

---

## **4 HEALTH**

### **4.1 Introduction**

Governments provide a wide range of services to improve the health of all Australians. The performance of the providers of different aspects of health care are often interrelated. For example, some public health programs reduce the incidence of serious health conditions that would otherwise require more expensive treatment in public acute care hospitals.

This year the scope of the Report has been broadened to better recognise these interrelationships. A framework of performance indicators for the health sector, as well as one for public acute care hospitals, is included. It is not yet possible to include data on other aspects of health provision — this will be progressed in future Reports.

The Steering Committee worked with the National Health Ministers' Benchmarking Working Group and the National Public Health Information Working Group to prepare this chapter.

### **4.2 Profile of health**

This chapter focuses on the public acute care and the public and community health aspects of the health care system. Other elements of the health system are discussed in the health preface.

#### **4.2.1 Public acute care hospitals**

Health covers an array of services, some of which are substitutes or complements. In making any assessment of an individual service, its position in relation to substitutes and complements within the whole health sector needs to be taken into consideration.<sup>1</sup>

---

<sup>1</sup> For example, metropolitan hospitals may provide health services such as inpatient acute care, outpatient clinics, sub-acute aged and mental health services, dental clinics and rehabilitation facilities. Depending on the jurisdiction, these services may be substituted for or complemented by each other, or by General Practitioners, the local mental health authority, the local pharmacy or dentist and the local nursing home or a private hospital stay.

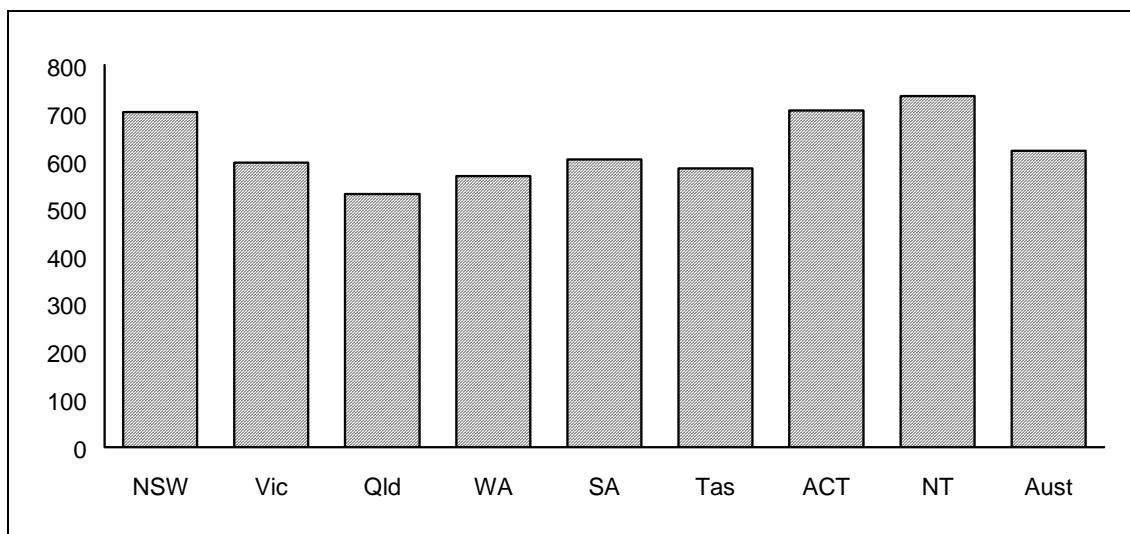
Governments provide public acute care hospitals to ensure that the population has access to cost-effective acute health services. Public acute care hospitals provide a range of services including:

- acute care services to admitted patients;
- services to non-admitted patients (emergency and outpatient services);
- services to sub-acute and non-acute patients (for example, patients undergoing rehabilitation and long-stay nursing home-type patients); and
- teaching and research activities.

Most of the data presented in this section relate to acute care services provided by hospitals for admitted patients. These services, for which data are most readily available, comprise the bulk of public hospital services.

Government recurrent expenditure on public acute care hospitals was \$11.1 billion in 1995–96, spread across 616 hospitals. Governments spent \$614 per person in 1995–96 (Figure 4.1). Across jurisdictions, recurrent expenditure per person in 1995–96 ranged from \$520 in Queensland to \$735 in the NT.

**Figure 4.1: Recurrent expenditure, 1995–96 (\$ per person)**



*Source:* Table 4A.2

Total separations from public acute care hospitals reached almost 3.6 million in 1995–96. More than one-third of total separations in 1995–96 were same-day separations. In addition, there were 34.6 million non-admitted occasions of service in public hospitals.<sup>2</sup>

---

<sup>2</sup> Data referred to non-admitted occasions of service from all public hospitals, not just public acute care hospitals.

The most common reasons for treatment in public hospitals in 1995-96 (including same-day cases) were:

- renal dialysis (8.6 per cent of separations);
- chemotherapy (3.4 per cent); and
- normal delivery without complications (3.1 per cent) (Table 4A.4).<sup>3</sup>

When same-day cases were excluded, normal delivery without complications was the most common reason for treatment (5.0 per cent of separations), followed by bronchitis and asthma in an admitted patient aged 50 years and under (1.8 per cent) and rehabilitation (1.5 per cent) (Table 4A.5).

#### **4.2.2 Public and community health**

Public health is generally defined as the organised response by society to protect and promote health, and to prevent illness, injury and disability (NPHP 1997). All jurisdictions perform services or undertake programs to enhance the health of the population. Governments provide public health services for a number of reasons:

- to enable all Australians access to at least a minimum level of care;
- to ensure that health standards for individuals are not adversely affected by the behaviour of others; and
- to reduce the need for more expensive publicly-funded acute care services.

Activities provided and classified as public health can be grouped under four major headings:

- promotion of health (for example, public campaigns designed to improve nutrition);
- protection against hazards (for example, surveillance of food premises and control of water and air quality through legislation or regulation);
- prevention and early detection of illness (for example, child immunisation and breast and cervical cancer screening services); and
- provision of health services (for example, school dental services and drug and alcohol treatment services).

