

Patient Management Task Force

**Paper No. 3**

**Better Access for Patients:  
Extending Ambulatory Care  
and Sameday Services  
for Medical and Surgical Patients**

May 2001

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# Introduction

‘The traditional hospitalisation process, in particular, is now called into question and is changing course: rather than evolving in the usual direction toward institutionalisation, it now tends to provide care and services to the patient in such a way as to avoid a long hospital stay.’

(Rodriguez, R ‘The ambulatory shift: is it a threat to the health and well-being of the elderly’, *Vital Aging*, V 4, No 4, June 1998)

Victoria has been a leader in Australia in the development of ambulatory care. However, the Patient Management Task Force has found there is considerable variation in the uptake of ambulatory care across metropolitan health services. It believes there is ample opportunity to expand ambulatory care in Melbourne’s metropolitan health services towards ‘world’s best practice’.

Day procedure centres, day surgery centres, and integrated care centres are just some of the many facilities or service models that aim to provide a ‘one-stop shop’ on a walk-in and walk-out basis. This paper uses the term ‘ambulatory care’ broadly to cover the range of services in which the patients receiving the service do not require an overnight stay in hospital.

The purpose of ambulatory care is to provide treatment for patients in a setting that is safe and which reduces the demand for hospital beds. Ambulatory care provides a range of services to patients requiring sameday surgery as well as care and observation for specific outpatient procedures, including chemotherapy and renal dialysis. It may include disease management and education, with support systems that maximise the use of technologies and communication. The ambulatory setting may be employed for suitable paediatric, adolescent, adult and geriatric patients.

The use of ambulatory care is possible due to improvements in anaesthesia and analgesia, surgical and medical technology, pharmacological developments and earlier post-operative mobilisation of patients. Ambulatory care facilities can reduce costs, increase throughput for elective and non-elective surgery, relieve pressure on hospital beds, and reduce the potential for hospital-acquired infections.

With respect to day surgery, this paper draws extensively on a literature review commissioned by the Patient Management Task Force from the Centre for Clinical Effectiveness, Monash Institute of Public Health and the Planning and Development Unit, Southern Health (see: <http://www.dhs.vic.gov.au/ahs/patman>). However, it is acknowledged that the paper does not contain a detailed or comprehensive review of all the data on ambulatory care, especially with respect to variations in patterns of practice in Victoria (and the causes of those variations).

*The question is no longer ‘Which procedures can be performed on a sameday basis?’ It must be ‘What is the justification for not performing this procedure on a sameday basis?’*

*An objective of the Task Force is to engage actively with hospital management and clinicians in dealing with problems of access to emergency services and elective surgery—both at the individual health service level and in professional forums.*

## The Patient Management Task Force

The Patient Management Task Force was set up in November 2000 to identify specific areas for improvement in in-hospital patient management processes and to advise on the system factors that will encourage the adoption of best practice in patient management. An objective of the Task Force is to engage actively with hospital management and clinicians in dealing with problems of access to emergency services and elective surgery—both at the individual health service level and in professional forums. The Task Force is also seeking to obtain views from a wide range of stakeholder groups on effective solutions. The Task Force's terms of reference and membership are at Appendix 1.

The Task Force is focusing on major metropolitan hospitals<sup>1</sup> and is carrying out its work in three stages:

- Stage 1, the information gathering stage, is now complete. An overview paper *Serving the Needs of the Patient: Better Patient Management in Melbourne's Public Hospitals* has been released.
- Stage 2 involves producing papers on 'action areas' for consideration and comment by the field. Papers are being published on the following topics:
  - Emergency Services
  - Ambulatory Care
  - Multi-day Medical and Elective Surgery Patients
  - Services for the Older People
  - Improving the System
  - Care Decision Making
- Stage 3 will be the preparation of a short final paper incorporating a summary of the principal themes of the Task Force's work, key areas for action and any changes to the views of the Task Force as a result of comments received.

## Providing Feedback

The Patient management Task Force invites you to submit your views and comments on this paper and its recommendations to:

Patient Management Task Force  
Level 16, 555 Collins Street  
Melbourne Vic 3000

Email: [patient.management@dhs.vic.gov.au](mailto:patient.management@dhs.vic.gov.au)

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<sup>1</sup> The Alfred Hospital (Bayside Health); Austin and Repatriation Medical Centre; Box Hill, Maroondah and Angliss hospitals (Eastern Health); Frankston Hospital (Peninsula Health); Monash Medical Centre (Clayton and Moorabbin) and Dandenong Hospital (Southern Health); Northern Hospital (Northern Health); Royal Melbourne Hospital (Melbourne Health); St. Vincent's Hospital; Western Hospital and Sunshine Hospital (Western Health).

# Recommendations

1. Metropolitan health services and the Department of Human Services should make a firm commitment to a substantial shift from multi-day treatment to sameday care. The Department should agree to specific targets for a 'basket' of individual procedures (both medical and surgical) with metropolitan health services.
2. Metropolitan health services should develop plans to achieve benchmark targets for the substitution of sameday for multi-day care. Targets for sameday separations in a 'basket' of diagnosis related groups (DRGs) should be set for each metropolitan health service commencing with the 2001–02 Health Service Agreement.
3. Metropolitan health services and the Department of Human Services should collaborate with expert leading clinicians to share information on emerging international and national trends in sameday care, including data for comparison of practice between hospitals. Development of new arrangements for information sharing and comparative performance reporting should commence as soon as practicable and substantial progress should be made by 30 September 2001.
4. The Department of Human Services should adjust current funding models to provide a carefully targeted incentive to encourage the substitution of sameday for multi-day treatment.
  - Incentives should be based on establishing benchmark targets for a basket of DRGs managed on a sameday basis.
  - The 'basket' of DRGs should be adjusted in the future to take account of international and national trends in sameday care (refer Recommendation 3).
  - Monitoring of individual hospital performance should include a regular review process to minimise opportunities for gaming.

