in some cases, offer alternatives to placement on the waiting list.
- Some patients are on waiting lists when they do not need to be. GPs are well placed to assist with this issue, but there is a lack of agreed referral criteria.
- There is a need for more active management of outpatient resources, including 'did not attend' policies and protocol-driven outpatient referral.
- More sophisticated and transparent methods of prioritising patients for surgery are required to help reduce variability and improve equity in access to elective surgery.
- There are modest opportunities to improve resource use by identifying procedures that should not be offered by the public sector. These decisions should be made at a system-wide rather than hospital level.

7.2. Resource allocation across the system

There was discussion about the appropriateness of moving patients around the system to access resources. Stakeholders who participated in the consultation agreed that resources should be allocated to enable people to access surgery close to where they live, unless clinical complexity necessitates concentration of specialist resources. It was suggested that most surgeons have a commitment to managing patients who are referred to them, and are reluctant to refer patients to other providers. Nevertheless, the Elective Surgery Access Service (ESAS, see page 19) is seen as a useful initiative, providing patients are well-selected and well-informed. Patients appear to be willing to travel to access care.

The logic of devoting expensive tertiary hospital resources to less complex elective surgery such as uncomplicated joint replacements was queried, and it was suggested that the department should be promoting the redirection of uncomplicated cases to outer metropolitan hospitals.

Some stakeholders saw merit in increased specialisation of entire hospitals. This model operates overseas and to some extent in Victoria already (for example, the Royal Victorian Eye and Ear Hospital).

Physically separating elective surgery in specialised centres that do not treat emergency patients is viewed by most of the stakeholders as a key strategy for managing elective surgery. While existing five day, 23-hour and same-day models are considered to work well, one stakeholder suggested that we need to understand more about what constitutes a critical mass for the most efficient operation of an elective surgery centre.

Several stakeholders mentioned the particular challenges faced by services in rural areas, such as ensuring that surgical teams had sufficient caseload to maintain key skills.

7.3. System-wide performance management

There is a strong view that the focus on waiting lists and waiting times for elective surgery—which are considered to be not completely under the control of hospitals—should be balanced with measures that reflect surgical appropriateness, effectiveness, efficiency and safety in both elective and emergency areas.

Stakeholders believe that more could be done to actively encourage, recognise and reward good performance. They also see scope to improve current departmental approaches to identifying and managing hospital under-performance.

There was interest in system-wide approaches to improving the quality of clinical care, such as the development of standardised clinical guidelines, triage and prioritisation tools, care pathways and patient management frameworks. It was suggested that registers of clinical outcomes, developed with the relevant surgical specialty, should be in place for high risk, high cost procedures.

Stakeholders noted that there is much good work occurring but often it is not shared across the system.

7.4. Hospital resource management

Stakeholders spoke of the importance of hospitals actively managing and regularly reviewing the allocation of surgical resources. Some identified a need to challenge existing cultures and practices to achieve a greater focus on efficiency. For example, it was argued that theatre lists should be regularly reviewed and reallocated if patterns of utilisation and demand change.

Establishing and communicating clear expectations is seen as critical to achieving benchmark levels of performance and efficiency. There is a trend towards greater systematisation of surgery-related processes, including an increasing emphasis on pathway-driven care. Stakeholders see this as highly appropriate and facilitating good use of resources.

Elective surgery

Stakeholders expressed concern about the impact of elective surgery cancellations on staff and patients. They offered a range of suggestions to improve the management and utilisation of elective surgery resources, including:

- improving data collection and planning to provide a robust basis for theatre scheduling, resource allocation and demand management
- using electronic scheduling systems to facilitate organisation-wide work flows and reduce delays and wastage
- appointing specialist elective surgery coordinators.

Some hospitals are moving towards 'clustering' cases—for example, scheduling extended lists of major joint replacements, cholecystectomies or varicose veins—in the belief that it enhances efficiency and quality. Others have continued with traditional booking patterns (for example, one complex case, one medium-length case and a day case 'filler') on the basis that surgeons require variety in their work and such scheduling allows the best use of a 3.5 hour theatre session.

Emergency surgery

Many hospitals have experienced an increase in the proportion of emergency surgery compared with elective surgery and are under pressure to provide adequate staffing cover for emergency surgery.

