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# 11 Health management issues

Health management is concerned with the management of diseases, illnesses and injuries using a range of services (promotion, prevention/early detection and intervention) in a variety of settings (for example, public hospitals, community health centres and general practice). This chapter reports on the management of breast cancer and mental health, which represent some activities of the Australian, State and Territory governments in health management.

An overview of health management and the health management performance measurement framework is provided in sections 11.1 and 11.2 respectively. Sections 11.3 and 11.4 report on the performance of breast cancer and mental health management respectively. Section 11.5 outlines the future directions for the chapter, while jurisdictions' comments relating to all the health chapters appear in section 11.6. Definitions are listed in section 11.7. Supporting tables are identified in references throughout this chapter by an 'A' suffix (for example, table 11A.3 is table 3 in the attachment). Supporting tables are provided on the CD-ROM enclosed with the Report. Section 11.8 lists the supporting tables for this chapter and section 11.9 lists references used in the chapter.

## 11.1 Overview of health management

Policy makers are seeking alternative service delivery settings and a more coordinated approach to managing health problems. This chapter examines the performance of a number of services in influencing outcomes for women with breast cancer and for people with a mental illness. Measuring performance in the management of a health problem involves measuring the performance of service providers and the overall management of a spectrum of services, including prevention, early detection and treatment programs.

Breast cancer and mental illness are significant causes of morbidity and mortality in Australia. Cancer control and mental health are identified by governments as national health priority areas, as are asthma, cardiovascular health, diabetes mellitus, injury prevention and control, arthritis and musculoskeletal conditions. These areas represent almost 80 per cent of the total burden of disease and injury in

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Australia, and their management offers considerable scope for reducing this burden (AIHW 2003b).

Appropriate management of breast cancer and mental health will have a large effect on the health and wellbeing of many Australians. Both are subjects of programs designed to improve public health. Public health programs require the participation of public hospitals, primary and community health services, and other services. The performance of public hospitals is discussed in chapter 9 and the performance of primary and community health services generally is discussed in chapter 10.

Several additions and improvements have been made to the chapter this year:

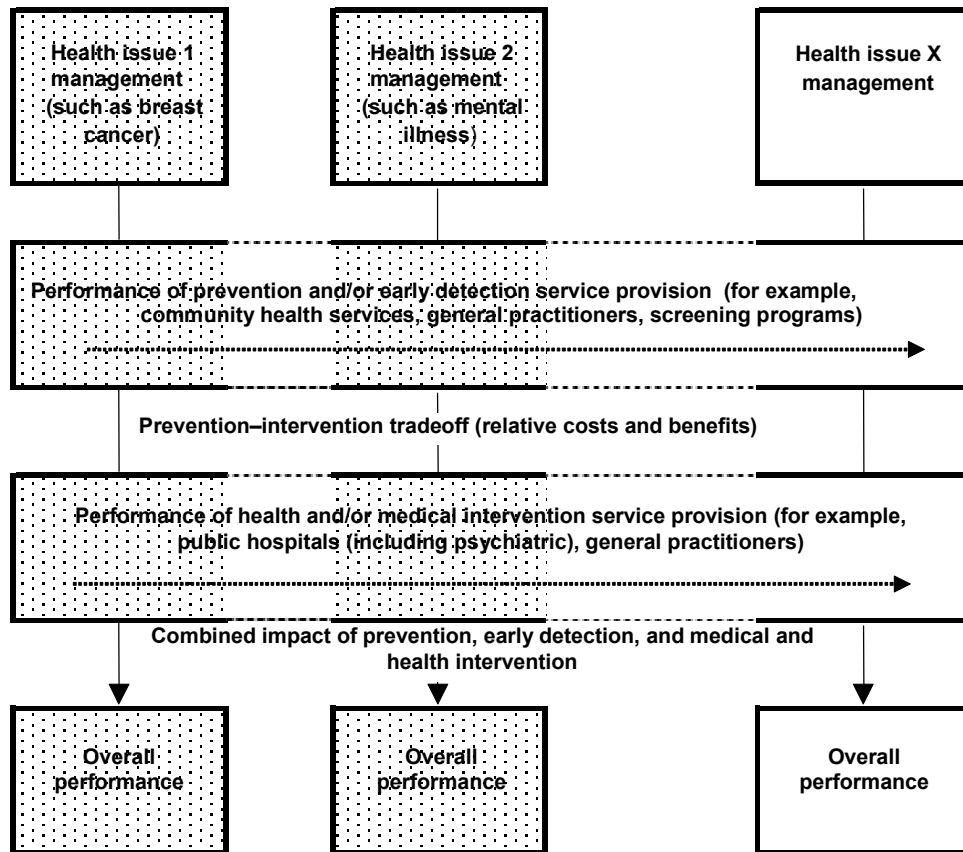
- Changes to the breast cancer framework include:
  - the ‘participation rate for women from special needs groups in BreastScreen programs’ has been reclassified as an indicator of the equity of access, rather than as a program outcome
  - the ‘participation rate for women in BreastScreen target age group’ has been reclassified as an indicator of how effective the program is at accessing its target age group, rather than as a program outcome
  - the ‘interval cancer rate’ has been reclassified as an early detection program outcome, rather than as an indicator of the safety of the early detection program.
- The indicator ‘services reviewed against the national standards’ has been changed from ‘specialised public mental health services reviewed against the national standards for mental health services’ to the ‘percentage of services that had completed an external review and been assessed as meeting all or most standards’.
- The number of paid consumer and carer consultants employed within public sector mental health services is reported as part of the ‘consumer/carer participation’ indicator for the 2007 Report.

## **11.2 Framework for measuring the performance of health management**

The ‘Health preface’ of this Report outlines the complexities of reporting on the performance of the overall health system in meeting its objectives. Frameworks for public hospitals and primary and community health services report the performance of particular service delivery mechanisms. The appropriateness of the mix of services (prevention versus intervention) and the appropriateness of the mix of delivery mechanisms (hospital-based versus community-based) are the focus of

reporting in this chapter. The measurement approach adopted is represented diagrammatically in figure 11.1.

Figure 11.1 The Australian health system — measurement approach



The appropriate mix of services — including the prevention of illness and injury, medical treatment and the appropriate mix of service delivery mechanisms — is measured by focusing on a health management issue (represented by the vertical arrows). As in previous years, the chapter covers breast cancer detection and management, and specialised mental health services. The breast cancer management framework integrates the early detection and medical intervention strategies, which should inform the tradeoffs in the allocation of resources between these two strategies. The mental health framework provides information on the interaction and integration arrangements between community-based and hospital-based providers in meeting the needs of Australians with a mental illness.

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## 11.3 Breast cancer

### Profile

Breast cancer is a disease whereby uncontrolled or malignant cell division leads to the formation of a tumour or tumours in a woman's breast (box 11.1).<sup>1</sup> Tumours may expand locally by invading surrounding tissue, or they may spread via the lymphatic or vascular systems to the rest of the body. If left untreated, most malignant tumours result in the death of the affected person (AIHW 2003a). The focus of this Report is on invasive cancers, although some data are reported on *ductal carcinoma in situ* (DCIS — noninvasive tumours residing in the ducts of the breast).

**Box 11.1 Some common health terms used in breast cancer detection and management**

**breast conserving surgery:** an operation to remove the breast cancer but not the breast itself. Types of breast conserving surgery include lumpectomy (removal of the lump), quadrantectomy (removal of one quarter of the breast) and segmental mastectomy (removal of the cancer as well as some of the breast tissue around the tumour and the lining over the chest muscles below the tumour).

**BreastScreen Australia:** BreastScreen Australia is the national mammographic population screening program. It is aimed at well women, without symptoms or family history. It provides free screening mammograms at two-yearly intervals for women aged 50–69 with the aim of reducing deaths from breast cancer in this target group through early detection of the disease. Women aged 40–49 years and 70 years and over are eligible to attend but are not actively targeted. Services provided by BreastScreen Australia include all screening and assessment services to the point of diagnosis. The program includes health promotion activities, information provision, counselling and data collection across the screening and assessment pathways. BreastScreen Australia is jointly funded by the Australian, State and Territory governments.

**ductal carcinoma in situ (DCIS):** abnormal cells that involve only the lining of a duct. The cells have not spread outside the duct to other tissues in the breast. DCIS is also known as intraductal carcinoma.

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<sup>1</sup> Breast cancer in males is very rare. It is not examined in this Report.

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Box 11.1 (Continued)

**health management:** an ongoing process beginning with initial client contact and including all actions relating to the client: assessment/evaluation; education of the person, family or carer(s); diagnosis; and treatment. Problems associated with adherence to treatment and liaison with, or referral to, other agencies are also included.

**incidence rate:** the proportion of the population newly diagnosed with a particular disorder or illness during a given period (often expressed per 100 000 people).

**invasive cancer:** a tumour whose cells invade healthy or normal tissue.

**prevalence:** the number of cases of a disease present in a population at a given time (point prevalence) or during a given period (period prevalence).

**screening:** the performance of tests on apparently well people to detect disease at an earlier stage than would otherwise be the case.

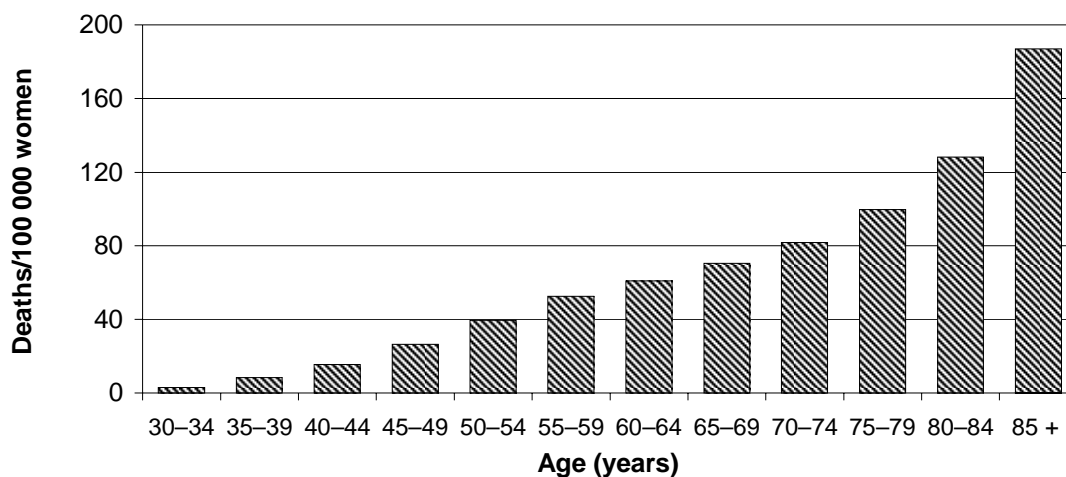
**screening round (first):** a woman's first visit to a BreastScreen Australia service.

**screening round (subsequent):** a woman's second or subsequent visit to a BreastScreen Australia service.

**total mastectomy:** removal of the breast (also known as a simple mastectomy).

Breast cancer was responsible for 2641 female deaths in 2004, making it one of the most frequent causes of death from cancer for females (ABS 2006a). The strong relationship between age and the mortality rate from breast cancer is shown for the period 2000–2004 in figure 11.2. Women aged 40–44 years had an annual average mortality rate over this period of 15.5 per 100 000, whereas women aged 75–79 years had an annual average mortality rate of 99.7 per 100 000.