The incentive scheme should be introduced in 2001–02 and should be evaluated prior to extending it in future years.
5. Individual metropolitan health services should establish, without delay, leadership groups with senior managers and expert clinicians to drive the shift to ambulatory care.
6. As a matter of urgency (and by no later than 30 June 2001), all metropolitan health services should follow the practice already adopted by some and ensure that they monitor patient safety indicators for sameday care, particularly the rate of admission to an inpatient bed following sameday surgery.

7. The Consultative Council on Anaesthetic Mortality and Morbidity and the Surgical Consultative Council should work together with other professional bodies (including at the national level) to develop agreed standard approaches to the measurement of patient safety indicators including unplanned readmission rates. The Councils should submit a report on this by 31 December 2001.
8. Metropolitan health services and the Department of Human Services should establish a collaborative initiative in 2001–02 with a focus on benchmarking and re-engineering of the internal hospital processes that drive the shift to sameday care. It should provide information for the purposes of service planning and process redesign on how sameday procedures affect (and are affected by) the operation of the rest of the hospital (for example, theatre utilisation, diagnostics).
9. The Department of Human Services should commission an appropriate peak body—with experience in community education about health issues and the provision of information to consumers—to develop community information and education strategies to support the shift to sameday care.
10. In consultation with professional bodies, metropolitan health services, regional hospitals and other stakeholders, the Department of Human Services should commission a project to:
  - Establish guidelines and decision making criteria to assist hospitals in achieving the right balance between sameday, multi-day and emergency surgery.
  - Assess the implications of a substantial shift from multi-day to sameday care including modelling the downstream impacts on elective surgery and access to emergency services.

This work should be completed by 30 September 2001.

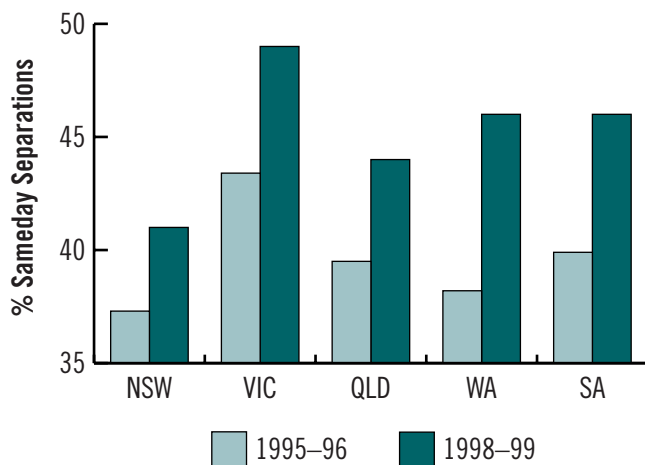
11. In conjunction with the industry, the Department of Human Services should undertake further work on the future service and capital planning requirements of the shift to ambulatory care. To be completed by 31 December 2001, this should include an examination of stand-alone versus co-located facilities, as well as development of ambulatory care models. It should also provide guidelines on minimum work volumes necessary for viability.
12. Metropolitan health services should give priority in their service and capital planning to the establishment of expanded ambulatory care services and facilities. These plans should be developed following completion of the work recommended in Recommendation 11.

# Observations and Findings

**1. Sameday hospital treatment is more widespread in Victoria than in some other States, but there is potential for a further significant shift from multi-day to sameday care.**

The latest national data show that in 1998–99, Victorian public hospitals were well ahead of the national average in sameday hospital treatment, with 49 per cent of acute separations being sameday (AIHW 2000, *Australian Hospital Statistics 1998–99*). However, admission for renal dialysis accounts for 28 per cent of all sameday separations. Excluding this condition, sameday rates in Victoria of around 41 per cent were much closer to the average of the other States (except NSW).

**Figure 1: Sameday Separations in Five State Public Hospital Systems, 1995–96 to 1998–99**



Source: AIHW Australian Hospital Statistics 1998–99 and 1995–96

In 1999–2000, 61 per cent of medical separations and 31 per cent of procedural (including surgical) separations in Melbourne’s major metropolitan hospitals were sameday. The Task Force considers that there remains clear scope for further improvement. For example, in the USA in 1996, 45 per cent of all surgical procedures were carried out on an ambulatory (sameday) basis. For ‘community’ (short-term) hospitals, which account for 94 per cent of all inpatient admissions, this proportion was 60 per cent (National Center for Health Statistics (2000) *Health: United States, 2000* (with Adolescent Health Chartbook) Tables 94 and 96). It is recognised that there are system and definitional differences between Australia and the US that make close comparisons unreliable. However, the direction and scale of the variation in these data are indicative of a significant difference in patient management practices. NSW Health has set a target for that State’s area health services of 60 per cent of all surgery to be performed on a sameday basis (to be met by 1 July 2001).

*The take-up of sameday hospital treatment is highly variable across metropolitan health services (see Appendix 2 for examples).*

The Task Force has reviewed data from the Victorian Admitted Episodes Dataset to identify differences among hospitals in the proportion of inpatient episodes that are completed on the same day. It has also taken account of recent international experience. The goal was to identify a sample of DRGs where there is variability in the extent of sameday treatment, in order to set targets for operational improvement based on this analysis.