The promotion and protection activities listed above are commonly referred to as population public health activities because they are delivered to populations

---

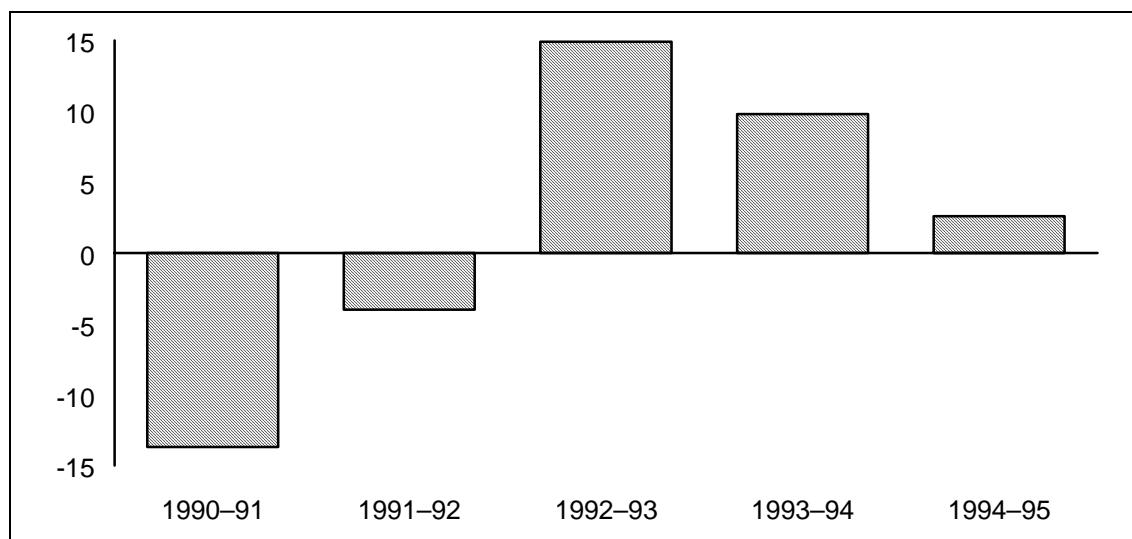
<sup>3</sup> Data related to all public hospitals, not just public acute care hospitals.

rather than individuals. The prevention and provision activities may also be termed public health personal clinical activities.

Except for health protection, many of these activities are delivered by a range of health care providers — general practitioners, public acute care hospitals and community health services. While general practitioners and public acute care hospitals provide a range of services in addition to these public health services, community health services concentrate on health promotion, early detection of health problems and the assessment and care of health problems (Fry 1994).

Given their role in delivering public health services, community health services are often grouped with public health services within government programs for administrative responsibilities and funding. Governments spent \$1.8 billion on public and community health programs in 1994–95 (AIHW 1997b). Unlike overall government health expenditure generally, growth in real government expenditure on public and community health has been volatile in recent years. Real expenditure fell in 1990–91 and 1991–92 but grew each year between 1992–93 and 1994–95, although growth in 1994–95 was considerably less than in the previous two years (Figure 4.2).

**Figure 4.2:** Growth in real government expenditure on public and community health, 1989–90 to 1994–95 (per cent)



*Source:* Table 4A.6

## 4.3 Recent developments in the sector

Many changes take place in the health sector in any given year. Some changes which have particular relevance to the Review process are discussed below.

### 4.3.1 Coordinated care trials

There are some weaknesses in the capacity of the Australian health system to meet the needs of people with ongoing complex health conditions (such as asthma and diabetes) which require services to be provided under different programs or by different levels of government. To better meet the needs of these clients, Commonwealth and State and Territory Governments are jointly undertaking a series of coordinated care trials. These trials began in October 1997 and will conclude in December 1999.

The focus in the coordinated care model is on consumers, with funding linked to individuals directly rather than to providers. The general trials have been designed to test:

- ways to break down the boundaries between State and Territory and Commonwealth Government programs and health and community services;
- the ability to substitute services while staying budget neutral;
- the value of a care coordinator and a deliberate care plan as a means of shifting the focus back to clients and to services; and
- the impact of coordinated care on the health and wellbeing of the individual.

Services provided by the trials will be funded by pooling existing funds from current health and community service programs, such as the Medicare Benefits Schedule, the Pharmaceuticals Benefit Scheme, hospitals and Home and Community Care. Care coordinators, in partnership with clients, are able to design a customised care package with the flexibility to substitute services. The aim is to improve the matching of services to client needs, reducing the impact of access or other factors. It is intended that savings achieved by avoiding costly interventions and duplication of services pay for care coordination and other preventative and support services.

Trials targeted at Aboriginal and Torres Strait Islander communities are also being developed. These trials will place a greater emphasis on ensuring improvements in *community* as well as *client* health. The aim is to improve the clinical appropriateness of primary health services, while ensuring services also meet the cultural and social needs of communities. To achieve these

improvements, the focus of the trials is on public health issues and community involvement in all aspects of care planning and service delivery.

Widespread introduction of coordinated care could improve performance measurement by providing better information on the overall impact of the health system on individuals, supplementing the current focus on the performance of separate providers.

#### **4.3.2     Performance of the health system in meeting the needs of indigenous Australians**

This Report regards appropriateness and access as major issues in relation to services for indigenous Australians. The Australian Health Ministers' Advisory Council (AHMAC) has been considering the issue of Aboriginal and Torres Strait Islander health more generally and has developed a series of indicators to monitor all health services in relation to indigenous Australians.

Australian Health Ministers endorsed a plan in August 1997 which requires all health providers to report against nationally consistent performance indicators and targets for the health of Aboriginal and Torres Strait Islander people. Many of these indicators are beyond the scope of this Report. Some, however, may provide valuable insights into the performance of particular providers (such as public acute care hospitals) in meeting the needs of indigenous clients or managing a particular health issue (such as cardiovascular disease) for indigenous Australians.

#### **4.3.3     The National Public Health Partnership**

A recent major development in the field of public health has been the establishment of the National Public Health Partnership between the Commonwealth and State and Territory Governments. The Partnership principally deals with services conceived and delivered for whole populations and their health status (that is the components of the health system outside the framework of the Medicare Agreement). It seeks to clarify the roles and responsibilities of the Commonwealth and State and Territory Governments, the Australian Institute of Health and Welfare (AIHW) and the National Health and Medical Research Council (NHMRC) in relation to public health.

The Partnership aims to:

- improve collaboration in public health efforts;
- bring about better coordination and sustainability of public health strategies; and

- strengthen public health infrastructure and capacity.

The Partnership has two working groups to progress the development of benchmarks in public health. One of these, the Public Health Information Working Group, will promote the collection, analysis and application of information required for monitoring and evaluating public health strategy implementation, focusing initially on five National Health Priority Areas.