Figure 11.2 Annual average mortality rates from breast cancer, by age group, 2000–2004



Source: AIHW (unpublished); table 11A.1.

### *Incidence and prevalence*

Breast cancer is the most prevalent type of cancer affecting Australian women. In 2001, the estimated risk of a woman in Australia developing breast cancer before the age of 75 years was one in eleven (AIHW and AACR 2004). The number of new cases of breast cancer diagnosed in Australian women increased from an annual average of 10 262 over the period 1995–99 to an annual average of 11 301 over the period 1998–2002 (table 11.1). The increase in the number of cases detected reflected both an increase in the underlying rate of breast cancer, as well as the early detection of cancers that previously would not have been discovered for some years, primarily through the activity of BreastScreen Australia (AIHW 2003a).

Annual average age standardised incidence rates of breast cancer are presented in figure 11.3. Breast cancer incidence data are averaged over five year periods to smooth volatility in year-on-year movements, particularly for smaller jurisdictions that tend to have fewer cases but relatively large variations in rates from year to year. The Australian incidence rate increased from an annual average of 113.0 per 100 000 women for the period 1994–98 to an annual average of 115.0 for the period 1998–2002.

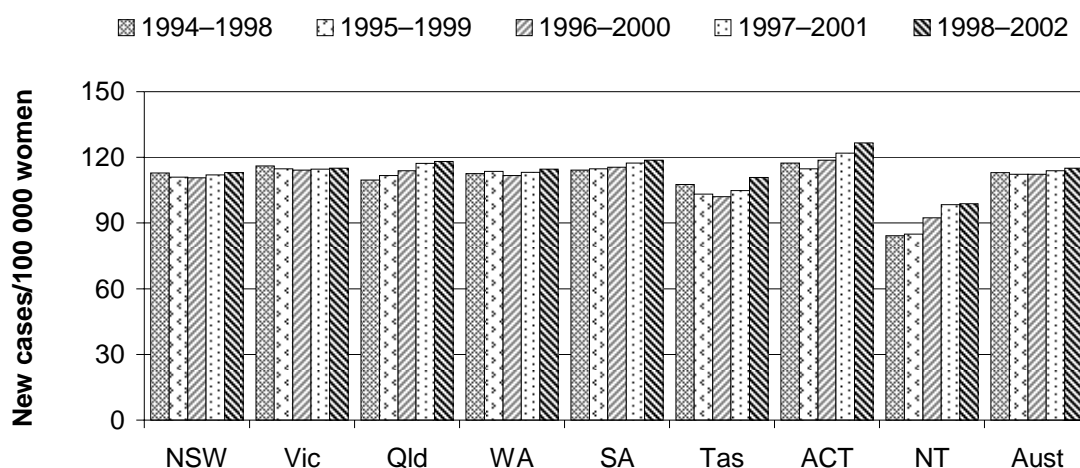
Table 11.1 **Annual average new cases of breast cancer diagnosed (number)<sup>a</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
1995–1999	3 511	2 676	1 786	938	911	248	148	45	10 262
1996–2000	3 576	2 724	1 879	951	930	250	158	50	10 519
1997–2001	3 703	2 792	1 995	993	962	262	168	54	10 930
1998–2002	3 818	2 862	2 075	1 037	990	282	181	55	11 301

<sup>a</sup> A new case is defined as a person who has a cancer diagnosed for the first time. One person may have more than one cancer, so may be counted twice in incidence statistics if it is decided that the two cancers are not of the same origin.

Source: AIHW (unpublished); table 11A.2.

Figure 11.3 **Annual average age standardised incidence rates of breast cancer for women of all ages<sup>a, b</sup>**

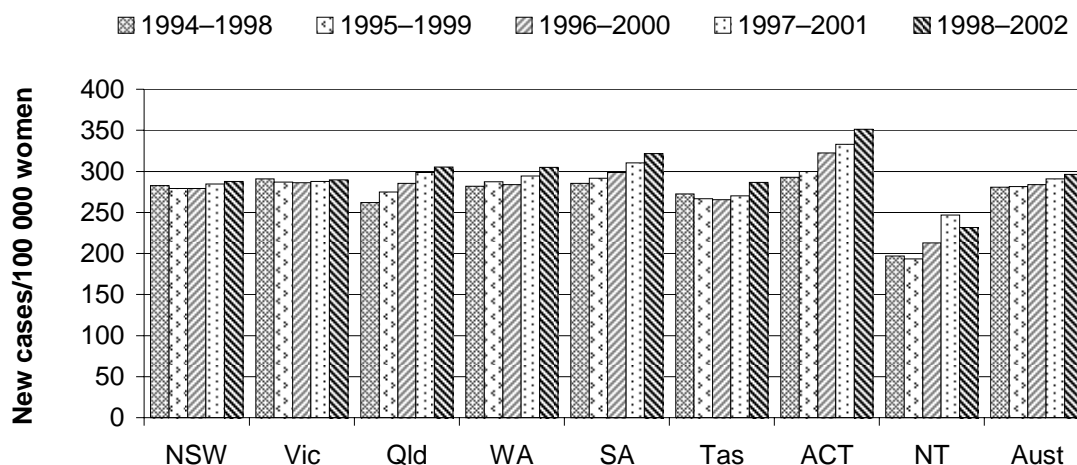


<sup>a</sup> Incidence refers to the number of new cases of breast cancer per 100 000 women. <sup>b</sup> Rates are age standardised to the Australian 2001 population standard.

Source: AIHW (unpublished); table 11A.3.

Annual average age standardised incidence rates of breast cancer for women aged 50–69 years are shown in figure 11.4.

Figure 11.4 Annual average age standardised incidence rates of breast cancer for women aged 50–69 years<sup>a, b</sup>



<sup>a</sup> Incidence refers to the number of new cases of breast cancer per 100 000 women. <sup>b</sup> Rates are age standardised to the Australian 2001 population standard.

Source: AIHW (unpublished); table 11A.3.

### *Size and scope of breast cancer detection and management services*

Breast cancer detection and management services comprise a number of major components: primary care and community-based services, including general practitioner (GP) services and community-based women's health services; screening services; acute services based in hospitals, including both inpatient and outpatient services; private consultations for a range of disciplines; and post-acute services, including home-based and palliative care (DHS 1999).

A fundamental component of breast cancer control is the use of screening mammography to enable early detection of breast cancer. There is evidence that population-based screening of women aged 50–69 years can reduce deaths from breast cancer. According to the National Breast Cancer Centre, women whose cancer is diagnosed before it has spread outside the breast have a 90 per cent chance of surviving five years. The five year survival rate drops to 20 per cent if the cancer spreads to other parts of the body before diagnosis (NBCC 2003). It is generally accepted that cancers detected early may be treated more conservatively and that these women have a higher likelihood of survival.

BreastScreen Australia, jointly funded by the Australian, State and Territory governments, undertakes nationwide breast cancer screening. It targets women aged 50–69 years for screening once every two years. The program aims to have 70 per cent or more of women aged 50–69 years participating in screening over a 24 month



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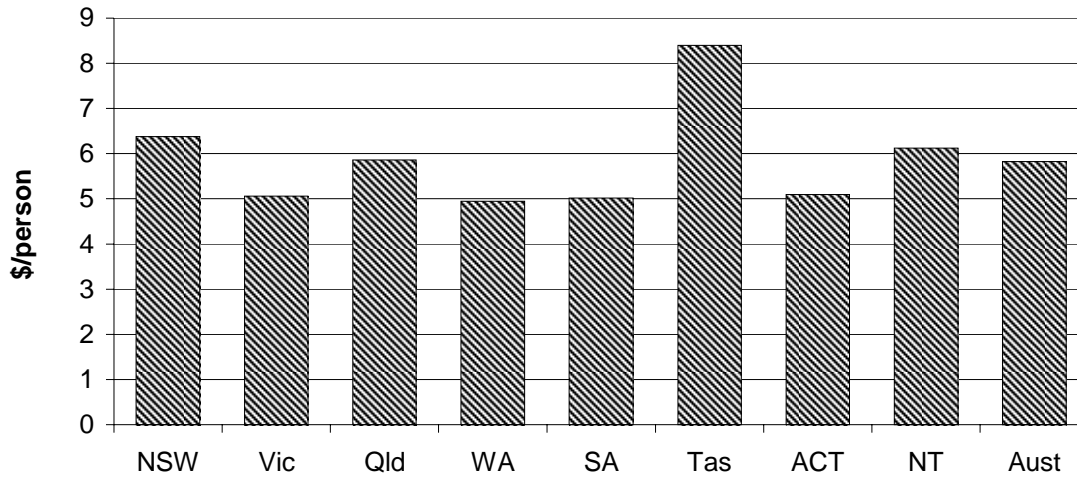
period. All recruitment activities undertaken by BreastScreen Australia specifically target women in this age group, although women aged 40–49 years and those over 70 years may also use the service.

Services provided by BreastScreen Australia in each State and Territory include all screening and assessment services to the point of diagnosis. The program includes health promotion activities, information provision, counselling and data collection across the screening and assessment pathways. Each jurisdiction manages a central BreastScreen registry to ensure women with a screen detected abnormality receive follow-up treatment and to enable women to be invited for re-screening at the appropriate interval. Data collected from the registries allow for quality assurance, monitoring and evaluation of the program. All jurisdictions perform fine needle aspiration biopsy and core biopsies as part of their assessment services, but some jurisdictions do not include open biopsies in the funded program (table 11A.4).

Information on BreastScreen Australia program performance is published by the Australian Institute of Health and Welfare (AIHW) in the BreastScreen Australia monitoring reports, the most recent of which was published in 2006 (AIHW 2006b).

Governments spent around \$118.5 million on breast cancer screening in 2004-05 (table 11A.5). Estimates of government expenditure on breast cancer screening per person are presented by jurisdiction in figure 11.5. These estimates include Australian, State and Territory government expenditure. Differences across jurisdictions partly reflect variation in the proportion of women in the target age group for breast cancer screening, data deficiencies and collection methods, as well as the nature of the services and their relative efficiency. Some differences may also be due to the geography of a State or Territory, and to the proportion of the target population living in rural and remote areas. The data therefore need to be interpreted with care.

Figure 11.5 **Public health expenditure on breast cancer screening, 2004-05<sup>a, b, c, d, e, f, g</sup>**



<sup>a</sup> In every jurisdiction, BreastScreen Australia is a joint initiative funded by both the State or Territory government and the Australian Government under the Public Health Outcome Funding Agreements. <sup>b</sup> The data need to be interpreted with care because of data deficiencies, differences across jurisdictions relating to the use of cash accounting and accrual methods, the treatment of corporate and central office costs, differences in methods used to collect expenditure figures, and differences in the interpretation of public health expenditure definitions. <sup>c</sup> The Australian total includes Australian Government direct project expenditure, database or registry and other program support, population health non-grant program costs and running costs. <sup>d</sup> Medicare funding for radiographic breast examinations is excluded because it is not public health expenditure. <sup>e</sup> Victorian data include depreciation. <sup>f</sup> Data for the ACT include expenditure on BreastScreen ACT and the Cancer Registry. <sup>g</sup> Data for the NT for direct expenditure include public health information systems, disease surveillance and epidemiological analysis, public health communication and advocacy, public health policy, program and legislation development, and public health workforce development.

Source: AIHW (2006c and 2007); ABS, Estimated Residential Population Cat. no. 3101.0 (unpublished); tables AA.2 and 11A.5.