By way of examples, the Task Force suggests that the following targets for sameday care are achievable in metropolitan health services:

- Tonsillectomy or adenoidectomy, 90 per cent
- Vein ligation and stripping, 90 per cent
- Abdominal, umbilical and other hernia procedures age >0, 90 per cent
- Inguinal and femoral hernia procedures age >0, 90 per cent
- Local excision and removal of internal fixation device excl. hip, 90 per cent
- Other wrist and hand procedures, 90 per cent
- Cholecystectomy w/o closed CDE w/o catastrophic or severe CC, 80 per cent
- Chest pain, 60 per cent
- Otitis media and URI w/o CC, 60 per cent

Some of these targets (such as that for cholecystectomy) are considerably more challenging than others. Achieving the targets will require action plans tailored to the specific circumstances at the individual health service level, including such factors as work practices, skill mix, information technology and equipment, and the role and design of many hospitals.

*To drive the shift from multi-day to sameday care, collaborative arrangements are required involving expert leading clinicians, metropolitan health services and the Department of Human Services to share information on emerging international and national trends in sameday care, including data for comparison of practice between hospitals.*

To continue the development of sameday care, information should be provided identifying which procedures should be expanded on a sameday basis and establishing benchmarks or best practice guidelines for particular procedures. Comparative performance reporting of reliable data and trends against benchmarks should be provided on the Department of Human Services and other Web sites, such as the Clinicians Health Channel.

## Recommendations

1. Metropolitan health services and the Department of Human Services should make a firm commitment to a substantial shift from multi-day treatment to sameday care. The Department should agree to specific targets for a 'basket' of individual procedures (both medical and surgical) with metropolitan health services.
2. Metropolitan health services should develop plans to achieve benchmark targets for the substitution of sameday for multi-day care. Targets for sameday separations in a 'basket' of DRGs should be set for each metropolitan health service commencing with the 2001–02 Health Service Agreement.

3. Metropolitan health services and the Department of Human Services should collaborate with expert leading clinicians to share information on emerging international and national trends in sameday care, including data for comparison of practice between hospitals. Development of new arrangements for information sharing and comparative performance reporting should commence as soon as practicable and substantial progress should be made by 30 September 2001.

**2. The take-up of sameday care options could be boosted by changes to funding arrangements that would foster genuine substitution at the hospital level.**

Funding for ambulatory care for admitted patients is provided through case payments based on the weighted inlier equivalent separation (WIES) to which the procedure is grouped.

The cost weights are reviewed and adjusted regularly to ensure that they reflect as closely as possible the actual cost of treatment. However, for each DRG, the incentive (or disincentive) to move a procedure from an overnight or multi-day to a sameday basis depends on the relative difference between the various cost weights. An examination of the cost weights shows that these relativities differ depending upon the DRG.

*While demand pressures and technological advances have been key drivers in the advances in ambulatory care, funding has also been a major factor. Funding has influenced the change by encouraging hospitals to treat more patients within capped budgets.*

### **Case Study 1—ERCP**

Endoscopic retrograde cholangiopancreatography (ERCP) is an examination of the bile and pancreatic ducts through their opening into the intestinal tract using an endoscope. ERCP may be used to discover the reason for jaundice, upper abdominal pain, and unexplained weight loss and is a commonly performed diagnostic procedure for a range of problems including in the liver, gallbladder, bile ducts, and pancreas.

Possible complications of ERCP include pancreatitis (inflammation of the pancreas), infection, bleeding, and perforation of the duodenum. However, such problems are uncommon.

ERCP takes thirty minutes to two hours. After the procedure, the patient will need to stay under observation for one to two hours until the sedative wears off. If any kind of treatment is done during ERCP, such as removing a gallstone, there may be a need to stay in the hospital overnight.

The procedure 'ERCP complex therapeutic procedure without catastrophic or severe complications' has an average length of stay of 3.4 days and an inlier low point of 1 day. The same day weight for this procedure is 0.5088 and the one-day and inlier weights are 1.0175.

*continues*

For the patient who undergoes ERCP on a sameday basis, the hospital receives \$1140. However, should that same patient be admitted for an overnight stay, the payment increases to \$2280. The hospital will benefit financially if the increased marginal cost of the overnight stay is outweighed by the marginal extra payment.

*Aiming for comparable outcomes, funding mechanisms should encourage substitution of sameday care for multi-day care.*

In considering possible funding incentives to foster a genuine substitution of sameday for multi-day care, the Task Force has been guided by the principle that for comparable levels of complexity, and aiming for comparable outcomes, funding mechanisms should encourage substitution of sameday care for multi-day care. Bonus payments could be made for a specific set of DRGs to encourage practice change and to reward high performing hospitals. The bonus scheme would be monitored closely to identify gaming and the list of DRGs would change over time as new treatments become suitable for sameday provision.

Non-admitted patients (typically general medical or specialist practitioner services provided through outpatient departments) are funded through the Victorian Ambulatory Casemix System. The Task Force does not support growth in these services at the expense of services for admitted patients. However, it does believe that changes in treatment options that make a patient admission unnecessary should be recognised in the funding models and incentives adjusted accordingly.

### **Recommendation**

4. The Department of Human Services should adjust current funding models to provide a carefully targeted incentive to encourage the substitution of sameday for multi-day treatment.
  - Incentives should be based on establishing benchmark targets for a basket of DRGs managed on a sameday basis.
  - The 'basket' of DRGs should be adjusted in the future to take account of international and national trends in sameday care (refer Recommendation 3).
  - Monitoring of individual hospital performance should include a regular review process to minimise opportunities for gaming.

The incentive scheme should be introduced in 2001–02 and should be evaluated prior to extending it in future years.

**3. In individual metropolitan health services, the shift to ambulatory care has to be driven by clinician and senior executive leadership and commitment to change.**

Information exchange, and comparative analysis of hospitals' experiences and performance need to become a priority role of management. There is also a need for focused examination of professional issues (for example,

workforce development and the impact of the shift to sameday care on teaching and research), as well as support for developing and evaluating models of care.