#### **4.3.4 National Health Priority Areas**

The National Health Priority Areas — diabetes mellitus, cardiovascular health, cancer control, injury prevention and control, and mental health — focus the efforts of governments on areas where a concerted effort could achieve significant gains in the health of the nation. A limited number of priority indicators, encompassing the continuum of care, from prevention through to treatment, rehabilitation and palliation will be reported for each area every two years.

The indicators for diabetes are based on a health outcomes framework developed by the National Health Information Management Group (NHIMG) and endorsed by AHMAC in October 1996. The indicators for the other four areas were developed earlier. Reports for injury prevention and control and cancer control were submitted to Health Ministers late in 1997, with the remaining reports due to be submitted in 1998. States and territories may develop their own targets over time.

#### **4.3.5 Block grant funding of Divisions of General Practice**

The Divisions and Project Grants Program aims to improve health outcomes for patients by encouraging general practitioners in a geographically-defined area to work together and link with other health professionals in that area, and by upgrading the quality of health service delivery at the local level. This includes improving the skills of general practitioners and providing specific health services where required.

From 1 January 1998, Divisions of General Practice will have moved to new funding arrangements within the new Divisions of General Practice Program. This new direction is based on equitable sharing of resources and puts all Divisions onto a funding basis which is both transparent and certain.

Divisions will have access to funding based on a formula which takes into account their population, a measure of patient load covered by a Division's general practitioners and distinct population characteristics associated with

significant differentials in health status. Within each grant, Divisions will have the flexibility to choose the activities most relevant to the needs of their communities. Each Division will have the facility to make long-term plans, and achieve those objectives by making appropriate choices on the use of their allocated funds.

The majority of Divisions will move to block funding for an 18 month period to June 1999. Some Divisions will immediately move to outcomes-based block funding. These Divisions are to reach pre-agreed targets in national health priority areas such as immunisation, diabetes and cardiovascular disease.

#### **4.4 Framework of performance indicators**

The overall performance of the health system in meeting government objectives depends on the appropriateness of the mix of services provided and how well each specific service is provided, as well as on the efficiency and effectiveness of services (Box 4.1). The service quality, in turn, depends on the performance of individual service providers and groups of service providers.

##### **Box 4.1: Objectives for the health system**

Broadly, the government health system aims to protect and restore the health of the community in a cost-effective manner. Governments fulfil their objective in two ways:

- by preventing people from getting sick or detecting illness at an early stage (prevention/early detection services); or
- by caring for people when they get sick (intervention services).

Prevention strategies occur before the diagnosis of an illness is made and generally aim to:

- reduce the risk of getting a disease or illness by increasing protective factors;
- delay the onset of illness; and
- stop a disease from becoming more severe.

Intervention strategies occur after a diagnosis has taken place.

This Report has previously focused on the performance of public acute care hospitals in providing intervention services. It has not covered other aspects of the health system such as other service providers and the appropriate mix of services. This more complete task involves assessing:

- the performance of providers in the delivery of prevention/early detection and intervention services;
- the trade-off between disease prevention and intervention after disease occurs — that is, assessing the relative costs and benefits of each strategy;
- different prevention strategies — that is, targeting the general public or whole population groups, people in high-risk groups who have yet to develop symptoms, or people exhibiting symptoms; and
- different intervention strategies — that is, treating individuals diagnosed with an illness or continuing care services for people with chronic complaints.

Measuring the performance of the health system integrates the measurement of the performance of health control for particular health issues and measurement of the performance of the providers of both prevention and intervention services. It can be represented schematically (Figure 4.3).

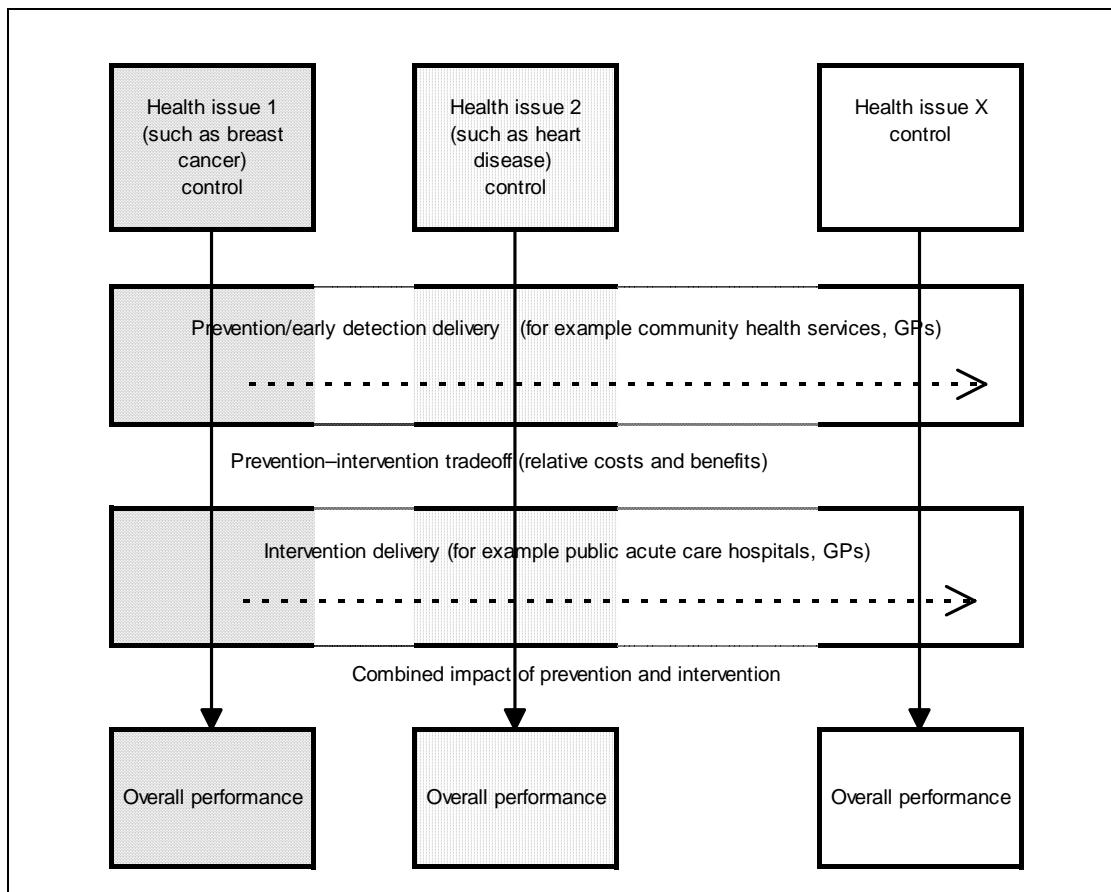
Measuring the control of a single health issue integrates the prevention/early detection and intervention strategies. It can be applied to the full range of health issues, as has been done here by the development of a set of indicators for breast cancer control, for example. It provides information on the trade-off between prevention and intervention (represented by the vertical arrows) and the performance of providers in delivering prevention and intervention services (represented by the shaded areas within the prevention and intervention service delivery components).<sup>4</sup>

By contrast, performance measurement of service providers focuses on one component — either prevention/early detection or intervention services — of health control (represented by the horizontal arrows). The Report will continue to monitor the efficiency and effectiveness of public acute care hospitals as a contribution to the performance measurement of service providers.