The number of women aged 40 years or over screened by BreastScreen Australia indicates the size of the BreastScreen Australia program. Around 828 000 women in this age group were screened in 2005, compared with 837 000 in 2001 (table 11.2).

Table 11.2 **Number of women aged 40 years or over screened by BreastScreen Australia<sup>a</sup>**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
2001	298 613	188 677	171 337	71 432	69 774	20 702	12 160	4 414	837 109
2002	294 027	187 714	177 281	69 697	68 571	22 204	11 793	4 166	835 453
2003	289 913	188 782	180 396	76 059	69 182	22 424	10 651	4 547	841 954
2004	270 598	198 743	191 084	78 773	69 882	23 107	9 995	4 045	846 227
2005	235 812	197 627	199 981	81 351	70 909	25 440	11 901	4 482	827 503

<sup>a</sup> First and subsequent screening rounds, for women aged 40 years or over.

Source: State and Territory governments (unpublished); table 11A.6.

Breast cancer is diagnosed outside the BreastScreen program when women elect to screen privately or when they have symptoms which make it inappropriate for the diagnosis to be made through screening. For these women, GPs are critical as the initial point of referral to specialists for diagnosis and treatment services. Relevant clinical disciplines include surgery, plastic and reconstructive surgery, pathology, radiation and medical oncology, nursing, diagnostic radiology, radiography, physiotherapy, allied health, and psychological and psychiatric services. Post-acute services include a range of further treatments, such as radiotherapy and chemotherapy (most of which take place on a same day or outpatient basis) and a range of follow-up and palliative care services (DHS 1999).

Inpatient separations in public hospitals for selected breast-cancer related Australian refined diagnosis related groups (AR-DRGs)<sup>2</sup> in 2004-05 are presented in table 11.3. Most of the data relating to breast cancer detection and management in this Report are provided by BreastScreen Australia. At present, data for breast cancer services other than screening are limited.

Table 11.3 **Separations for selected AR-DRGs related to breast cancer, public hospitals, 2004-05 (per 10 000 people)<sup>a, b</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
<b>Breast cancer related conditions</b>									
Major procedures for malignant breast conditions	2.9	3.0	2.5	2.8	2.8	2.6	3.7	1.7	2.8
Minor procedures for malignant breast conditions	1.0	1.3	1.3	1.0	0.9	1.4	0.6	0.5	1.1
Skin, subcutaneous tissue and plastic breast procedures	2.7	3.3	3.3	3.2	5.8	2.0	1.7	1.8	3.2
Other skin, subcutaneous tissue and breast procedures	12.0	22.7	21.3	18.9	25.1	17.6	8.3	11.0	18.2
Malignant breast disorders (age >69 years w CC)	0.6	0.6	0.5	0.2	0.7	1.2	0.3	np	0.6
Malignant breast disorders (age <70 years w CC) or (age >69 years w/o CC)	0.3	0.8	0.4	1.5	0.5	0.7	0.3	np	0.6
<b>All conditions</b>	1 931.6	2 378.9	1 797.7	1 880.3	2 294.2	1 749.0	1 904.0	3 731.8	2 051.4

w/o CC = without complications and co-morbidities. w CC = with complications and co-morbidities.  
<sup>a</sup> Care needs to be taken when comparing jurisdictions because admission practices vary. <sup>b</sup> AR-DRG version 5.1. **np** Not published.

Source: AIHW (2006a); table 11A.7.

<sup>2</sup> AR-DRGs are a patient classification system that hospitals use to match their patient services (hospital procedures and diagnoses) with their resource needs. AR-DRG version 5.1 is based on the ICD-10-AM classification (see chapter 9 for more detail).

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## Framework of performance indicators

The indicators developed to report on the performance of breast cancer detection and management are based on the shared government objectives for managing the disease (box 11.2). The 'Health preface' explains the performance indicator framework for health services as a whole, including the health services subdimensions for quality and sustainability that have been added to the standard Review framework. Breast cancer prevention is excluded from the framework in the absence of definitive primary preventative measures, although there are known associated risk factors. There are ongoing trials examining possible preventative interventions for the small proportion of the population at high risk of breast cancer due to the presence of BRCA1 or BRCA2 genetic variations.

The performance indicator framework shows which data are comparable in the 2007 Report (figure 11.6). For data that are not considered directly comparable, the text includes relevant caveats and supporting commentary. Chapter 1 discusses data comparability from a Report-wide perspective (see section 1.6).

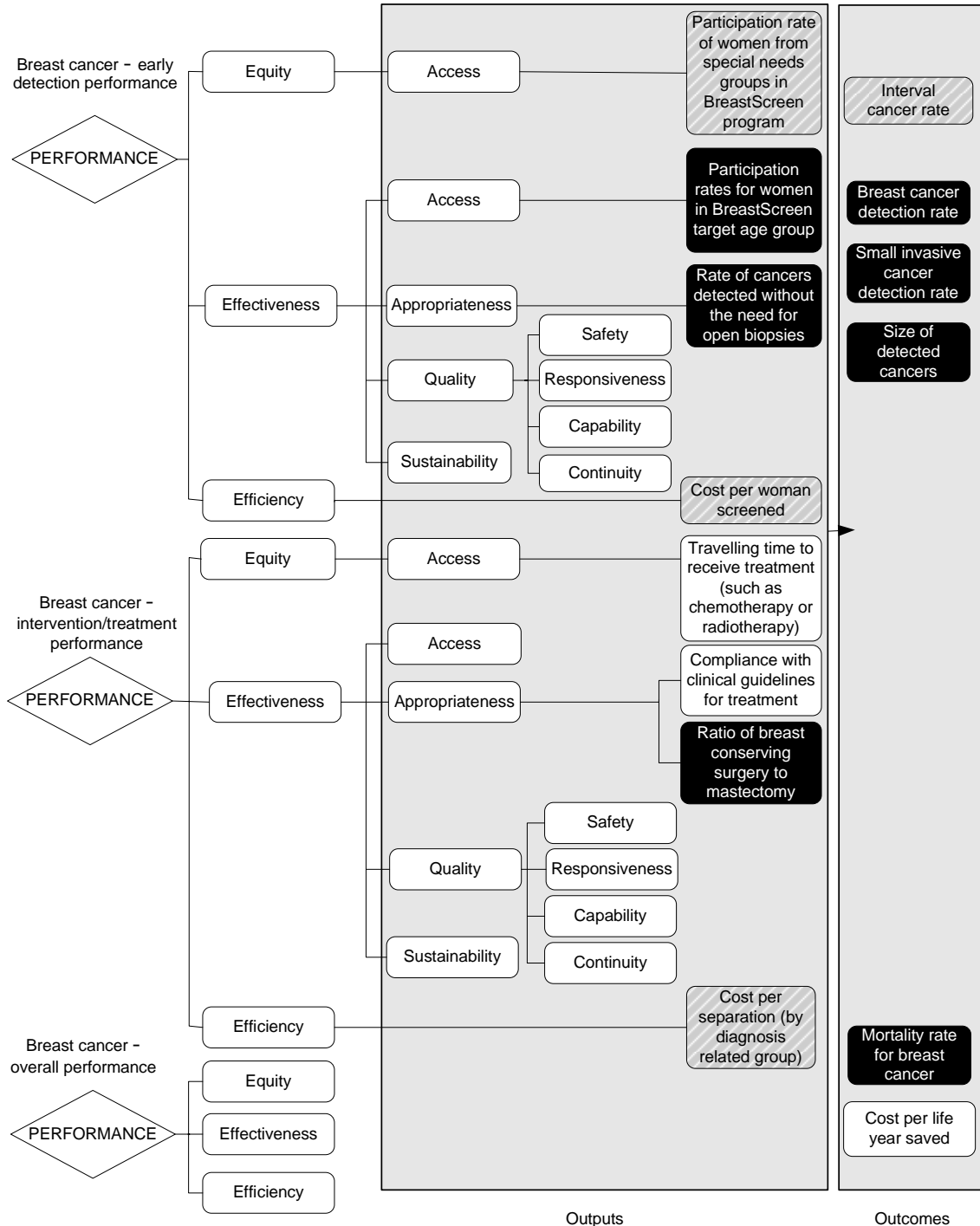
Some changes have been made to the breast cancer detection and management framework for the 2007 Report:

- the 'participation rate for women from special needs groups in BreastScreen programs' indicator has been reclassified from being an outcome to an indicator of equity of access
- the 'participation rate for women in BreastScreen target age group' indicator has been reclassified from being an outcome to an indicator of how effective the program is at accessing its target age group
- the 'interval cancer rate' has been reclassified as an early detection program outcome, rather than as an indicator of early detection program safety.

### Box 11.2 Objectives for breast cancer detection and management

The objectives for breast cancer detection and management are to reduce morbidity and mortality attributable to breast cancer, and to improve the quality and duration of life of women with breast cancer in a manner that is equitable and efficient.

**Figure 11.6 Performance indicators for breast cancer detection and management**



**Key to indicators**

- Text** Provided on a comparable basis for this Report subject to caveats in each chart or table
- Text** Information not complete or not directly comparable
- Text** Yet to be developed or not collected for this Report

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The framework for breast cancer detection and management focuses on achieving a balance between early detection and treatment. It has a tripartite structure — that is, performance indicators presented relate to early detection, intervention and overall performance.

### **Key performance indicator results**

Given the significant amounts of available data relating to breast cancer screening, screening is the focus of reporting. Data relating to the management and treatment of breast cancer are less readily available, and a Steering Committee priority is to extend reporting in this area in the future.

Ongoing monitoring of the BreastScreen Australia program involves reporting program performance against specific indicators such as participation, detection of small invasive cancers, sensitivity, detection rate for ductal carcinoma in situ, recall to assessment and rescreening rates. Data is collected at the jurisdictional level and provides an overview of the performance of the Program.

In addition, each of the BreastScreen Australia services is assessed against 173 National Accreditation Standards as part of their accreditation process. These Standards include a number of indicators that collectively assess the safety of the services provided by individual BreastScreen Australia services.

#### *Outputs*

##### *Early detection — participation rate of women from selected community groups in BreastScreen programs*

The ‘participation rate of women from selected community groups in BreastScreen programs’ is an indicator of equity of access (box 11.3).

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**Box 11.3 Participation rate of women from selected community groups in BreastScreen programs**

The 'participation rate of women from selected community groups' — that is, Indigenous women, women from non-English speaking backgrounds (NESB) and women living in rural and remote areas — in breast cancer screening is an indicator because women from these groups may experience particular language, cultural and geographic barriers to accessing breast cancer screening. This indicator measures the performance of the BreastScreen program in overcoming these barriers. This reflects the importance of screening to the early detection of breast cancers. Early detection is associated with better outcomes for women with breast cancer, in terms of morbidity and mortality.

The participation rate measures the proportion of the eligible population in the community group attending the screening program within a 24 month period. Participation rates for community groups that are at, or close to, those for the total population indicate success in overcoming group-specific barriers to access.

The national age standardised participation rate for Indigenous women aged 50–69 years has tended to increase in recent years, but remains below the non-Indigenous participation rate in that age group, although this may be influenced by problems with the identification of Indigenous status (table 11A.9). For the same 24 month period and age group, the national participation rate for NESB women (42.7 per cent) was also lower than that of the national total female population, as was that of women living in rural and remote areas (50.5 per cent) (table 11.4). Care needs to be taken when comparing data across jurisdictions, given differences in the collection of data by Indigenous, NESB, and rural and remote status across jurisdictions.