Local champions are essential if the benefits of an increase in sameday services are to be realised. They (including executive management and clinical leaders) also need the support of an external network that provides an impetus for system-wide change.

## Recommendation

5. Individual metropolitan health services should establish, without delay, leadership groups with senior managers and expert clinicians to drive the shift to ambulatory care.

**4. In moving towards a substantially higher usage of sameday hospital care, patient safety must not be compromised.**

The increase in complexity and number of day surgery cases demands a systematic way of selecting and preparing patients. All elective surgery can be considered for day surgery, however, it must meet particular clinical criteria. Identified strategies to reduce unplanned admissions include improved patient selection and pre-operative assessment, patient waiting time and education, pre-operative anaesthesia, nursing care and post-operative analgesia. Prolonged surgery is a predictor of unplanned admission, and should be considered in patient selection.

For this reason, the Task Force believes that hospitals and clinicians should pay close attention to established safety indicators, including admission to an inpatient bed following sameday surgery and unplanned readmissions. However, there is no uniformly accepted set of definitions relating to unplanned readmissions and accurate measurement is especially difficult (for example, a readmission may occur at another hospital unknown to the patient's original hospital).

The establishment of a system of unique patient identifiers would assist greatly in monitoring such patient safety indicators. Clinical pathways and protocols are also a vital tool in tracking patient care. The Task Force will be making recommendations on the opportunities to revolutionise patient management processes through information technology in a subsequent paper. It strongly endorses the introduction of a unique patient identifier as well as improvements to patient management systems to link services such as hospitals, aged residential care and general practice.

## Recommendations

6. As a matter of urgency (and by no later than 30 June 2001), all metropolitan health services should follow the practice already adopted by some and ensure that they monitor patient safety indicators for sameday care, particularly the rate of admission to an inpatient bed following sameday surgery.

*Clinicians should pay close attention to established safety indicators, including admission to an inpatient bed following sameday surgery and unplanned readmissions.*

7. The Consultative Council on Anaesthetic Mortality and Morbidity and the Surgical Consultative Council should work together with other professional bodies (including at the national level) to develop agreed standard approaches to the measurement of patient safety indicators including unplanned readmission rates. The Councils should submit a report on this by 31 December 2001.

**5. Well-developed patient management processes are essential in providing good ambulatory care.**

The development of stand-alone ambulatory care facilities or units within hospitals can encourage the redesign of patient care processes with a consumer focus. However, many such services will continue to be provided in existing facilities. Reform of patient care processes can achieve similar outcomes within existing infrastructure and it is important that hospitals make the best use of what they already have.

Wherever possible, ambulatory care services should have:

- Extended hours of operation (including early mornings, late evenings and weekends).
- Booked appointment times.
- A single point of management responsibility for all services provided at the facility.
- Rotation of staff in hospital-based training programs.
- A carefully targeted patient selection and referral process.
- Clinical pathways to foster local commitment, streamline care and identify patients at risk.
- Collaboration with GPs and other community providers to increase care options.
- A mix of beds and chairs that can be flexibly deployed day-to-day depending on patient mix.

Where possible, care should be supported by care pathways that are understood by all involved.

‘Re-engineering hospital processes can achieve dramatic and sustainable improvements in care. It requires commitment at every level of an organization, strong leadership, significant and sustained input from senior clinical staff, as well as managers, involvement of patients and the public, and a critical analysis which defines the problems and objectives before identifying a solution.

Significant re-engineering successes include Leicester Royal Infirmary’s Balmoral Test Centre that provided programmed testing of patients to underpin multiple ‘one stop’ clinics. Its turnaround time for 80 per cent of outpatient tests has dropped from 79 hours to

*Essential elements in the management of ambulatory care services are innovative clinical protocols, a heightened customer focus and the ability to take advantage of changes in technology.*

34 minutes, while the waiting time in outpatients has fallen from 90 minutes to 8 minutes.’

Scottish Office (1998) *Acute Services Review Report*

In ambulatory care settings, patient selection is crucial to achieving good outcomes and avoiding complications. Patient selection requires the development of appropriate risk assessment instruments that should include the suitability of the patient's home circumstances, including the availability of home support (family, friends, residential care) for the relevant period after returning home.

The presence of a small number of 23-hour ‘overnight beds’ has the potential to expand the types of services provided and extend the hours of operation of the service. Used on a planned basis, they provide a resource that may be required for people who have travelled long distances, in special social circumstances, or who experience problems with pain relief. However, unplanned overnight stays should be transferred to an overnight bed in the associated hospital.

While all metropolitan hospitals provide ambulatory care services to a greater or lesser extent, there are three stand-alone ambulatory ‘integrated’ care centres in metropolitan Melbourne, each of which embraces a different model (see Appendix 3).

Hospital in the home (HITH) can be used to assist in the shift from multi-day to sameday surgery. For example, in the case of hernia, pain-relieving drugs in tablet form administered at home can now replace the use of injectable drugs requiring closer supervision in a hospital facility. Opportunities to further develop HITH programs will be explored in the Task Force’s papers on emergency services and multi-day elective surgery.

Re-engineering hospital processes to foster the shift to sameday care requires measurement and comparative performance analysis within and between hospitals. The Emergency Breakthrough Collaboration in Victoria is just one example of how hospitals working together can analyse and understand their own processes, benchmark their performance against peer hospitals and achieve commitment to change.