---

<sup>4</sup> The schema represented here appears to differ from that developed by the National Health Priority Committee to monitor the performance of the five health priority areas, but conceptually they are similar. Both encompass a continuum of care and assess the trade-offs associated with preventing an episode of illness and intervening when it does occur. Both frameworks also assess the trade-offs associated with different prevention strategies and different intervention strategies.

**Figure 4.3: Australian health system — measurement schema**

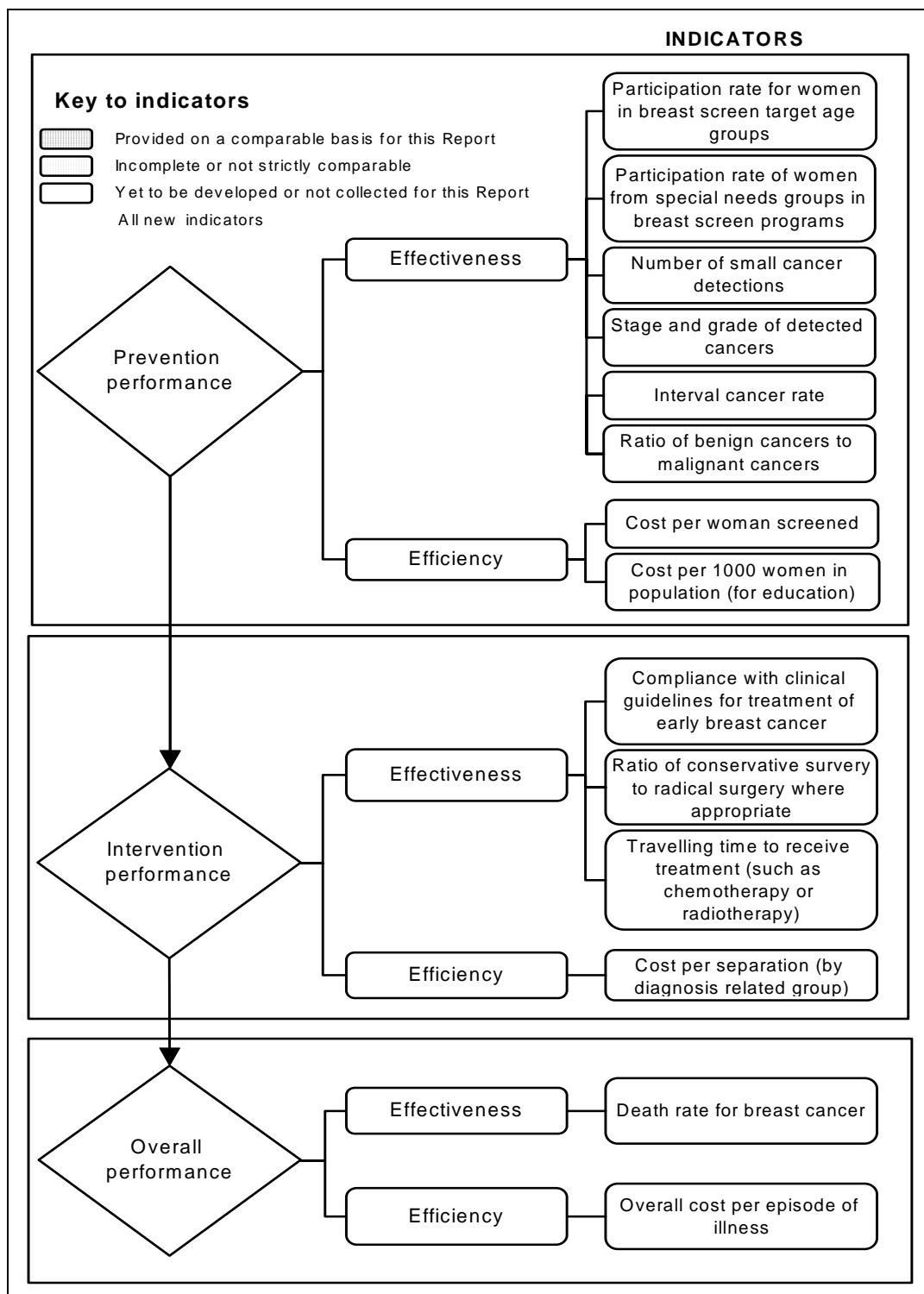


More detailed frameworks for breast cancer control and public acute care hospitals are discussed below. It is anticipated that detailed monitoring frameworks will also be developed for community health services (which provide prevention and intervention health services) and other health control issues such as heart disease, other cancers, diabetes, injury and mental health.

#### **4.4.1 Breast cancer — framework for control of a health issue**

The framework developed to monitor the performance of breast cancer control aims to integrate public and community health initiatives to encourage the early detection of breast cancer with the treatment of breast cancer in public acute care hospitals (Figure 4.4). The framework measures the effectiveness (in terms of outcomes, access, appropriateness and quality) and the efficiency (in terms of unit cost and total cost) of breast cancer control. It covers a number of service delivery types and includes indicators of system-wide performance as well as the performance of early detection strategies and intervention strategies.

Figure 4.4: Performance indicators for breast cancer control



The effectiveness of breast cancer control is measured by the death rate from breast cancer (standardised for variations in age distribution over time), disaggregated into women who were screened and women who were not screened. Efficiency is measured by combined expenditure on early detection and intervention per episode of illness, reflecting that one aim of breast cancer control is early diagnosis which increases the potential for successful treatment and lowers the costs of subsequent treatment. Early detection and intervention programs can also be assessed for their effectiveness and efficiency.