Various strategies for managing emergency surgery are being implemented at hospital level, including:

- linking surgeon's access to elective resources with a requirement to provide emergency cover
- designating theatres for emergency cases, although there are varying views about whether these are efficient. A semi-urgent theatre with some pre-booking is viewed by some stakeholders as more efficient.
- under-booking elective sessions to allow for emergency cases
- implementing twilight and weekend daytime theatre sessions for semi-urgent patients
- appointing emergency surgery patient flow coordinators.

7.5. Workforce development and management

Stakeholders believe the strategy should give high priority to workforce issues, and should consider hospitals' ability to recruit and retain staff from all disciplines that make up a surgical team. Some stakeholders emphasised the need to fully understand the factors that affect staff morale, engagement and commitment, and to develop specific strategies addressing these issues. They suggested that key factors in building staff commitment include:

- actively engaging staff in decisions about the management of surgical resources
- optimising clinicians' capacity to practise their craft and opportunities for skill development
- eliminating or at least minimising cancellations of scheduled elective surgery.

There is stakeholder support for reviewing the structure of the surgical workforce, and exploring new workforce models and roles, to ensure the surgical workforce is best placed to meet the needs of patients and hospitals.

Stakeholders offered various suggestions for improving the use of valuable surgical staffing resources. Some hospitals are actively recruiting full-time surgeons to increase the availability of surgeons for emergency work, or when lists become available at short notice, and to increase the proportion of surgery undertaken within working hours rather than out-of-hours. Colocated private hospitals are seen as having a positive impact in this regard, because they encourage geographic full-time practice. One stakeholder suggested that no surgeon, including visiting medical officers, should be appointed unless they had at least three sessions a week at the hospital.

It was also suggested that new approaches to public sector on-call rosters may minimise disruption to surgeons' other work commitments, while improving continuity of patient care.

8. Initiatives to date

The Victorian surgical services strategy will build on a range of existing initiatives implemented in recent years to build system capacity, improve service quality and achieve better patient outcomes. Some key initiatives are noted below.

8.1. Targeted additional funding for elective surgery

Both the Commonwealth and Victorian Governments have invested in additional elective surgery activity. As part of the Victorian Government's Elective Surgery Initiative, a total of \$15 million has been provided in 2007-08 for additional elective surgery activity to address demand pressures. In addition, the Commonwealth Government's Elective Surgery Waiting List Reduction Plan commitment of \$600 million over four years is providing \$34.2 million to Victoria to treat over 5,900 long wait patients by the end of December 2008. To support implementation of the additional activity, the Victorian Government has provided a total of \$10.8 million for equipment and minor capital works.

8.2. Access and prioritisation initiatives

Access to surgical services has been improved through the Victorian Government's investment in new infrastructure, equipment and the reconfiguration of existing facilities. Major current capital developments include:

- a purpose built freestanding statewide elective surgery centre at The Alfred
- two designated surgery centres at St Vincent's Health and Austin Health
- new day surgery theatres at the Yarra Ranges Day Hospital
- theatre redevelopment at Peninsula Health including two new theatres.

A number of waiting list management and prioritisation initiatives have also aimed to increase access to elective surgery. These initiatives include:

- The Elective Surgery Access Service (ESAS), which assists semi-urgent (category two) and non-urgent (category three) elective surgery patients to receive more rapid treatment by arranging surgery at another hospital that has the capacity to treat their condition. Five metropolitan hospitals have received extra funding to treat additional patients referred to them as part of ESAS.
- Dedicated clinical resources to manage patients waiting for surgery. The department has funded elective surgery access coordinator positions at all major metropolitan health services and large regional health services.
- Specialty-specific prioritisation models. For example, the orthopaedic waiting list (OWL) project is developing an evidence-based tool for prioritising people waiting for joint replacement surgery, and a service model for coordinating conservative treatment and care for patients while they wait for surgery.
- The Elective Surgery Waiting Time website www.health.vic.gov.au/yourhospitals. The 'Your Hospitals' website is targeted at patients and referring practitioners and provides information about waiting times for individual procedures and health services.
- Reviews of the range of surgery that will be offered to public patients—for example aesthetic surgery and non-medical circumcision—to ensure that priority is given to the most appropriate and necessary surgical procedures.