## **Recommendation**

8. Metropolitan health services and the Department of Human Services should establish a collaborative initiative in 2001–02 with a focus on benchmarking and re-engineering of the internal hospital processes that drive the shift to sameday care. It should provide information for the purposes of service planning and process redesign on how sameday procedures affect (and are affected by) the operation of the rest of the hospital (for example, theatre utilisation, diagnostics).

*Practical, down-to-earth and targeted patient education is essential to ensure that patients are able to make appropriate arrangements with families and carers well in advance of their treatment.*

**6. Good patient and community information is a vital element in the delivery of sameday care.**

Examples of patients arriving at an ambulatory care centre with suitcase in hand ready for an overnight stay suggest that there are opportunities to improve the timing, content, format, presentation and language used in communicating with patients. There is also a need to update information and ensure continuing relevance and accuracy.

Rapidly changing technologies and treatment options may have moved far ahead of community expectations and assumptions about the settings in which hospital care is delivered. The Task Force believes that it is an important part of the health professional's role to bridge that gap. Peak industry and professional bodies could consider ways in which they can provide broader public education about the benefits and implications of both sameday and multi-day surgery in order to foster community awareness and informed (thoughtful) acceptance of sameday care.

**Recommendation**

9. The Department of Human Services should commission an appropriate peak body, with experience in community education about health issues and the provision of information to consumers, to develop community information and education strategies to support the shift to sameday care.

**7. Whilst a substantial increase in sameday activity is desirable and achievable, there are no widely accepted and authoritative guidelines or criteria to assist hospitals in achieving the right balance between sameday, multi-day and emergency services.**

Because sameday surgery and medical care is generally less complex than multi-day care, there is a danger that clinical priorities may be distorted in the drive to increase sameday activity. We need to ensure that patients with a lower level of need are not unfairly advantaged at the expense of their higher need counterparts by the greater availability of sameday options.

Often novel technologies, including the shift to ambulatory care, are accepted but underlying practice does not change to reflect the service delivery innovation—new approaches are grafted on to old processes. For example, there is considerable debate about the advantages and disadvantages of discrete operating lists for sameday surgery.

The Task Force believes that there is a need to identify and promote best practice in sameday care, as well as to understand better the extent of its impact on the hospital system as a whole, including: quality (patient safety and appropriateness), efficiency (best practice benchmarks), flexibility (the capacity of existing facilities and practices to accommodate future changes) and cost.

## Recommendation

10. In consultation with professional bodies, metropolitan health services, regional hospitals and other stakeholders, the Department of Human Services should commission a project to:
  - Establish guidelines and decision making criteria to assist hospitals in achieving the right balance between sameday, multi-day and emergency surgery.
  - Assess the implications of a substantial shift from multi-day to sameday care including modelling the downstream impacts on elective surgery and access to emergency services.

This work should be completed by 30 September 2001.

**8. In the longer term, the shift to sameday admissions will have substantial implications for information technology and the role and design of many hospitals, such as increasing the availability of procedure rooms and operating theatres.**

Ambulatory care services in metropolitan health services have limited physical capacity to take on additional work load, so the development and implementation of new ambulatory care models will initially need to take place within existing infrastructure. Capital planning will need to take this into account. While there is much that can be done immediately within existing infrastructure, a substantial increase in the proportion of work undertaken on a sameday basis may require a reconfiguration of existing physical space or, in some instances, the construction of new facilities.

There are advantages and disadvantages of stand-alone (in contrast to on-site) ambulatory care centres. For those who require major surgery or develop complications in the perioperative period, hospital based centres provide a greater range of acute services than free standing units. However, stand-alone units offer an opportunity to provide services in a wider range of locations that may be more convenient for patients.

## Recommendations

11. In conjunction with the industry, the Department of Human Services should undertake further work on the future service and capital planning requirements of the shift to ambulatory care. To be completed by 31 December 2001, this should include an examination of stand-alone versus co-located facilities, as well as development of ambulatory care models. It should also provide guidelines on minimum work volumes necessary for viability.
12. Metropolitan health services should give priority in their service and capital planning to the establishment of expanded ambulatory care services and facilities. These plans should be developed following completion of the work recommended in Recommendation 11.

*The development and implementation of new ambulatory care models will initially need to take place within existing infrastructure.*

# Appendix 1: Patient Management Task Force

## Terms of Reference

1. To identify essential organisational and patient management practices that should be in place in all hospitals.
2. To determine the extent to which these practices are occurring in metropolitan health services, identify specific areas where improvements should occur and advise on how these improvements could be quickly achieved.
3. To determine key indicators of good patient management practice and the benchmarks that should be achieved by health services.
4. To advise on incentives and other strategies that could be used to encourage health services to achieve benchmarks.
5. To communicate and engage with representative bodies of health professionals, practitioners, managers and other stakeholders in identifying and implementing good patient management practices.

## Membership

Dr Michael Walsh (Chair), Chief Executive, Bayside Health

Dr Jim Breheny (Deputy Chair), Chair, Austin and Repatriation Medical Centre Board

Professor Gordon Clunie, Chair, Ministerial Advisory Emergency and Critical Care Committee

Ms Ella Lowe, Executive Director Operations, Peninsula Health

Mr Robert Burnham, General Manager, Northern Hospital

Dr Heather Buchan, Assistant Director, Quality and Care Continuity Branch, Acute Health Division, Department of Human Services

Mr Geoff Lavender, Regional Director, Barwon-South Western Region, Department of Human Services (Project Director)

## Project Team

Ms Robynne Cooke, Austin and Repatriation Medical Centre

Mr Peter Lewis, Acute Health Division, Department of Human Services

Mr Nick Legge, Aged, Community and Mental Health Division, Department of Human Services

Mr Amos Yee, Acute Health Division, Department of Human Services

Ms Julie La Gamba, Acute Health Division, Department of Human Services.