**Table 11.4 Age standardised participation rates of women aged 50–69 years from selected communities in BreastScreen Australia programs, 2004 and 2005 (24 month period) (per cent)<sup>a, b</sup>**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Indigenous <sup>c</sup>	33.9	37.3	50.2	29.8	33.1	34.9	44.8	18.9	36.1
Non-English Speaking Background <sup>d</sup>	43.0	33.6	63.1	55.2	52.5	41.5	73.4	11.1	42.7
Metropolitan or capital city <sup>e</sup>	61.7	57.9	58.7	54.9	60.7	56.0	55.6	47.3	59.0
Rural and remote, or rest of State <sup>f</sup>	36.2	56.7	58.7	57.6	65.7	57.5	..	40.3	50.5
All women aged 50–69 years	51.2	57.5	58.6	55.6	62.1	57.4	55.3	43.9	55.7

<sup>a</sup> First and subsequent rounds. <sup>b</sup> Rates are standardised to the 2001 Australian population standard. <sup>c</sup> Those women who self-identify as being of Aboriginal or Torres Strait Islander descent. <sup>d</sup> Women who speak a language other than English at home. <sup>e</sup> Includes 'capital city' (State and Territory capital city statistical divisions) and 'other metropolitan centre' (one or more statistical subdivisions that have an urban centre with a population of 100 000 or more). <sup>f</sup> Includes 'large rural centre' statistical local areas where most of the population resides in urban centres with a population of 25 000 or more); 'small rural centre' (statistical local areas in rural zones containing urban centres with populations between 10 000 and 24 999); 'other rural area' (all remaining statistical local areas in the rural zone); 'remote centre' (statistical local areas in the remote zone containing populations of 5000 or more) and 'other remote area' (all remaining statistical local areas in the remote zone). – Nil or rounded to zero. .. Not applicable.

Source: State and Territory governments (unpublished); tables 11A.8 and 11A.9.

*Early detection — participation rate of women in the BreastScreen target age group*

The 'participation rate of women in the BreastScreen target age group' is an indicator of how effective the program is at accessing its target population (box 11.4).

**Box 11.4 Participation rate of women in the BreastScreen target age group**

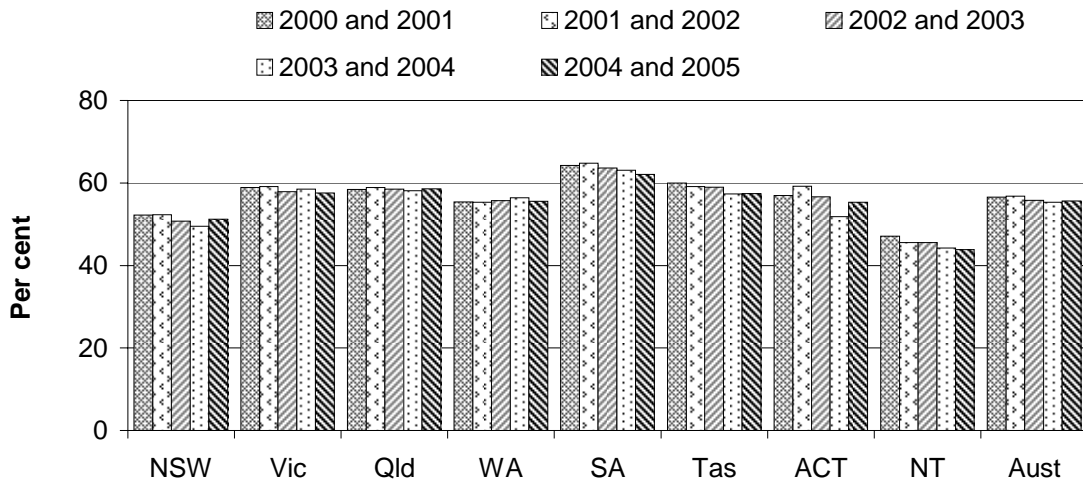
The 'participation rate of women in the BreastScreen target age group' of 50–69 years is an indicator of how effective the program is at accessing its target population. It reflects the importance of screening to the early detection of breast cancers. Early detection is associated with better outcomes for women with breast cancer, in terms of morbidity and mortality.

The participation rate measures the proportion of the eligible population attending the screening program within a 24 month period. Higher screening participation rates are more desirable. The aim under the National Accreditation Standards (2004) is that at least 70 per cent of women aged 50–69 years participate in screening over a 24 month period. Recruitment activities undertaken by BreastScreen specifically target women in this age group although access to the program is also provided for women aged 40–49 years and 70 years or over (BreastScreen Australia 2004).



The participation of women aged 50–69 years in BreastScreen Australia screening programs was 55.7 per cent in the 24 month period 2004 and 2005 (figure 11.7).

Figure 11.7 **Age standardised participation rates of women aged 50–69 years in BreastScreen Australia screening programs (24 month period)<sup>a, b</sup>**



**a** The participation rate is the number of women resident in the jurisdiction who were screened during the reference period, divided by the number of women resident in the jurisdiction, using the ABS estimated resident population. This value represents the estimated population at the midpoint of the reference period. It is an average of the two estimated resident populations for the two calendar years (by adding both years and dividing by two). The catchment area is a geographic region based on service size in relation to the population, accessibility and the location of other services. It is uniquely defined for each service based on postcode or statistical local area. **b** Rates are standardised to the 2001 Australian population standard. Source: State and Territory governments (unpublished); table 11A.8.

### *Early detection — rate of cancers detected without the need for open biopsies*

The ‘rate of cancers detected without the need for open biopsies’ is an indicator of the effectiveness of early detection (box 11.5).

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**Box 11.5 Rate of cancers detected without the need for open biopsies**

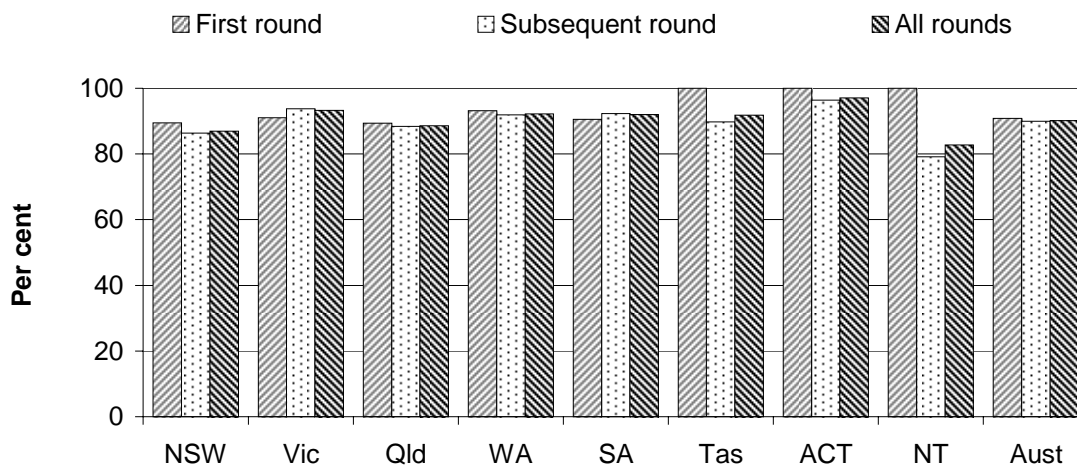
The 'rate of cancers detected without the need for open biopsies' is an indicator of the effectiveness of BreastScreen Australia in diagnosing breast cancer without the need for invasive procedures.

This indicator is defined as the number of diagnoses made without a diagnostic open biopsy, as a proportion of all breast cancers detected (invasive and DCIS). High rates of cancers detected without the need for open biopsies indicates effectiveness in detecting malignancies while minimising the need for invasive procedures.<sup>3</sup>

The BreastScreen Australia National Accreditation Standards (2004) state that 75 per cent or more of invasive cancers or DCIS should be diagnosed without the need for a diagnostic open biopsy (BreastScreen Australia 2004).

In 2005, for women attending their first screening round, the rate of cancers detected without the need for open biopsies was 90.8 per cent Australia wide. For women attending a subsequent round the rate was 90.0 per cent Australia wide (figure 11.8).

**Figure 11.8 Rate of cancers detected without the need for open biopsies, all women, 2005**



Source: State and Territory governments (unpublished); table 11A.10.

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<sup>3</sup> A breast biopsy is a procedure for obtaining a breast tissue specimen for microscopic examination to establish a diagnosis.

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*Early detection — cost per woman screened*

The ‘cost per woman screened’ is an indicator of the efficiency of early detection performance (box 11.6).

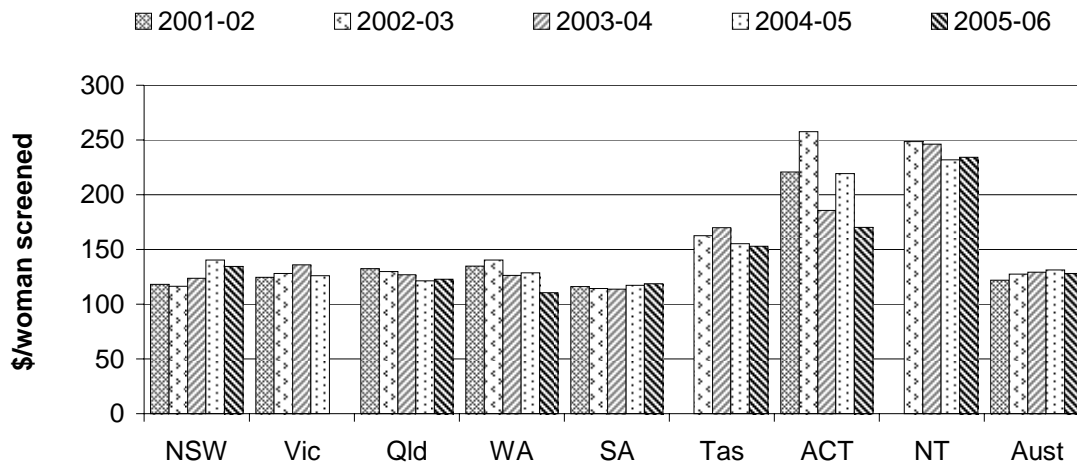
**Box 11.6 Cost per woman screened**

The ‘cost per woman screened’ is an indicator of the efficiency of the breast cancer screening program. An objective of breast cancer detection and management is that services are provided in an efficient manner.

‘Cost per woman screened’ measures the total cost of providing services (including screening, assessment and program management), divided by the number of women screened. A low ‘cost per woman screened’ can indicate efficiency, but caution must be used when interpreting indicators in this way because the cost does not provide any information on the quality of service provided.

Care needs to be taken when making comparisons across jurisdictions. There are potential differences in the items included in the measures of cost (particularly in the treatment of depreciation and capital asset charges, and the inclusion of subsidies). There may also be differences across jurisdictions in the scope of activities being costed. The Review is working to identify these differences across jurisdictions to improve data comparability in future (table 11A.12). Preliminary estimates of costs in each jurisdiction are presented in figure 11.9. The average cost per woman screened in Australia in 2005-06 was \$128.

**Figure 11.9 Real cost per woman screened, BreastScreen Australia services (2005-06 dollars)<sup>a, b, c, d, e, f</sup>**



<sup>a</sup> Constant price expenditure (in 2005-06 dollars) using the Gross Domestic Product price deflator (table AA.26). <sup>b</sup> Data for NSW do not include subsidies. <sup>c</sup> Data for Queensland include depreciation and user cost of capital for 2001-02 and 2002-03. <sup>d</sup> Data for Tasmania are not available for 2001-02. <sup>e</sup> Data for the NT are not available for 2001-02. <sup>f</sup> Data for Victoria for 2005-06 are not available.