Early detection programs include breast screening services (primarily targeted at women aged 50 to 69 years) and education programs (targeted at all women) that encourage self-examination and annual clinical examination. The effectiveness of breast screening is linked to the participation of women in breast screening programs (both overall and from special needs groups); the rate of small cancer detections; and the interval cancer rate (that is the number of women developing breast cancer between screenings). The effectiveness of screening and education is reflected in the stage and grade of detected cancers. Efficiency is measured by cost per woman screened (for screening programs) and cost per 1000 women in the population (for education programs).

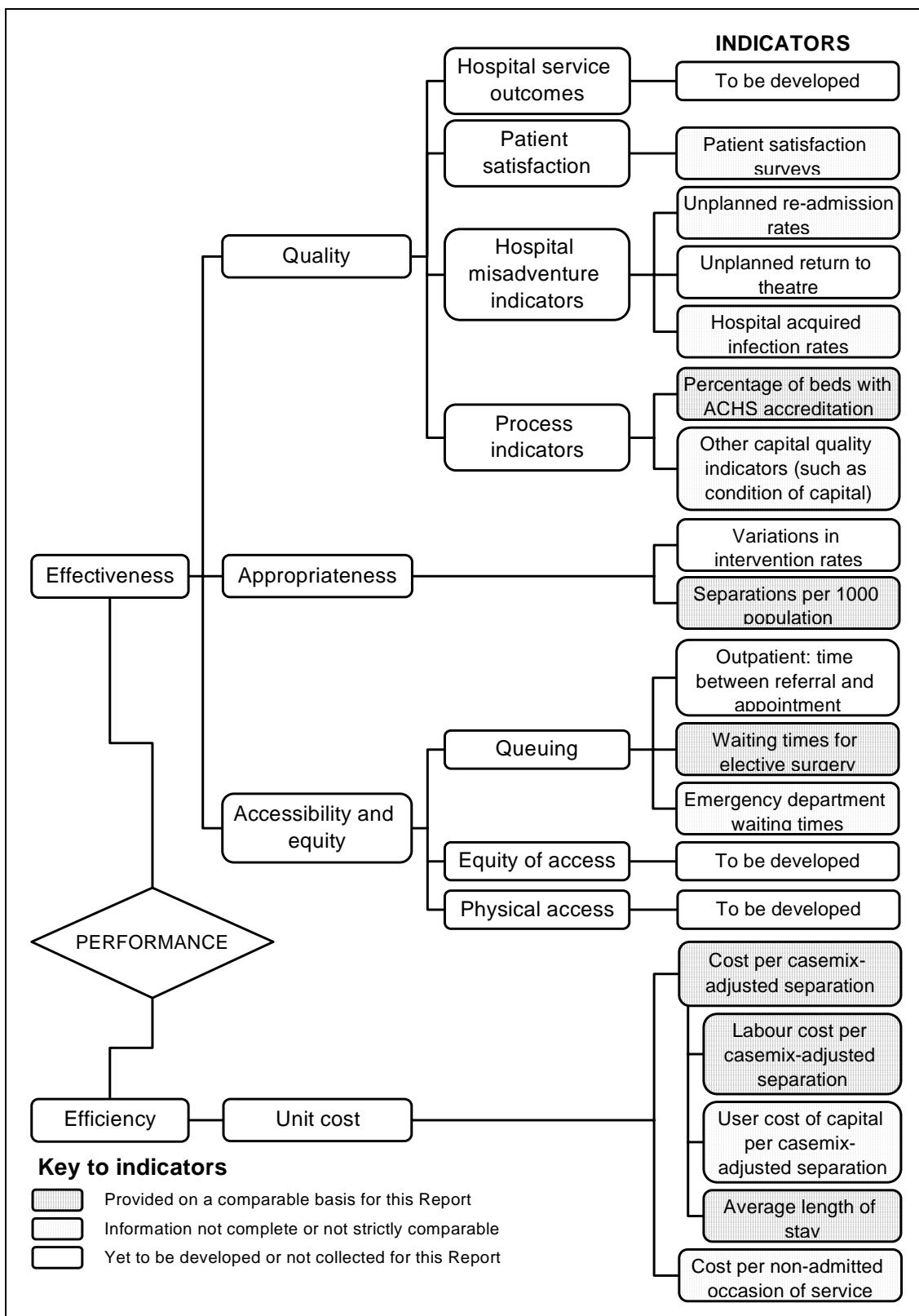
Hospitals' compliance with clinical guidelines for the treatment of early breast cancer provides some indication of the appropriateness of the treatment, as does the proportion of women undergoing conservative surgery where appropriate compared with those undergoing radical surgery. Travelling time for radiotherapy and/or chemotherapy indicates the access of women to treatment, while cost per separation for each Australian National Diagnosis Related Group (AN-DRG) indicates the efficiency in the provision of breast cancer treatment.

#### **4.4.2 Public acute care hospitals**

As discussed earlier, overall monitoring of the health system requires not only the appropriate mix of prevention and intervention services, but that each prevention and intervention level of service is provided in the most efficient and effective manner. Thus, this Report updates the reporting on public acute care hospitals as an important provider of intervention services.

The framework of performance indicators for public acute care hospitals is unchanged from the 1997 Report (Figure 4.5). It captures general aspects of the performance of public acute care hospitals in providing health care services, many of which cannot be individually costed. A description of indicators for public acute care hospitals is provided in Attachment 4A.

Figure 4.5: Performance indicators for public acute care hospitals



## 4.5 Future directions

The key challenges for improving reporting in the health chapter include:

- filling gaps in reporting for public acute care hospitals; and
- extending the coverage of the Review.

### 4.5.1 Filling gaps in reporting for public acute care hospitals

While appreciating that indicator and data development can be difficult and time consuming and that work is progressing (discussed below), the Steering Committee does have some concern over the rate of progress between previous and current Reports. Consequently, the Steering Committee has asked its Health Working Group to develop a detailed strategy and timetable for establishing indicators and data collections for all key areas of health services, beginning with quality of care.

#### *Improving existing performance indicators*

Over recent years, a range of project work has been undertaken to test and where necessary refine existing indicators, in particular those relating to quality of care, access and efficiency. These projects are discussed below.

- *The Pilot Hospital Wide Clinical Indicators Project*: this project examined using administrative databases to collect information for four hospital misadventure indicators: rate of emergency patient hospital readmissions with 28 days of separation; rate of hospital acquired bacteraemia, rate of post-operative wound infection following clean and contaminated surgery; and rate of unplanned return to an operating room.

The project concluded that these indicators could not be easily or efficiently extracted from available administrative databases and that they did not appear to be appropriate for use as external measures of quality of care provided by hospitals. The project recommended developing clinical indicators for specific conditions and process indicators linked to evidence-based clinical guidelines. Nevertheless, the development of measures of quality of care is seen as a high priority by the Steering Committee and it will continue to report hospital misadventure indicators until replacement measures are available.