8.3. New models of care

A range of work has been undertaken in Victoria to introduce or encourage new approaches to the care of surgery patients, including:

- Establishing new models of surgical care. For example, 23-hour procedure units have been developed for surgical patients whose expected episode of care can be delivered within 23 hours. Beds in the 23-hour units are quarantined for this purpose and patient care is delivered according to a set clinical pathway. Evaluations of this model have found it to be effective in improving patient flow without leading to increased readmission rates or increasing demand on community services (see Ryan et al. 2004).
- Developing streamlined models of care for particular conditions. For example, the Cranbourne cataract model has reduced the number of appointments required by each patient.
- Developing guidelines to support best practice in caring for particular patient groups. For example, the department is currently developing a framework for the design and delivery of bariatric surgery programs.
- Promoting non-surgical alternatives where appropriate—for example, varicose vein clinics.
- Using private sector capacity. Commencing in 2005, the department has procured a limited number of elective surgery procedures from the private sector. The initiative, which targets patients from particular specialties who have waited longer than the clinically recommended time, will provide surgery to approximately 470 patients in 2007–08.

8.4. Quality initiatives

Surgical Outcomes Information Initiative

The Surgical Outcomes Information Initiative (SOII) is an initiative of the Victorian Surgical Consultative Council (VSCC), which is appointed by the Minister for Health under the *Health Act 1988*. SOII analyses VAED data relating to surgical outcomes (mortality and morbidity) in Victorian hospitals. Each hospital is given feedback about how its performance on various surgical procedures compares with state averages, and any outliers are reviewed by the SOII group.

Victorian Audit of Surgical Mortality

The department has engaged the Royal Australasian College of Surgeons to conduct the Victorian Audit of Surgical Mortality (VASM). This audit process is designed to highlight system and process errors. The VASM model is based on peer review of de-identified cases, and cases are referred to the Victorian Surgical Consultative Council (VSCC) if concerns are identified. The initiative is working towards reviewing 100 per cent of deaths of patients under the care of surgeons in Victorian public hospitals.

Quality indicators project

The department is conducting a developmental process to broaden the set of key performance indicators used to monitor health services. This work aims to provide a more balanced perspective of health service activity and system performance and to allow monitoring and benchmarking of health services in programs or

areas currently not covered by the Statement of Priorities (SoPs). This includes developing and refining indicators related to elective surgery, beyond those access indicators now in use (for example, the elective surgery waiting list indicators). Any measures will be tested with the field to establish their appropriateness as measures of performance. Areas covered by the measures are effectiveness, equity, efficiency and patient outcomes. The department is also exploring ways of improving the way performance feedback is given to health services.

Specific reporting initiatives

There are a number of other data collection and reporting initiatives designed to improve the quality of surgical care in Victoria's public hospitals. Details are as follows:

- The Australasian Society of Cardiac and Thoracic Surgeons, together with the department, has developed a program to collect data about, and report on, cardiac surgery in Victorian hospitals. The annual reports provide an overview of the patients who underwent surgery in each of the six major Victorian hospitals, the types of surgery performed, complications, and other details relating to risk and surgery outcomes.
- The Melbourne Vascular Surgery Association (MVSA), together with the Royal Australasian College of Surgeons and the department, has developed a program to collect data about, and report on, outcomes and activity in vascular surgery in Victorian hospitals. Victoria's thirteen vascular surgery units participate in the reporting.
- The Victorian Hospital Acquired (Nosocomial) Infection Surveillance System (VICNISS) has been established to reduce the number of infections acquired in Victorian hospitals. A key focus of surveillance activities is surgical site infection. The VICNISS coordinating centre collects and analyses data on hospital acquired infections in acute care public hospitals in Victoria, and reports individual hospital and aggregate data back to participants and the department. Surveillance activities are targeted to those patients at highest risk of hospital acquired infections.
- The Australian Orthopaedic Association National Joint Replacement Registry monitors the outcome of all joint replacement procedures undertaken in Australia. An initiative of the Australian Orthopaedic Association, the registry is a collaborative between orthopaedic surgeons, the Commonwealth Government, all hospitals undertaking joint replacement surgery and the orthopaedic industry. The registry provides information on practices and outcomes, identifying reasons for revision and highlighting potential areas of improvement.

8.5 Workforce

The department's Strengthening Medical Specialist Training Program is undertaking a range of initiatives to improve training opportunities for doctors, targeting areas forecast to have a high growth in activity levels.