Source: State and Territory governments (unpublished); ABS (unpublished) National Accounts: National Income Expenditure and Productivity; tables AA.26 and 11A.11.

### *Intervention/treatment — travelling time to receive treatment*

The Steering Committee has identified a woman's 'travelling time to receive treatment' as an indicator of the equity of intervention and treatment performance (box 11.7). Data on this indicator, however, were not available for the 2007 Report.

#### **Box 11.7 Travelling time to receive treatment**

The Steering Committee has identified the 'travelling time to receive treatment' indicator for development and reporting in future. This indicator relates to access to breast cancer intervention and treatment services such as chemotherapy or radiotherapy. A fast 'travelling time to receive treatment' suggests that intervention and treatment services are accessible in terms of distance travelled. A fast travelling time also implies that services are well located in terms of the population served.

### *Intervention/treatment — compliance with clinical guidelines for treatment*

The Steering Committee has identified 'compliance with clinical guidelines for treatment' as an indicator of the effectiveness and appropriateness of intervention

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and treatment performance (box 11.8). Data on this indicator, however, were not available for the 2007 Report.

**Box 11.8 Compliance with clinical guidelines for treatment**

The Steering Committee has identified the 'compliance with clinical guidelines for treatment' indicator for development and reporting in future. This indicator relates to the appropriateness of breast cancer intervention and treatment. Compliance with clinical guidelines and treatment suggests breast cancer intervention and treatment are appropriate.

*Intervention/treatment — ratio of conserving surgery to mastectomy*

The ratio of 'conserving surgery to mastectomy' is an indicator of the appropriateness of intervention and treatment performance (box 11.9).

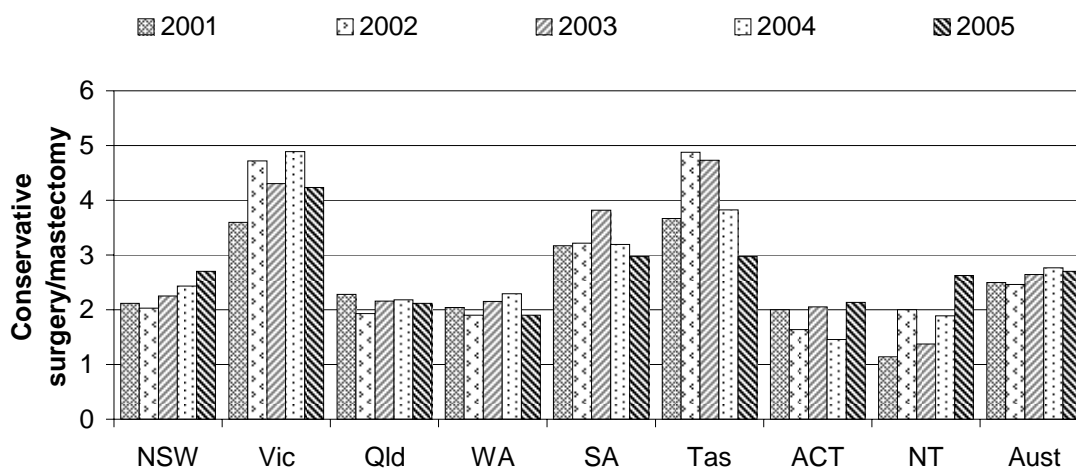
**Box 11.9 Ratio of conserving surgery to mastectomy**

The ratio of 'conserving surgery to mastectomy' is an indicator of the appropriateness of breast cancer intervention and treatment that aims to reduce morbidity and mortality. It can also reflect the early detection of breast cancer, because breast conserving surgery is more likely to be possible when cancers are detected at an early stage.

The ratio is defined as the number of cases for which breast conserving surgery or no surgery was performed, divided by the number of cases requiring mastectomy. Breast conserving surgery removes the breast cancer but not the whole breast. In terms of intervention and treatment, the ratio should reflect the appropriate mix of treatment. In terms of early detection of breast cancer, a high ratio is desirable. Other factors — such as the surgeon's judgment as to the best treatment for the patient — can also affect the type of surgery undertaken.

Data for this indicator are derived from BreastScreen Australia and represent only a portion of the total possible treatment information available. BreastScreen Australia aims to diagnose small cancers that can be treated more effectively and with reduced morbidity for women, so these data are not necessarily a good indication of general clinical practice relating to breast cancer. In 2005 the ratio of conserving surgery to mastectomy averaged 2.7:1 nationally, but varied across jurisdictions (figure 11.10).

Figure 11.10 Ratio of conserving surgery to mastectomy<sup>a</sup>



<sup>a</sup> Applies for women of all ages.

Source: State and Territory governments (unpublished); table 11A.13.

### *Intervention/treatment — cost per separation by diagnosis related group*

The ‘cost per separation by diagnosis related group’ is an indicator of the efficiency of intervention and treatment performance (box 11.10).

#### **Box 11.10 Cost per separation by diagnosis related group**

‘Cost per separation by diagnosis related group’ is a proxy indicator of efficiency. An objective of breast cancer detection and management is to provide services in an efficient manner.

This indicator is defined as the cost of care per separation in public hospitals for selected breast cancer related conditions. A low cost per separation can indicate efficiency, but caution must be used when interpreting the indicator in this way, because the cost per separation does not provide any information on the quality of service provided. In addition, not all intervention strategies are reported.

Data for this indicator are sourced from the National Hospital Cost Data Collection (NHCDC) and are based on the AR-DRG classification version 5.0. The NHCDC is an annual collection of hospital cost and activity data covering the financial year before the collection period. Participation in the NHCDC is voluntary, so the samples are not necessarily representative of all hospitals in each jurisdiction (although this is improving over time). Therefore, an estimation process has been carried out to create representative national activity figures from the sample data. In

addition, the purpose of the NHCDC is to calculate DRG cost weights, not to compare the efficiency of hospitals (DHA 2005).

Table 11.5 summarises costs per separation for selected breast cancer AR-DRGs. The average cost of major procedures for malignant breast conditions across Australia was \$5835 per separation in 2004-05; minor procedures for malignant breast conditions cost \$2993 per separation on average. Table 11A.14 summarises the average length of stay (in public hospitals) associated with each AR-DRG.

**Table 11.5 Average cost per separation, public hospitals by selected breast cancer AR-DRGs, 2004-05 (dollars)<sup>a, b, c</sup>**

<i>AR-DRG</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Major procedures for malignant breast conditions	5 425	6 376	5 464	6 308	5 265	5 865	6 997	8 152	5 835
Minor procedures for malignant breast conditions	3 036	2 800	3 208	3 026	2 915	2 737	3 345	3 477	2 993
Malignant breast disorders, age > 69 years w CC	4 909	4 547	4 003	5 988	5 394	4 775	5 951	np	4 764
Malignant breast disorders, age <70 years w CC or age >69 w/o CC	1 546	1 744	2 055	620	1 287	2 715	1 217	np	1 453

w CC = with complications and co-morbidities. w/o CC = without complications and co-morbidities.  
<sup>a</sup> Estimated population costs are obtained by weighting the sample results according to the known characteristics of the population. <sup>b</sup> Average cost is affected by a number of factors, some of which are admission practices, sample size, remoteness and the types of hospital contributing to the collection. Direct comparison across jurisdictions is difficult because there are differences in hospital costing systems. <sup>c</sup> In accordance with NHCDC methodology, depreciation and some capital costs are included in these figures, except for Victoria, which does not include depreciation. **np** Not published due to low volume and privacy concerns.

Source: DHA 2006; table 11A.14.

## Outcomes

### *Early detection — interval cancer rate*

The ‘interval cancer rate’ is an outcome indicator of the effectiveness of early detection (box 11.11).

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**Box 11.11 Interval cancer rate**

An interval cancer is an invasive breast cancer diagnosed in the interval between a negative screening result and the next scheduled screening examination. The purpose of the 'interval cancer rate' indicator is to help determine how effective the BreastScreen Australia program is in detecting breast cancer at an early stage. Measuring the interval cancer rate helps to obtain an early measure of the likely impact of the screening program on mortality.

The 'interval cancer rate' is defined as the number of interval cancers per 10 000 women screened. A low interval cancer rate is desirable because it suggests the breast screening process is effective in detecting breast cancer.

This rate needs to be interpreted in conjunction with the breast cancer detection indicators.

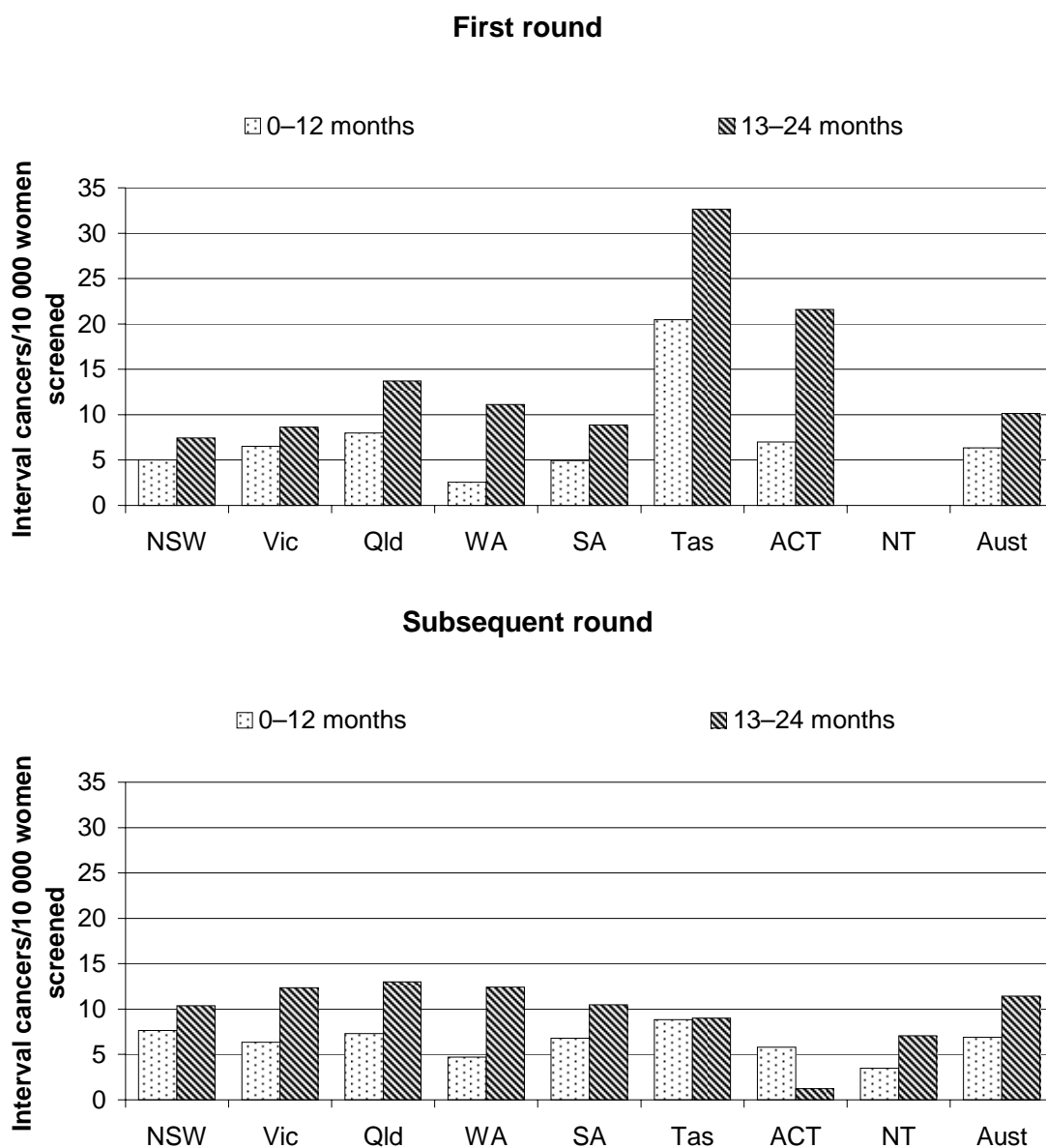
There is a time lag in obtaining data for this indicator, because the detection period falls between the last screening visit in the reference screening year and the next scheduled screening appointment. Following that period, a further time lag is required for the reporting of those cancers to the cancer registry, before a process of data matching can occur between each jurisdiction's screening program and its cancer registry. As a result, the most recent data available for this Report are for women screened during 2002. Stratification is by first and subsequent screening rounds to allow for expected variation in interval cancer rates between rounds.