## Appendix 2: Variations in Sameday Hospital Treatment

Case studies for two common surgical procedures and one common medical condition are presented below to illustrate the potential for further shifts from multi-day to sameday care.

### Case Study 1—Cholecystectomy

Cholecystectomy (gall bladder removal) is a common surgical procedure that can be performed safely as a day case using laparoscopic surgery. The most common type of cholecystectomy (AN-DRG 367) was the top ranked multi-day procedure in 1998–99 (measured as the number of patient days for procedures where sameday cases < 10 per cent). The cost of this type of cholecystectomy in Australian public hospitals in 1998–99 was estimated at approximately \$90 million.

In 1998–99, Queensland public hospitals performed 2.5 per cent of cases on a sameday basis, whereas in Victoria only 0.2 per cent of cases were sameday. However, in the USA in 1996, 42 per cent of cholecystectomies were performed on a sameday basis and for non-elderly patients, the proportion was around 50 per cent.<sup>2</sup>

**Figure 2: Cholecystectomy w/o CDE (AN-DRG 367), % Sameday Separations, Five State Public Hospitals, 1998–99**

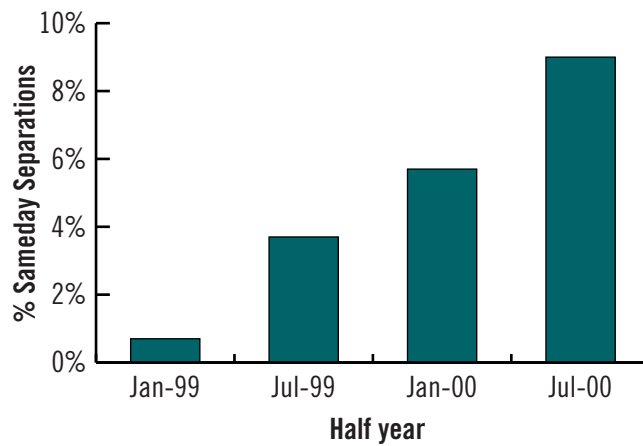


Source: AIHW *Australian Hospital Statistics 1998–99*

- 2 Kramarow E, Lentzner H, Rooks R, Weeks J, Saydah S. 1999. Health and Aging Chartbook. Health, United States, 1999. Hyattsville, Maryland: National Center for Health Statistics.
- 3 For purposes of comparison, consider a Canadian study of a 256-bed non-teaching acute-care community hospital on the outskirts of a major urban centre, served by 4 general surgeons. It found that prior to intervention, outpatient cholecystectomy was done in 75 per cent of the patients. Variations in individual surgical practice, preoperative patient selection and inappropriate day surgery facilities were thought to be correctable factors leading to admission. After correction of these factors (follow-up study), the rate of outpatient cholecystectomy rose to 95 per cent. Variations in individual surgical practice disappeared, and no patient required processing through inappropriate day surgery facilities. No patient suffered untoward effects from outpatient management. (Voitk A, 'Establishing outpatient cholecystectomy as a hospital routine', *Canadian Journal of Surgery* 1997;40(4):284–288).

In Victoria, the proportion of sameday separations varies across the metropolitan public hospital system. At most hospitals less than 1 per cent of cholecystectomies are sameday separations.<sup>3</sup> A notable exception is St Vincent's hospital where sameday separations for this procedure have increased from less than 1 per cent to nearly 10 per cent in the past few years.

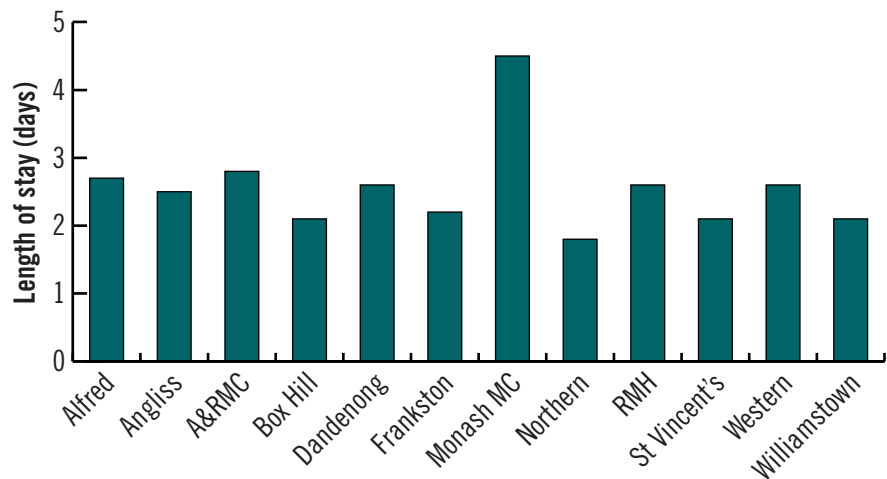
**Figure 3: Sameday Separations for Cholecystectomy (VIC-DRG H04B) at St Vincent's, 1999–2000**



Source: Victorian Admitted Episodes Dataset (VAED)

The length of stay for multi-day stay patients also varies considerably. If metropolitan hospitals had a length of stay equivalent to the hospital with the lowest average stay length, an additional four multi-day beds would become available and there would be other benefits such as reduced risk of hospital acquired infection.