As well as surgeons, a number of other professional groups—such as nurses, allied health workers and technicians—have important roles in the provision of surgical services. The department is looking at how these staff could be used more effectively to support surgery-related activities. The surgical services strategy will give further consideration to these issues.

9. Next steps

Following the workshop on 9 April there will be a broader consultation and research process to inform the Victorian Surgical Services Strategy, which will be developed over several months in 2008.

The department welcomes stakeholder input on issues relevant to the strategy. Feedback can be provided to the following people in the Metropolitan Access and Performance Branch: Mr Terry Symonds, Elective Surgery Team Leader (terry.symonds@dhs.vic.gov.au) or Dr Martin Lum, Senior Medical Advisor (martin.lum@dhs.vic.gov.au).

Appendix 1: Separations from larger Victorian public hospitals, 2006–2007⁵

	All surgery	General surgery	Orthopaedics	Gynaecology	Obstetrics	Ophthalmology	Plastics	E N T	Urology	Neurosurgery	Vascular	Cardiothoracic	Respiratory	Endocrinology
Royal Victorian Eye & Ear	12,446	200	-	-	-	10,037	134	1,990	-	13	-	-	58	14
Royal Women's Hospital	11,842	429	-	5,333	5,991	-	8	-	80	-	-	1	-	-
Royal Melbourne Hospital	10,107	2,987	1,811	26	6	324	1,246	386	586	1,007	576	712	311	129
Geelong Hospital	9,846	2,257	1,614	921	994	779	1,006	599	586	76	378	451	141	44
Alfred The [Prahran]	9,214	2,812	1,517	34	3	559	1,355	302	522	634	508	521	380	67
Royal Children's Hospital	9,115	2,589	1,424	58	-	568	1,216	1,456	679	320	51	399	333	22
The Northern Hospital	9,103	3,382	1,350	788	752	342	1,442	315	260	117	164	32	90	69
Sunshine Hospital	8,366	1,773	995	1,301	1,467	475	1,628	394	162	77	7	1	81	5
Dandenong Campus	8,293	2,121	1,825	656	1,240	46	1,735	147	42	119	168	17	25	52
St Vincents Hospital	7,902	2,207	1,777	19	2	16	1,137	414	359	673	435	520	250	93
Austin Hospital	7,768	2,861	1,392	27	11	87	782	236	671	425	331	487	367	91
Box Hill Hospital	7,630	2,289	1,406	901	844	21	665	353	488	50	273	98	170	72
Frankston Hospital	7,048	2,041	1,359	601	974	35	728	328	406	75	267	47	121	66
Ballarat Health Services	6,531	1,851	1,092	591	549	556	479	661	425	20	122	33	137	15
Monash Medical [Clayton]	6,486	1,901	958	64	1,041	11	331	248	284	496	323	468	299	62
Bendigo Hospital	5,856	1,614	1,271	830	576	274	363	371	374	17	34	47	73	12
Latrobe Regional Hospital	5,341	1,409	1,439	443	387	566	349	395	202	11	66	3	50	21
Western Hospital	5,196	2,046	938	25	2	245	629	214	341	88	291	112	188	77
Mercy Hospital for Women	4,880	75	-	2,270	2,496	-	7	-	29	-	-	-	1	2
Monash Medical [Moorabbin]	4,758	1,124	512	1,286	205	37	97	685	746	8	2	2	51	3
Williamstown Hospital	4,758	1,554	652	1,130	58	13	239	566	515	8	18	-	4	1
Maroondah Hospital	4,668	1,935	1,249	37	-	129	937	46	173	68	11	3	71	9
Mercy Public [Werribee]	4,611	1,419	161	916	942	14	146	739	217	6	7	-	24	20
Wodonga Regional Health	4,433	1,118	30	746	635	911	188	556	181	25	17	-	21	5