Figure 11.11 presents the age standardised interval cancer rate by screening round for women aged 50–69 years. Differences in the rates across jurisdictions may be caused by differences in the policies of the BreastScreen services in each jurisdiction. Some jurisdictions (such as SA and some services in NSW) do not further investigate an abnormality of the breast if the mammogram appears normal, even when a symptom is reported. These women are advised to visit their GP for a referral to a diagnostic service. This could have the effect of increasing the jurisdiction's interval cancer rate and reducing their cancer detection rate if an invasive breast cancer is subsequently diagnosed outside the breast cancer screening program. Comparisons across jurisdictions therefore need to be made with care.

In 2002, for all women aged 50–69 years in the first round of screening, the interval cancer rate 0–12 months following screening was 6.3 per 10 000 women screened. In subsequent rounds this increased to 6.9 per 10 000 women screened. Interval cancer rates 13–24 months following screening are also shown in figure 11.11.



Figure 11.11 Age standardised interval cancer rate, women aged 50–69 years, 2002<sup>a, b, c</sup>



<sup>a</sup> Rates are expressed as the number of interval cancers per 10 000 women screened. <sup>b</sup> The numbers used to measure this indicator were small, resulting in large variations from year to year. It is reasonable to view this indicator over time rather than from one year to the next. <sup>c</sup> Data for the NT were zero in the first round for 0–12 and 13–24 months.

Source: State and Territory governments (unpublished); table 11A.15.

### *Early detection — breast cancer detection rate*

The ‘breast cancer detection rate’ is an outcome indicator of early detection (box 11.12).

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### Box 11.12 **Breast cancer detection rate**

The 'breast cancer detection rate' is an indicator of the effectiveness of screening services in identifying breast cancers at an early stage. Early detection of cancers while they are still small and localised to the breast is associated with better outcomes for women with breast cancer, in terms of morbidity and mortality.

The 'detection rate' is the number of detected cancers per 10 000 women screened. While a high incidence of breast cancer is not desirable, a high rate of detecting these cancers is desirable.

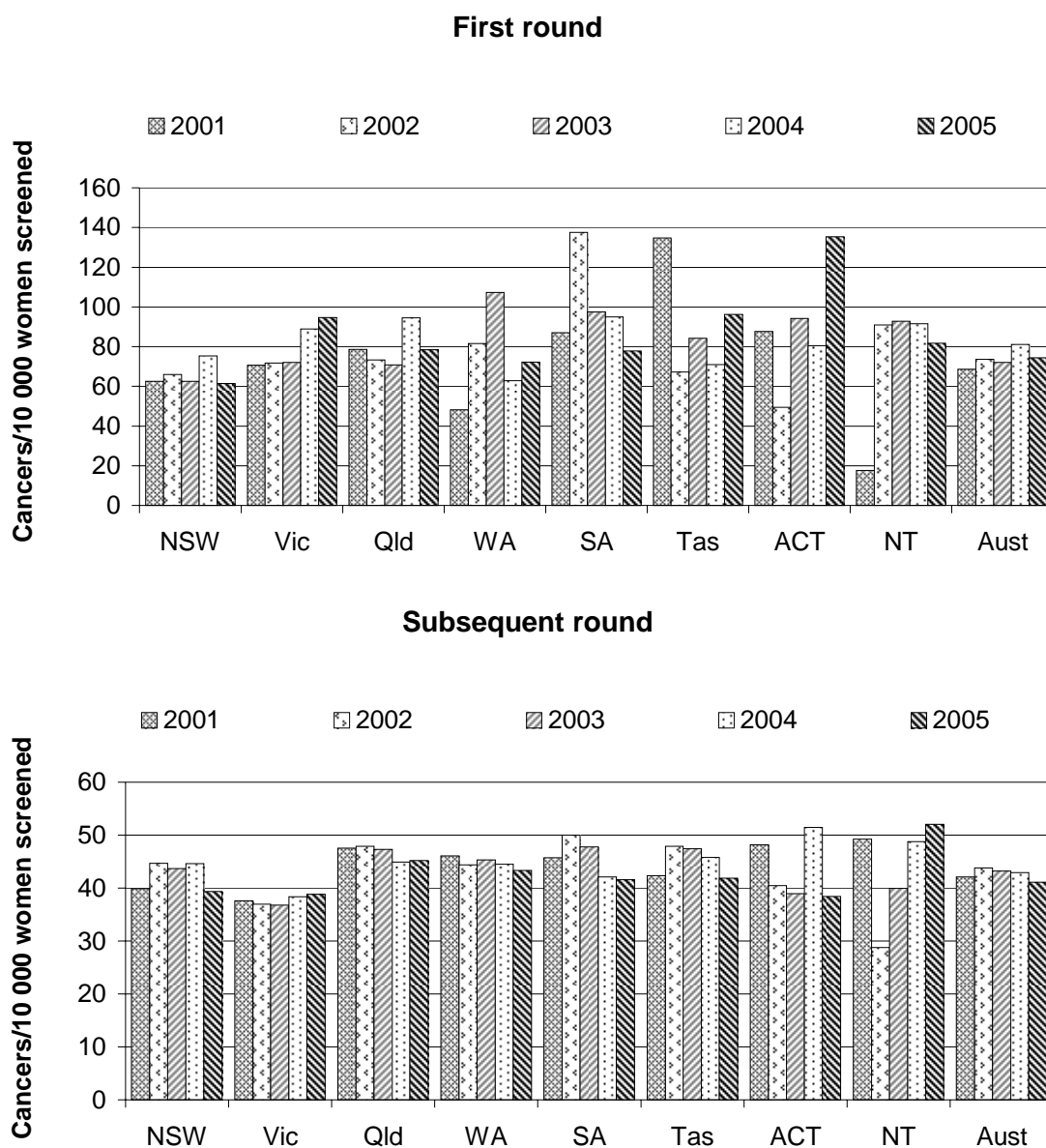
The following relevant BreastScreen Australia National Accreditation Standards for detection rates are based on the expected Australian rates (BreastScreen Australia 2004):

- Greater than or equal to 50 per 10 000 women aged 50–69 years who attend for their first screen are diagnosed with invasive breast cancer.
- Greater than or equal to 35 per 10 000 women aged 50–69 years who attend for their second or subsequent screen are diagnosed with invasive breast cancer.
- Greater than or equal to 12 per 10 000 women aged 50–69 years who attend for their first screen are diagnosed with DCIS.
- Greater than or equal to seven per 10 000 women aged 50–69 years who attend for their second or subsequent screen are diagnosed with DCIS.

It is important to consider together all of the following rates: the invasive cancer detection rate, the small invasive cancer detection rate, the DCIS detection rate and the interval cancer rate.

Figure 11.12 reports the age standardised number of invasive cancers detected per 10 000 women screened aged 50–69 years, by screening round. DCIS detected per 10 000 women screened is reported in table 11A.16. (Relevant definitions can be found in box 11.1 and section 11.7.)

Figure 11.12 **Age standardised breast cancer detection rate for women aged 50–69 years, invasive cancers<sup>a</sup>**



<sup>a</sup> Rates are per 10 000 women screened, and age standardised to the Australian population of women attending a BreastScreen service in 1998.

Source: State and Territory governments (unpublished); table 11A.16.

*Early detection — small invasive cancer detection rate*

The ‘small invasive cancer detection rate’ is an outcome indicator of early detection performance (box 11.13).

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**Box 11.13 Small invasive cancer detection rate**

The 'small (less than 15 millimetres in diameter) invasive cancer detection rate' is an indicator of the early detection of breast cancers. Early detection of cancers while they are still small and localised to the breast is associated with better outcomes for women with breast cancer, in terms of morbidity and mortality.

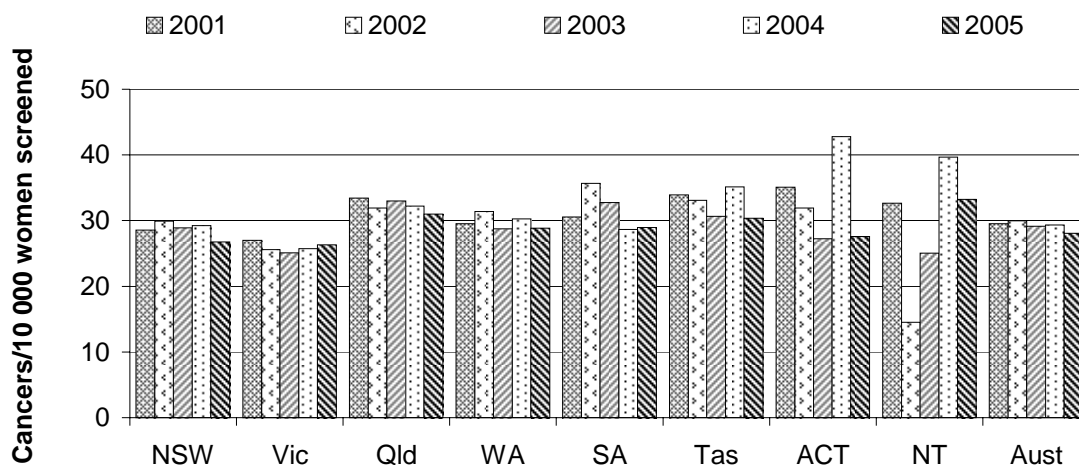
The 'small invasive cancer detection rate' is defined as the number of invasive cancers detected with a diameter of 15 millimetres or less, per 10 000 women screened. It is desirable that a high proportion of cancers detected are small cancers: detection of small cancers is generally associated with increased survival rates and reduced morbidity and mortality, leading to some cost savings to the health care system and women (AIHW, BreastScreen Australia and the NCSP 1998).

The BreastScreen Australia National Accreditation Standards (2002) specify that 25 or more women per 10 000 women aged 50–69 years who attend screening are expected to be diagnosed with a small (15 millimetres or less) invasive breast cancer (BreastScreen Australia 2002).

It is important to consider together all of the following rates: the invasive cancer detection rate, the small invasive cancer detection rate, the DCIS detection rate and the interval cancer rate.

Age standardised rates for small invasive cancer detection for women aged 50–69 years screened by BreastScreen Australia in 2005 are reported in figure 11.13. This shows that the rate for Australia was 28.1 cancers per 10 000 women screened in 2005.