- *Patient satisfaction*: A number of projects have been undertaken by the Commonwealth and State and Territory Governments to improve the availability and comparability of patient satisfaction information. These

included the development of national guidelines on consumer feedback and regular collections of patient satisfaction information through surveys.

- *Hospital costs*: A project investigating estimates of costs for admitted and non-admitted patient services in acute care hospitals has highlighted some of the differences in estimation methods used between hospitals and provided recommendations for improving comparability.
- *Ambulatory care*: The National Institution Based Ambulatory Model project developed national data definitions for non-admitted patient services (outpatient and emergency department services). External consultants were engaged to develop access indicators for ambulatory patient services for use by care providers and governments. In addition, two data elements for access performance indicators for waiting times in emergency departments are expected to be included in the next version of the National Health Data Dictionary.

#### *Developing additional indicators and data definitions*

A number of projects have been established to develop additional indicators and data definitions:

- work has begun on the development of a national access performance indicator for public hospital outpatient services (that is, waiting time to outpatient appointment by specialty);
- the National Health Information Management Group has agreed to develop a national minimum data set for elective surgery and operating theatres; and
- the Commonwealth Government is developing proposals for indicators for the treatment of specific conditions in the acute care setting and research into relative utilisation rates of specific interventions.

#### **4.5.2 Extending the coverage of the Review**

Further work is planned over the next year to extend the health control framework to other health issues (such as cardiovascular disease) so the interrelationship of different parts of the health system can be better analysed. Future Reports will also attempt to incorporate the role of general practitioners into performance measurement, and it is anticipated that a framework similar to that for public acute care hospitals will be developed for community health services in future Reports.

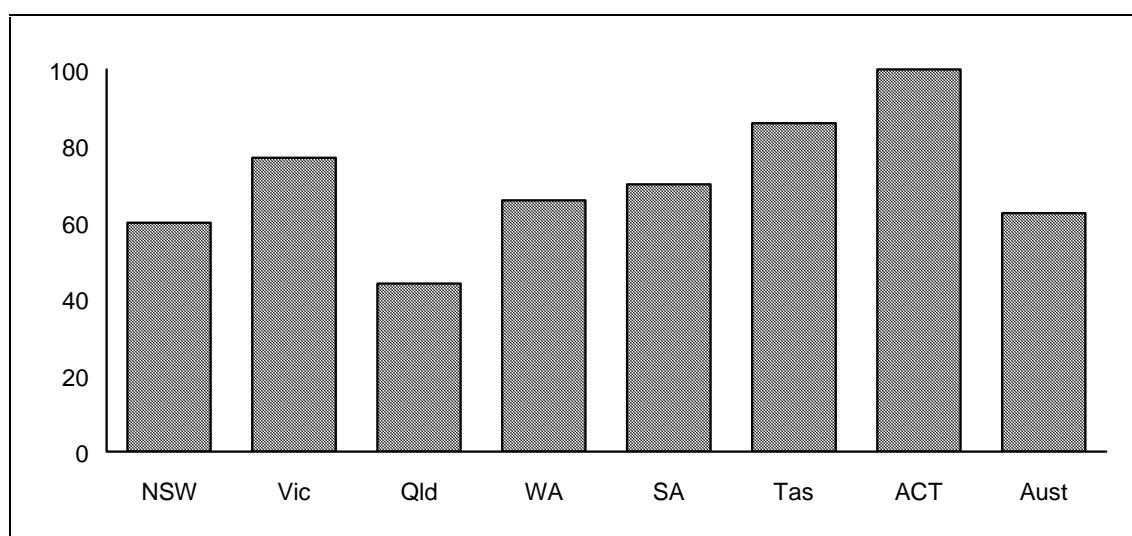
## 4.6 Key performance results

Data presented below relate to performance of public acute care hospitals.

### 4.6.1 Quality

The proportion of public hospital beds accredited by the Australian Council on Healthcare Standards (ACHS) was chosen as an indicator of quality because it requires demonstrated adherence to quality assurance practices.<sup>5</sup> Approximately 62 per cent of public hospital beds were accredited at the end of 1995–96 (Figure 4.6). Across jurisdictions, the percentage of beds accredited ranged from 100 per cent in the ACT to 44 per cent in Queensland.

Figure 4.6: Public hospital beds accredited by the ACHS, 30 June 1996 (per cent)<sup>a</sup>



a The NT did not seek accreditation for its public hospitals.

Source: Table 4A.10

---

<sup>5</sup> This indicator may not truly represent the quality of hospital care because accreditation of hospitals is a voluntary process and a low level of accreditation may reflect a low participation rate rather than poor quality.

Patient satisfaction, unplanned readmission, hospital-acquired bacteraemia and post-operative infections were also included as indicators of quality at a system-wide level. However these data were not comparable for a number of reasons, including differences in the definitions used and data collection processes. Moreover, some conceptual difficulties have been identified with the misadventure indicators (Section 4.5). For these reasons, caution should be used in interpreting the data presented below.

The most notable jurisdiction-level results were:

- WA patients surveyed ranked their satisfaction with their stay in hospital as 4.29 (where 1 is unsatisfied and 5 is fully satisfied) (Table 4A.19);
- in Victoria, 10 per cent of patients treated were readmitted within 28 days (Table 4A.8);
- in Victoria, 2.4 per cent of patients who underwent clean surgery acquired a post-operative infection, compared with 1.9 per cent of such patients in Queensland (Table 4A.7); and
- in the NT, there were 2227 emergency patient readmissions (4.8 per cent of total separations) (Table 4A.8).

An indicator of the condition of capital — the ratio of the depreciated replacement value of capital to its total replacement value — was also used as an indicator of quality in previous reports. However, this measure focuses on only one aspect of the cost of capital — depreciation of capital value — and does not take account of the expenditure on the upkeep of assets (that is, maintenance). The condition of capital is therefore no longer reported. However, information on the capital stock of public acute care hospitals continues to be reported — the user cost of capital per casemix-adjusted separation is included as an efficiency indicator.

#### **4.6.2 Access**

##### *Waiting times for elective surgery*

No additional data on waiting times for elective surgery were available from that presented in the 1997 Report (SCRCSSP 1997).