5. Separations recorded in the VAED with a surgical DRG type. Specialities are derived from the DRG

	All surgery	General surgery	Orthopaedics	Gynaecology	Obstetrics	Ophthalmology	Plastics	E N T	Urology	Neurosurgery	Vascular	Cardiothoracic	Respiratory	Endocrinology
Angliss Hospital	4,319	1,697	7	864	995	2	95	389	221	3	2	-	42	2
Casey Hospital	4,180	1,371	74	677	206	95	192	882	575	35	7	-	60	6
Goulburn Valley Health	3,855	1,274	815	443	435	99	308	167	220	12	9	2	63	8
Sandringham & District	3,703	1,260	770	681	543	3	130	142	156	12	1	-	-	4
Mildura Base Hospital	3,390	1,008	495	526	511	350	151	181	123	4	7	2	18	14
Peter MacCallum Cancer	3,274	2,277	11	60	-	49	428	57	300	2	-	51	38	1
Other smaller hospitals	47,277	15,787	5,326	7,246	3,251	6,075	2,876	4,296	1,827	167	77	8	250	91
All hospitals	246,196	68,668	32,270	9,500	25,116	22,718	21,027	17,515	11,750	4,569	4,152	4,017	3,817	1,077

Appendix 2: Elective surgery performance at 31 December each year

Elective surgery performance at 31 December each year

Data are the best currently available and may be different from previously published data

	Percentage of category 2 patients on the list for 90 days or less	Percentage of category 3 patients on the list for 365 days or less	Numbers on the waiting list	Hospital-initiated postponements per 100 admissions	Hospital-initiated postponement rate of admissions scheduled
2002	56%	72%	38,282	16.6	-
2003	58%	75%	38,798	14.4	-
2004	55%	75%	41,421	13.6	-
2005	58%	83%	40,241	11.7	8.7%
2006	62%	88%	37,103	11.0	8.7%
2007	60%	90%	39,355*	12.5	10.4%

* Data are incomplete because of HealthSmart and this figure is an estimate only

Appendix 3: Key Victorian Government policy documents

Victoria: A better state of health

The Government's 2005 policy *Victoria: A better state of health* outlines five principles that provide a vision for the state's public health system. These are:

- The best place to treat
- Together we do better
- Patient-focused technology
- A better patient experience
- A better place to work.

Metropolitan health strategy

The *Metropolitan health strategy* was released in October 2003 and provides a framework for service and capital planning across Melbourne. It focussed on fundamental changes needed to deliver high quality, safe and sustainable health services. Four strategic directions were proposed to position the health system to meet future demand for services: increased capacity; redistribution and reconfiguration of capacity; service substitution and diversion; and new service models.

The document is currently being updated to reflect progress made in implementing the strategy, new policy initiatives, and new service and capital developments.

Rural directions for a better state of health

Rural directions for a better state of health (2005) provides a framework for rural health services to meet the changing needs of communities and make the best use of resources to deliver improvements in the health of rural Victorians. Its three broad directions are:

- Promoting the health and wellbeing of rural Victorians.
- Fostering a contemporary health system and models of care in rural Victoria.
- Strengthening and sustaining rural health services.

Better, faster emergency care

Better, faster emergency care: improving emergency care and access in Victoria's public hospitals (2006) outlines ten priorities and actions to improve emergency care in Victoria's public hospitals. Its key aims are to:

- Ensure equitable and timely access to emergency care.
- Enhance the quality of emergency care.
- Support the delivery of patient-centered care.
- Deliver improved outcomes for the community.

Better skills, best care

The Victorian Government is implementing the *Better skills, best care* workforce design strategy to improve the sustainability of the public health workforce. As part of this, the department is funding projects to help health services pilot and evaluate new and amended work roles. These currently focus on anaesthetics, emergency care and intensive care.

Better quality, better health care: a safety and quality improvement framework for Victorian health services

The *Safety and quality framework* is an initiative of the Victorian Quality Council (VQC). It was developed as one component of a strategic approach to improving the safety and quality of patient care across five areas: establish a safety and quality framework; provide improved access to better data; involve consumers in improving safety and quality; educate on safety and quality; and respond to known problems and risks.

The framework identifies five dimensions of quality: safety; effectiveness; appropriateness; acceptability; access and efficiency.

Elective surgery access policy

This document provides advice to Victorian health services about the managing elective surgery waiting lists. The objectives of the policy are to:

- Improve access to elective surgery through active management of waiting lists.
- Promote best practice models for elective surgery waiting list management.
- Provide transparent processes for determining access to elective surgery.
- Identify the rights and responsibilities of health services and patients.
- Improve communication between health services, general practitioners and relevant community agencies.
- Provide authority for the development of local policies and protocols.

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