Figure 11.13 **Age standardised small diameter cancer detection rate for women aged 50–69 years, all rounds of screening<sup>a, b</sup>**



<sup>a</sup> Small diameter cancers are defined as invasive cancers up to and including 15 millimetre diameter. Prior to the 2003 Report, small diameter cancers were defined as 10 millimetre in diameter or less, so data are not comparable to data published before the 2003 Report. <sup>b</sup> Rates are per 10 000 women screened, and age standardised to the Australian population of women attending a BreastScreen service in 1998.

Source: State and Territory governments (unpublished); table 11A.17.

### *Early detection — size of detected cancers*

The ‘size of detected cancers’ is an outcome indicator of the success of early detection (box 11.14).

#### **Box 11.14 Size of detected cancers**

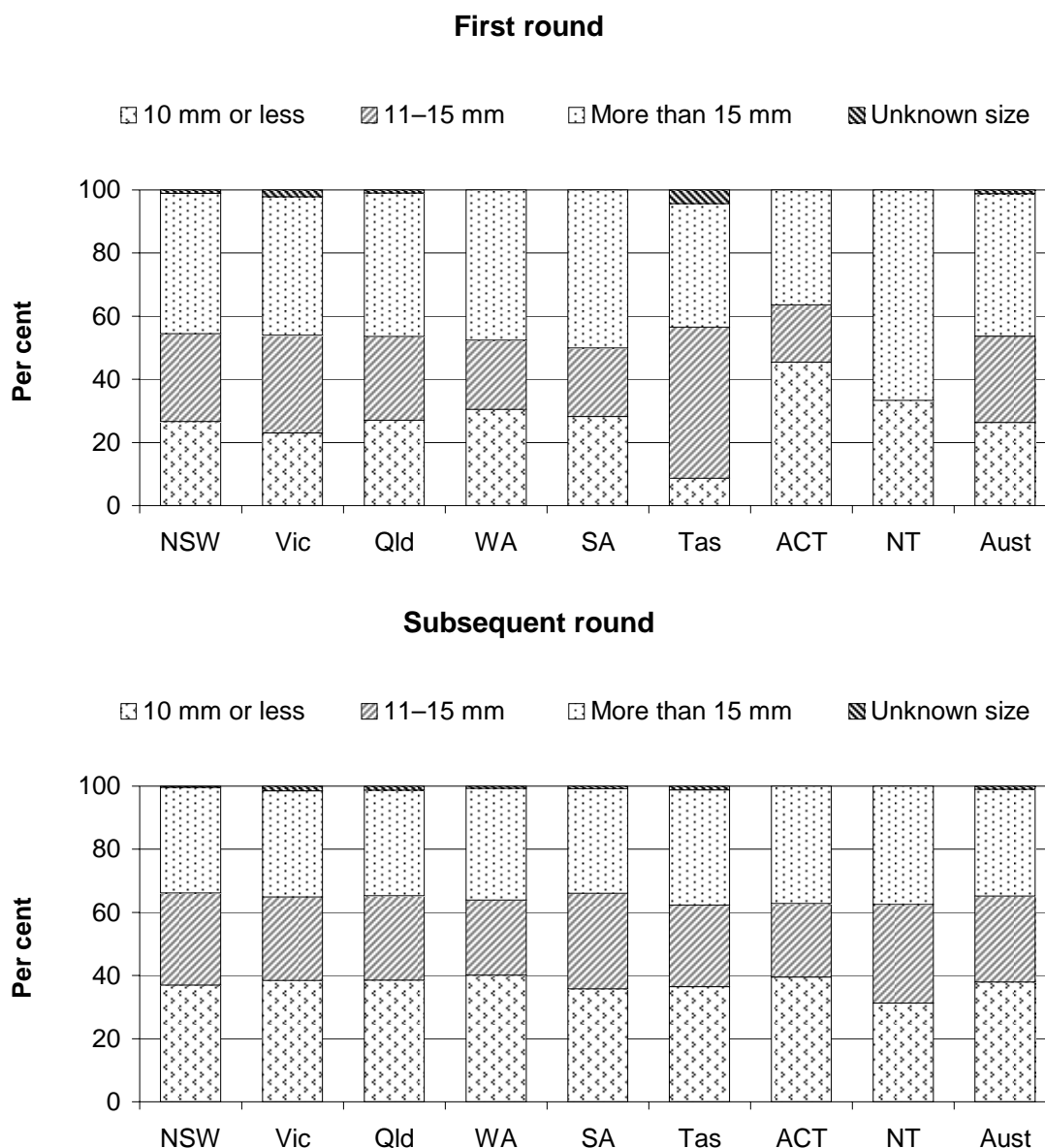
The ‘size of detected cancers’ is an indicator of the early detection of breast cancers. Detection of small cancers (those with a diameter of 15 millimetres or less) is generally associated with increased survival rates and reduced morbidity and mortality, leading to some cost savings to the health care system and women (AIHW, BreastScreen Australia and the NCSP 1998).

This indicator measures detected invasive cancers by size of cancer, as a proportion of total detected invasive cancers for women aged over 40 years. High detection of small cancers relative to large cancers is desirable because it is likely to result in reduced morbidity and mortality.

Data are reported by round because larger cancers are expected to be found in the first round of screening. In subsequent rounds, cancers should be smaller if the program is achieving its objective (that is, early detection of small cancers through regular two yearly screening).

Figure 11.14 presents the proportion of cancers by size by screening round for 2005. The data are from BreastScreen Australia and cover only its clients. The data reflect that larger cancers tend to be discovered in the first round and that smaller cancers tend to be detected in subsequent rounds.

Figure 11.14 **Detected invasive cancers, women aged over 40 years, by screening round and size of cancer 2005<sup>a, b</sup>**



<sup>a</sup> Non-breast malignancies were not counted. <sup>b</sup> For small jurisdictions, fluctuations due to small numbers can make comparisons unreliable.

Source: State and Territory governments (unpublished); table 11A.18.

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### Overall performance — mortality rate for breast cancer

The ‘mortality rate for breast cancer’ is an outcome indicator of overall performance (box 11.15).

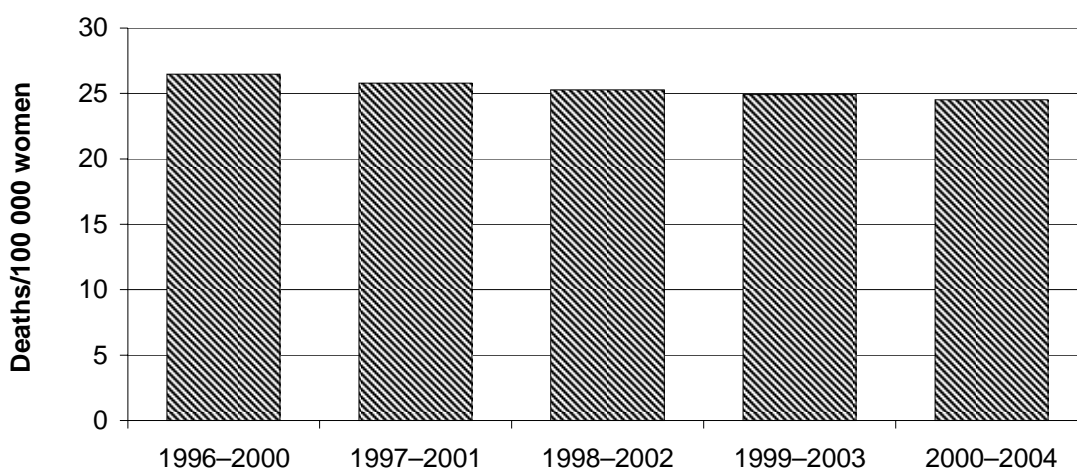
#### Box 11.15 Mortality rate for breast cancer

The ‘mortality rate for breast cancer’ is an outcome indicator of the effectiveness of both early detection and treatment services for breast cancer. It expresses mortality from breast cancer per 100 000 women as a five year rolling average.

Breast cancer mortality data are averaged over five year periods to smooth volatility in year-on-year movements, particularly for smaller jurisdictions that tend to have fewer cases but relatively large variation in rates from year to year. Caution still needs to be used, however, when comparing results for smaller jurisdictions (table 11A.1).

Age standardised mortality rates are the most appropriate measure for looking at changes in mortality rates. The average annual age standardised mortality rate for breast cancer declined from 26.5 per 100 000 women over the period 1996–2000 to an average of 24.5 per 100 000 women over the period 2000–2004 (figure 11.15).

Figure 11.15 Annual average age standardised mortality rate from breast cancer, all ages<sup>a</sup>

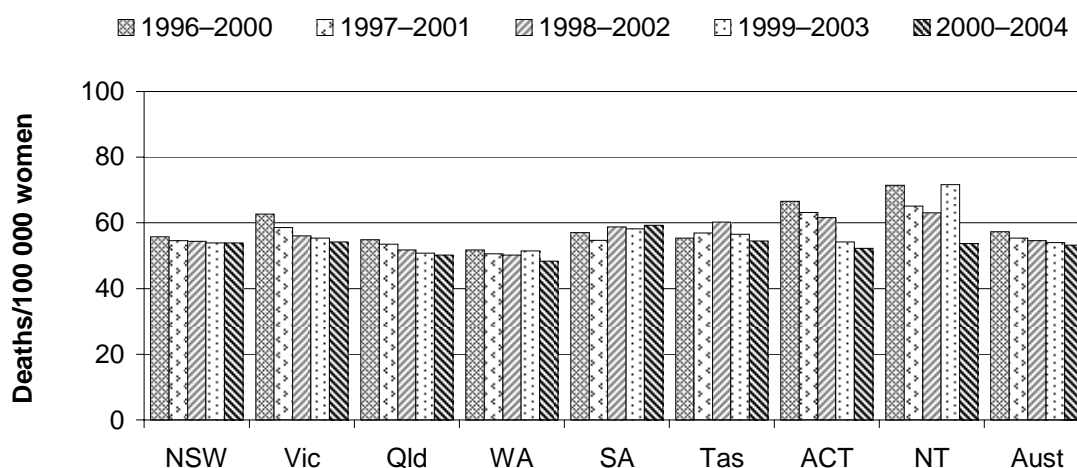


<sup>a</sup> Age standardised to the Australian population at 30 June 2001.

Source: AIHW (unpublished); table 11A.1.

The annual average age standardised mortality rate from breast cancer for women aged 50–69 years also declined, from 57.3 per 100 000 women over the period 1996–2000 to 53.2 per 100 000 women over the period 2000–2004 (figure 11.16).

Figure 11.16 **Annual average age standardised mortality rate from breast cancer, women aged 50–69 years<sup>a</sup>**



<sup>a</sup> Age standardised to the Australian population at 30 June 2001.

Source: AIHW (unpublished); table 11A.1.

### *Overall performance — cost per life year saved*

The Steering Committee has identified ‘cost per life year saved’ as an outcome indicator of the efficiency of overall performance (box 11.16). Data for this indicator, however, were not available for the 2007 Report.

#### **Box 11.16 Cost per life year saved**

The Steering Committee has identified the ‘cost per life year saved’ as an indicator for development and reporting in future. The indicator is a measure of the efficiency of breast cancer detection and management services.



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## 11.4 Mental health

### Profile

This section covers specialist mental health care services that treat mostly low prevalence but severe disorders. GPs are also important service providers for people with a mental disorder (chapter 10), but this Report does not include performance information on GPs' services for people with a mental illness. Alcohol and drug treatment services are not covered here, but are briefly described in chapter 10. Some common terms used in mental health management are outlined in box 11.17.