### *Emergency department waiting times*

Four jurisdictions provided waiting times for their emergency departments, but the results were not comparable. Notable jurisdiction-level results were:

- in NSW, the number of emergency department patients admitted within the recommended time ranged from 92 per cent for non-urgent patients to 67 per cent for emergency and urgent patients;<sup>6</sup>
- in Victoria, the proportion of emergency department patients seen within the recommended time ranged from 100 per cent for patients requiring immediate attention to 77 per cent for urgent patients;
- in WA, all resuscitation patients were admitted within the recommended time, compared with 66 per cent of semi-urgent patients (that is, patients requiring admission within 60 minutes); and
- in Tasmania, almost all resuscitation, emergency and non-urgent patients were admitted within the recommended time period, compared with almost three-quarters of urgent and semi-urgent patients (Table 4A.11).

#### **4.6.3      Appropriateness**

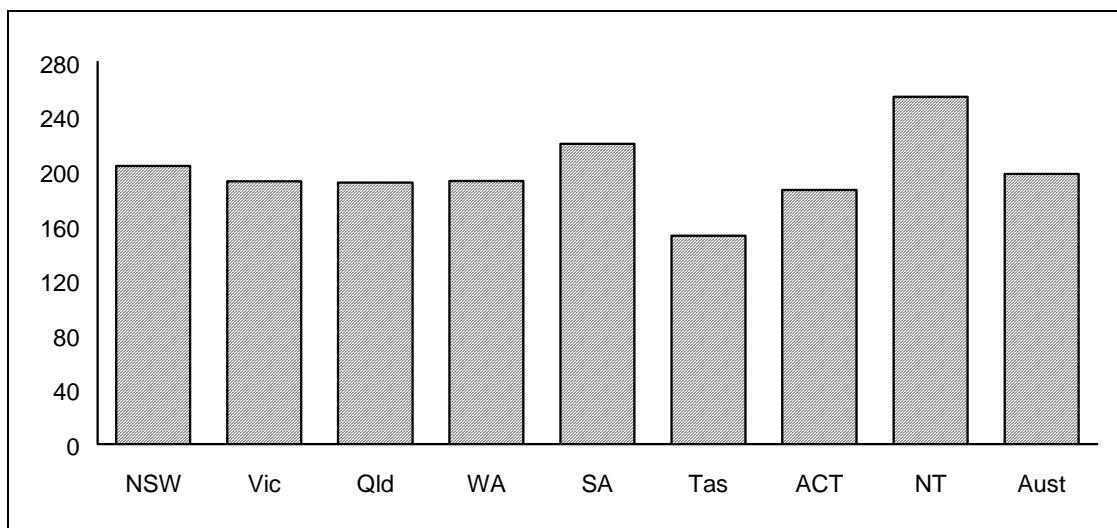
The number of separations per 1000 people (also known as the separation rate) has been adopted as an indicator of the appropriateness of hospital services. However, given that it is unclear what the appropriate level of separations is (for example a relatively high level may reflect better access *or* over-servicing) comparisons across jurisdictions are most useful for highlighting differences that may require more detailed analysis.

Nationally, the number of separations from public acute care hospitals per 1000 people was 197.8 in 1995–96 (Figure 4.7). Across jurisdictions, the rate in 1995–96 ranged from 152.8 separations for every 1000 people in Tasmania to 254.3 in the NT.

---

<sup>6</sup> Non-urgent patients are those requiring treatment within 120 minutes, emergency patient require admission within 10 minutes and urgent patients require admission within 30 minutes.

Figure 4.7: Separations, 1995–96 (number per 1000 people)<sup>a</sup>



<sup>a</sup> This indicator was not standardised for population composition differences across states and territories or for differences across states and territories in counting and reporting practices.

Source: Table 4A.9

#### 4.6.4 Efficiency

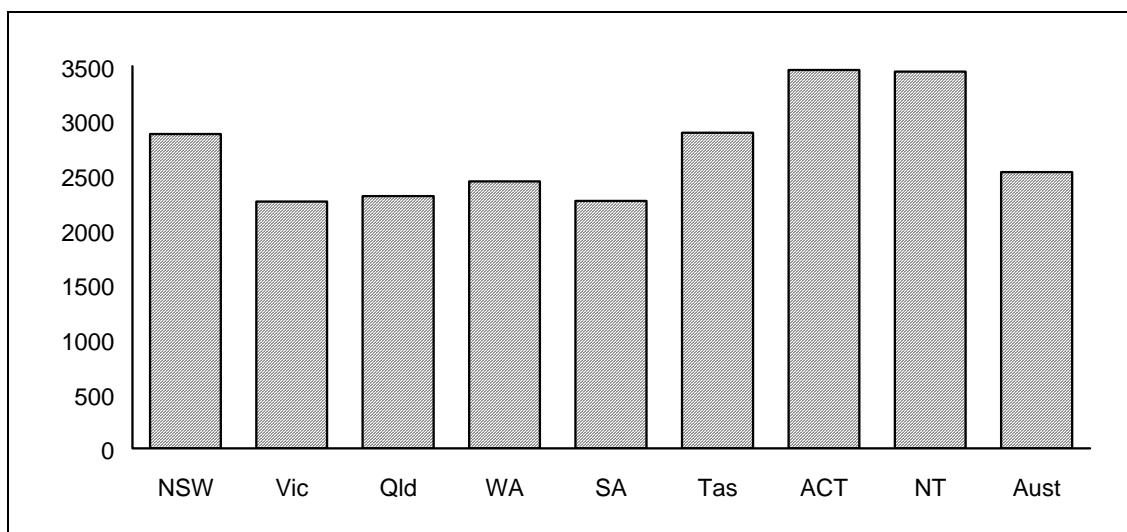
Some differences in indicator results for jurisdictions may reflect different reporting and counting rules used for generating financial data (especially between those jurisdictions who funded their public hospitals on the basis of casemix information and those who did not). Differences may also reflect the treatment of various expenditure items (for example, superannuation).

##### *Recurrent costs per casemix-adjusted separation*

Victoria recorded the lowest recurrent cost per casemix-adjusted separation<sup>7</sup> in 1995–96 (\$2261) while the ACT recorded the highest (\$3466) (Figure 4.8). The national average was \$2529.

<sup>7</sup> Recurrent cost per casemix-adjusted separation should only deal with acute admitted patients. However, it was not always possible to separate out the costs of acute patients from all other admitted patients for all jurisdictions. Non-acute admitted patients accounted for less than 5 per cent of all admitted patients.