**Figure 4: Average Length of Stay for Cholecystectomy (VIC-DRG H04B), Melbourne Hospitals, 1999–2000**

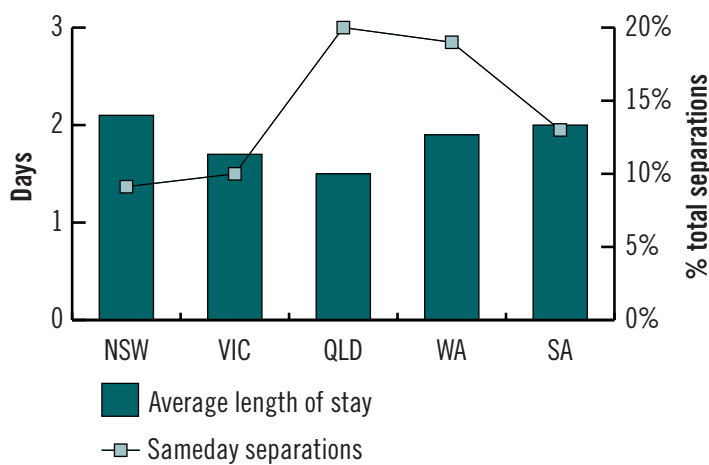


Source: Victorian Admitted Episodes Dataset (VAED)

## Case Study 2—Hernia Repair

Inguinal hernia repair is another common surgical procedure that can be performed safely on a same-day basis. The cost of this procedure in Australian public hospitals in 1998–99 was estimated at approximately \$40 million. In Queensland public hospitals in 1998–99, 20 per cent of hernia operations were performed on a same-day basis, whereas in Victoria only 10 per cent of cases were same-day.

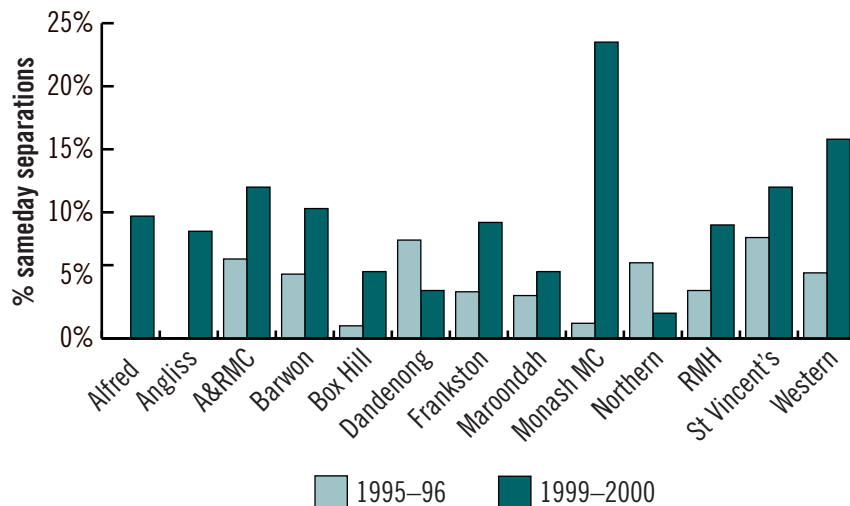
**Figure 5: Hernia Procedures (AN-DRG 320), Australian Public Hospitals, 1998–99**



Source: AIHW *Australian Hospital Statistics 1998–99*

There is considerable variability across the public hospital system in the extent to which hospitals are doing hernia repairs on a same-day basis. All hospitals have increased the proportion of same-day separations for this procedure with Monash Medical Centre leading this trend.

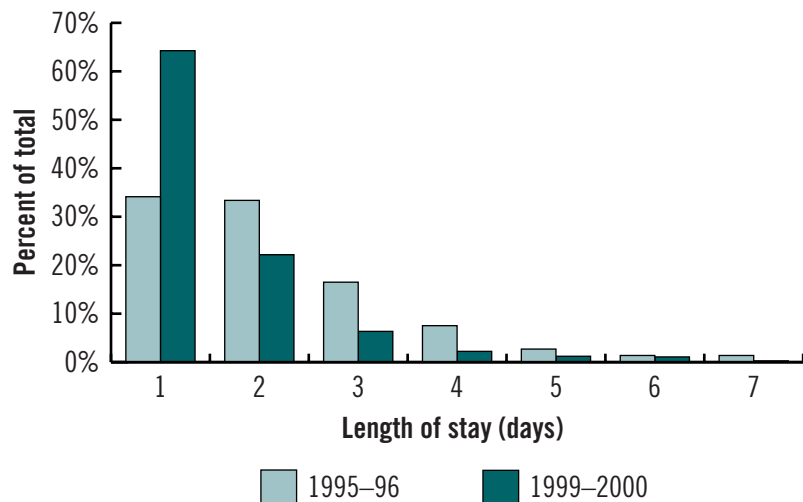
**Figure 6: Sameday Separations for Hernia Procedures (AN-DRG 320), 1995–96 and 1999–2000**



Source: Victorian Admitted Episodes Dataset (VAED)

Sixty-four per cent of all hernia repairs performed as multi-day procedures entail a stay of only one day. Keeping patients overnight after surgery is often a precautionary measure and allows observation for longer than sameday treatment. An extended period of observation with higher sameday rates would be achievable if more sameday surgery was conducted early in the day with discharges later in the evening.

**Figure 7: Distribution of Length of Stay for Multi-Day Hernia Procedures (AN-DRG 320), 1995–96 and 1999–2000**



Source: Victorian Admitted Episodes Dataset (VAED)

### Case Study 3—Chest Pain

Chest pain is a common reason for admission to hospital with about 50 per cent of patients admitted on a sameday basis. Approximately 97 per cent are admitted as emergency patients.