**Figure 4.8: Recurrent cost per casemix-adjusted separation for public acute care hospitals, 1995–96 (\$)**



Source: Table 4A.12

#### *User cost of capital per casemix-adjusted separation*

A user cost of capital per casemix-adjusted separation (a measure of capital use) was calculated for buildings and equipment. However, the asset valuation data used were unreliable and could not be compared across jurisdictions. NSW recorded a user cost of capital for buildings of \$327 per separation, while SA recorded a user cost of capital for equipment of \$108 per separation (Table 4A.13).

#### *Cost per non-admitted patient occasion of service*

NSW, Victoria, Queensland and SA provided information on the cost per non-admitted patient occasion of service. However, these data were not comparable across jurisdictions or with data presented previously on the number of non-admitted occasions of service. Some notable jurisdiction-level results were:

- in NSW, the cost per non-admitted patient occasion of service ranged from \$54 for primary and community based services to \$70 for outpatient services (Table 4A.18);
- in Victoria, the cost of an encounter (which encompasses the clinical visit and all ancillary services within 30 days of the clinic visit) was \$86 for teaching hospitals (Table 4A.14);
- in Queensland, the cost ranged from \$53 in non-metropolitan hospitals to \$88 in metropolitan hospitals (Table 4A.14); and

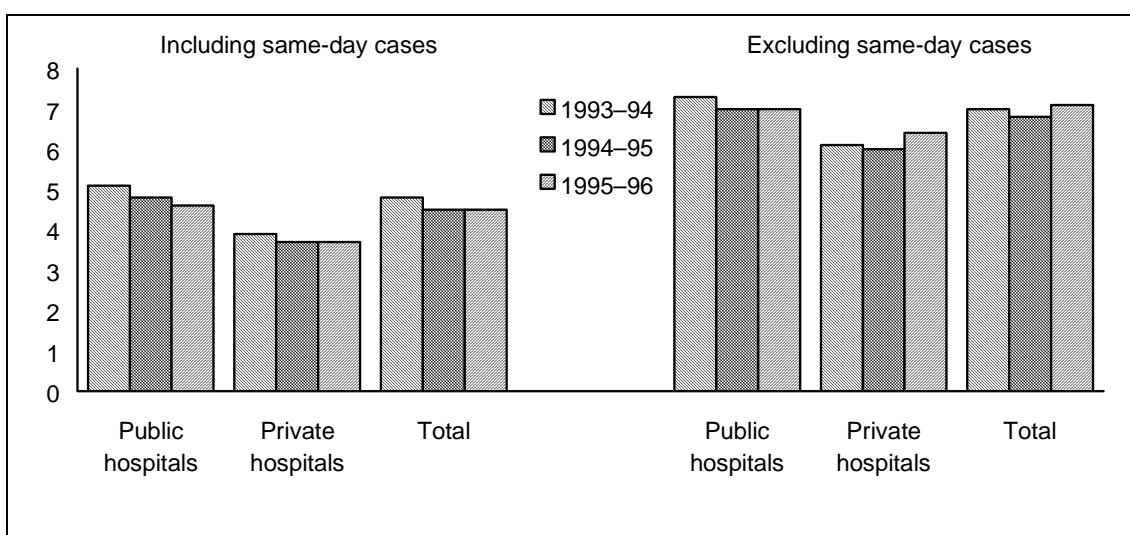
- in SA, the average cost for non-admitted patient occasions of service in metropolitan hospitals was \$71, compared with \$23 in non-metropolitan hospitals (Table 4A.14).

### Average length of stay

Average length of stay is also has a significant impact on the costs of hospital admitted patient episodes. The average length of stay (including same-day cases) in 1995–96 was 4.6 days for public hospitals, compared with 3.7 days for private hospitals and 4.5 days for all hospitals (Figure 4.9).<sup>8</sup> The average length of stay in public hospitals has declined steadily from 5.1 days in 1993–94. This is contrary to the trend in private hospitals and across total hospitals where the average length of stay did not change between 1994–95 and 1995–96.

Excluding same-day cases, the average length of stay in public hospitals was 7.0 days in 1995–96. Again, the average length of stay for public hospitals was higher than that for private hospitals and all hospitals (Figure 4.9). The average length of stay for overnight cases in public hospital has fallen since 1993–94, although it remained constant between 1994–95 and 1995–96. This was in contrast to the trend in private and all hospitals over the same period where the average length of stay has increased over this period.

**Figure 4.9: Average length of stay, 1993–94 to 1995–96 (days)**



Source: Table 4A.17

The average length of stay for specific AN-DRGs could be used both as an indicator of cost and to determine relative efficiency. The average length of stay

<sup>8</sup> Data related to all public hospitals, not just public acute care hospitals.

in public hospitals for the top five AN-DRGs for all hospitals (excluding same-day cases) is shown in Table 4.1.

Patients receiving rehabilitation recorded the longest length of stay in 1995–96 — from 22 days in the NT to 16 days in SA. Patients admitted for tonsillectomy and/or adenoidectomy procedures spent the least amount of time in public acute care hospitals — an average of 1.4 days in 1995–96.

The average length of stay for each of the top five AN-DRGs fell in most states and territories between 1994–95 and 1995–96. The largest changes in average length of stay were recorded for people admitted for heart failure and shock.

**Table 4.1: Average length of stay in public hospitals for the top 5 AN-DRGs — excluding same-day cases, 1994–95 to 1995–96 (days)**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
<i>Vaginal delivery without complication diagnosis</i>									
1994–95	3.5	3.8	3.4	3.7	3.6	3.9	3.4	3.7	3.6
1995–96	3.2	3.4	3.7	3.3	3.5	3.6	3.6	3.5	3.5
<i>Rehabilitation</i>									
1994–95	na								
1995–96	19.6	18.0	16.1	19.4	16.1	20.6	20.5	21.7	19.1
<i>Bronchitis and asthma age &lt;50 without complications</i>									
1994–95	2.1	1.9	2.2	2.2	2.1	2.1	2.4	2.5	2.1
1995–96	2.3	2.1	2.5	2.1	2.2	2.1	1.9	2.1	2.1
<i>Heart failure and shock</i>									
1994–95	7.3	6.6	6.4	6.3	6.6	7.1	8.0	6.4	6.8
1995–96	7.2	6.8	5.9	6.1	6.0	7.6	6.3	6.2	6.5
<i>Tonsillectomy and/or adenoidectomy</i>									
1994–95	1.8	1.3	1.3	1.5	1.5	2.0	1.3	1.3	1.5
1995–96	1.4	1.7	1.2	1.2	1.4	1.8	1.3	1.5	1.4

na not available.

Sources: Tables 4A.15; 4A.16