**Figure 8: Chest Pain (AN-DRG 261), Australian Public Hospitals, 1998–99**

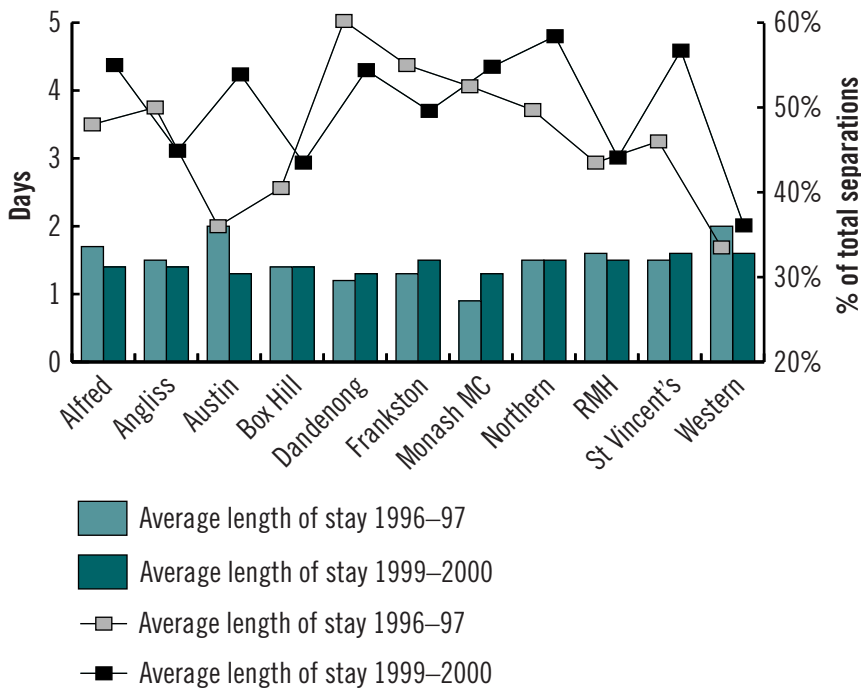


Source: AIHW *Australian Hospital Statistics 1998–99*

In 1998–99, 30 per cent were admitted nationally on a sameday basis, whereas in Victoria the rate was 43 per cent. The rate for major Melbourne metropolitan hospitals in 1999–2000 was closer to 50 per cent. This may be due in part to different admission patterns with considerable variations between States. The per capita admission rates for this condition in NSW is twice the rate in Western Australia, and in Victoria, the rate is in between the two States.

There is some variability across the metropolitan public hospital system in the extent to which hospitals are admitting patients for chest pain on a sameday basis, with the majority of hospitals showing an increase since 1996–97.

**Figure 9**



Source: Victorian Admitted Episodes Dataset (VAED)

During this period, the Department piloted the use of chest pain evaluation units at The Alfred and The Royal Melbourne Hospitals and at the Monash Medical Centre.

## Appendix 3: Some New Models of Ambulatory Care

Key features of successful models of ambulatory care include:

- Extended hours of operation (including early mornings, late evenings and weekends).
- Booked appointment times.
- A single point of management responsibility for all services provided at the facility.
- Rotation of staff in hospital-based training programs.
- A carefully targeted patient selection and referral process.
- Clinical pathways to foster local commitment, streamline care and identify patients at risk.
- Collaboration with GPs and other community providers to increase care options.
- A mix of beds and chairs that can be flexibly deployed day-to-day depending on patient mix.

While all metropolitan hospitals perform ambulatory care functions in purpose built areas, there are only three stand-alone ambulatory 'integrated' care centres in metropolitan Melbourne, each of which embraces a different model.

### Broadmeadows Integrated Care Centre

The centre comprises a large ambulatory care component and 126 inpatient beds providing the sub-acute services of aged care and rehabilitation, as well as palliative care and mental health. The ambulatory care centre combines community health services including a large general practice clinic and community mental health, acute services through public outpatient clinics and day surgery and endoscopy. There is also a chronic renal dialysis service. Extensive allied health services include a community rehabilitation service and hydrotherapy.

A range of services and organisations has been brought together to deliver care. For example, there is a satellite centre from the Royal Victorian Eye and Ear Hospital (outpatients and theatre), and services from the Women's and Children's Health Service, including obstetrics and gynaecology, and MHSky. A diverse range of specialists from the Melbourne and Northern Metropolitan Health Services provide outpatient services.

The key elements of this model are:

- Community-based care.
- Combination of primary and secondary care providers with links to tertiary care.
- General practice and specialist consulting on site.
- Two operating theatres and one endoscopy theatre running at about 80 per cent utilisation.
- A broad range of surgery, and trialing new techniques for public day surgery including laser prostatectomy.
- Pre-admission undertaken via strict selection criteria, a completed patient health questionnaire, and telephone contact.
- 24/24 post-surgery follow-ups with all patients who have had a general anaesthetic.

### **Cranbourne Integrated Care Centre**

Cranbourne Integrated Care Centre has both community providers and the capacity to perform sameday surgery. One theatre is to be operational at the end of February 2001 to take predominantly elective plastic procedures and low acuity day surgery cases. A second theatre is planned to become operational in May 2001. There are no overnight beds and patients will need to be triaged through pre-admission, as this is a stand-alone facility. Currently dialysis is performed there and it is also planned to develop a chemotherapy day unit.

The key elements of this model are:

- Community providers on site.
- Two operating theatres.
- Renal dialysis.
- Infusion and haematology.
- Outpatient and post-operative services.
- Consulting suites.
- No general practitioners.

### **Frankston Integrated Health Centre**

Frankston Integrated Care Centre also provides a single facility for a number of local community providers. This model does not provide for sameday surgery but is designed to enhance ambulatory medical care including chemotherapy and dialysis. The centre is located on land the adjacent to the acute hospital.

The key elements of this model are:

- Community providers on site (including local division of general practice).
- Chemotherapy.
- Renal dialysis.
- Outpatient services.
- Base for hospital in the home.
- No operating theatres.