Mental health relates to an individual's ability to negotiate the daily challenges and social interactions of life without experiencing undue emotional or behavioural incapacity (DHAC and AIHW 1999). There is a wide range of mental disorders that can affect an individual's functioning and quality of life. Each of these disorders is unique in terms of its incidence across the lifespan, causal factors and treatments.

This chapter reports on specialist mental health care services only. The performance of other health and related service providers is examined more closely in chapter 9 ('Public hospitals'), chapter 10 ('Primary and community health') and chapter 12 ('Aged care services'). Mental health patients often have complex needs and may access a number of other services, such as those covered in chapter 3 ('School education'), chapter 7 ('Corrective services'), chapter 8 ('Emergency management') and chapter 13 ('Services for people with a disability').

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### Box 11.17 **Some common terms relating to mental health**

**acute services:** the National Survey of Mental Health Services (NSMHS) defines acute services as specialist psychiatric care for people who present with acute episodes of mental illness. These episodes are characterised by recent onset of severe clinical symptoms of mental illness that have potential for prolonged dysfunction or risk to self and/or others. The key characteristic of acute services is that treatment effort focuses on symptom reduction with a reasonable expectation of substantial improvement. In general, acute psychiatric services provide short term treatment. Acute services may focus on assisting people who have had no prior contact or previous psychiatric history, or individuals with a continuing psychiatric disorder for whom there has been an acute exacerbation of symptoms.

**ambulatory care services:** mental health services dedicated to the assessment, treatment, rehabilitation and/or care of non-admitted inpatients, including but not confined to crisis assessment and treatment services, mobile assessment and treatment services, outpatient clinic services (whether provided from a hospital or community mental health centre), child and adolescent outpatient treatment teams, social and living skills programs (including day programs, day hospitals and living skills centres), and psychogeriatric assessment teams and day programs.

**community residential services:** staffed residential units established in community settings that provide specialised treatment, rehabilitation and/or care for people affected by a mental illness or psychiatric disability. To be defined as community-based residences, the services must provide residential care to people with a psychiatric illness or disability, be located in a community setting external to the campus of a general hospital or psychiatric institution, employ onsite staff for at least some part of the day, and be government funded.

**inpatient services:** stand-alone psychiatric hospitals or specialist psychiatric units located within non-psychiatric hospitals.

**mental disorder:** a diagnosable illness that significantly interferes with an individual's cognitive, emotional and/or social abilities. For the purposes of the Chapter it includes mental illness and psychiatric disability.

**mental health:** the capacity of individuals within groups and the environment to interact with one another in ways that promote subjective wellbeing, the optimal development and use of mental abilities (cognitive, affective and relational) and the achievement of individual and collective goals consistent with justice.

**mental health problem:** diminished cognitive, emotional and/or social abilities, but not to the extent that the criteria for a mental disorder are met.

**mental health promotion:** activities designed to improve the mental health functioning of people through prevention, education and intervention activities and services.

(Continued on next page)

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Box 11.17 (Continued)

**mental illness prevention:** interventions that occur before the initial onset of a disorder.

**non-acute services:** rehabilitation services that have a primary focus on intervention to reduce functional impairments that limit the independence of patients. Rehabilitation services focus on disability and the promotion of personal recovery. They are also characterised by an expectation of substantial improvement over the short term to medium term. Patients treated by rehabilitation services usually have a relatively stable pattern of clinical symptoms. Non-acute services also consist of extended care services that provide care over an indefinite period for patients who have a stable but severe level of functional impairment and inability to function independently without extensive care and support. Patients of extended care services usually show a relatively stable pattern of clinical symptoms, which may include high levels of severe unremitting symptoms of mental illness. Treatment effort focuses on preventing deterioration and reducing impairment. Improvement is expected only over a long period.

**non-government organisations:** private not-for-profit community managed organisations that receive State and Territory government funding specifically to provide community support services for people affected by a mental disorder. Programs provided by non-government organisations may include supported accommodation services (including community-based crisis and respite beds), vocational rehabilitation programs, advocacy programs (including system advocacy), consumer self-help services, and support services for families and primary carers.

**outpatient services (community-based):** services primarily provided to non-admitted patients on an appointment basis and delivered from health centres located in community settings physically separated within hospital sites. Services provided may also include outreach or domiciliary care as an adjunct to services provided from the centre base.

**outpatient services (hospital-based):** services primarily provided to non-admitted patients on an appointment basis and delivered from clinics located within hospitals. Services provided may also include outreach or domiciliary care as an adjunct to services provided from the clinic base.

**prevalence:** the number of cases of a disease present in a population at a given time (point prevalence) or during a given period (period prevalence).

**specialised care service:** services whose primary function is to provide treatment, rehabilitation or community support targeted to people affected by a mental disorder. This criterion is applicable regardless of the source of funds. Such activities are delivered from a service or facility that is readily identifiable as both specialised and serving a mental health function.

*Source:* DHA (2002).

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## *Prevalence*

As part of the National Health Survey in 2004–05, the ABS surveyed adults on the level of psychological distress that they had experienced in the four weeks before the survey. This survey used the Kessler-10 (K10) scale, which measures non-specific psychological distress. The scale consists of 10 questions about non-specific psychological distress and seeks to measure the level of current anxiety and depressive symptoms that a person might have experienced in the four weeks before the interview (ABS 2006b).<sup>4</sup> The 2004–05 data showed that, nationally, 61.8 per cent of those aged 18–64 years had experienced a low level of distress, 24.7 per cent had experienced moderate distress and 13.4 per cent had experienced a high or very high level of distress. Generally, people aged 65 years or over were less likely to experience moderate and high to very high levels of distress, compared with the younger age group (table 11.6). Overall, in percentage terms, more females than males had experienced moderate and high to very high levels of distress (table 11A.19).

In the 2003 ABS Survey of Disability, Ageing and Carers (ABS 2004), 16.1 per cent of all people with a disability (636 900 out of 3.96 million people) reported a mental or behavioural disorder as the main health condition causing their disability. Among people who had a disability that caused a profound or severe core activity limitation (around 1.2 million people or 31.4 per cent of all people with a disability), 23.4 per cent reported a mental or behavioural disorder as their main health condition (ABS 2004).

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<sup>4</sup> Respondents were asked whether in the previous four weeks they had felt: tired for no good reason; nervous; so nervous nothing could calm them down; hopeless; restless or fidgety; so restless they could not sit still; depressed; everything was an effort; so sad that they could not be cheered up; and worthless. For each question, there is a five level response scale based on the amount of time that the respondent reported experiencing the particular problem. Generally, each item was scored from 1 for ‘none of the time’, to 5 for ‘all of the time’. Scores of the 10 questions were then summed, yielding a minimum possible score of 10 and a maximum possible score of 50. Low scores indicated low levels of psychological distress and high scores indicated high levels of psychological distress (ABS 2006b).

**Table 11.6 K10 level of psychological distress, 2004–05 (per cent of population)<sup>a, b</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT<sup>c</sup></i>	<i>Aust</i>
18–64 years									
Low	62.3	59.9	61.3	65.7	61.6	66.3	60.6	na	61.8
Moderate	25.0	26.0	24.3	21.7	25.3	20.4	27.0	na	24.7
High and very high	12.7	13.8	14.4	12.6	13.0	13.2	12.4	na	13.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>na</b>	<b>100.0</b>
65 years or over									
Low	67.9	68.4	63.8	77.8	72.5	71.1	63.0	na	68.6
Moderate	20.0	21.6	21.9	15.0	18.9	18.9	27.3	na	20.2
High and very high	12.1	9.5	14.1	7.2 (d)	8.6	10.0 (d)	9.7	na	11.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>na</b>	<b>100.0</b>
Total adults									
Low	63.2	61.3	61.6	67.5	63.6	67.2	60.9	na	62.9
Moderate	24.1	25.3	23.9	20.7	24.1	20.1	27.0	na	24.0
High and very high	12.6	13.1	14.3	11.8	12.2	12.6	12.1	na	13.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>na</b>	<b>100.0</b>

<sup>a</sup> Psychological distress as measured by the K10 scale. <sup>b</sup> Numbers may not add up to 100 due to rounding.

<sup>c</sup> Separate estimates for the NT are not available for this survey, but the NT contributed to national estimates.

<sup>d</sup> Estimate has a relative standard error of 25–50 per cent and needs to be interpreted with caution.

**na** Not available. **np** Not published.

Source: ABS (2006b); table 11A.19.

### *Roles and responsibilities*

Specialist mental health care providers include a range of government and non-government service providers offering promotion, prevention, treatment and management, and rehabilitation services. Community mental health facilities, psychiatrists, clinical psychologists, psychotherapists, mental health clinicians in private practice, counsellors, public hospitals with specialist psychiatric units and stand-alone psychiatric hospitals all provide specialist mental health care. In addition, a number of health services provide care to mental health patients in a non-specialist health setting — for example, GPs, public hospital emergency departments and outpatient departments, and public hospital general wards (as opposed to specialist psychiatric wards). Some people with a mental disorder are cared for in residential aged care services.

State and Territory governments are the primary sources of funding and service delivery for specialist public mental health services. The Australian Government also provides funding to states and territories via the Australian Health Care Agreements and to private psychiatrists and GPs through the Medicare Benefits

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Schedule and to individuals through the Pharmaceutical Benefits Scheme, Medicare Safety Net and the Department of Veteran's Affairs (DVA). The Australian, State and Territory governments also fund other services that people with mental disorders can access, such as emergency relief, employment, accommodation, income support, rehabilitation, residential aged care and other services for older people and people with a disability (chapters 12 and 13).

### *Funding*

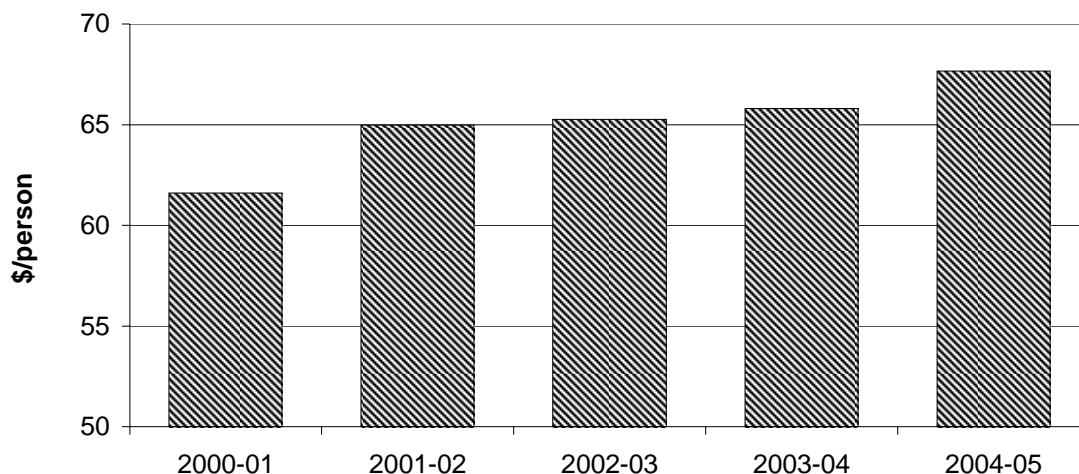
Real government recurrent expenditure of around \$3.8 billion was allocated to mental health services in 2004-05 (tables 11A.20 and 11A.21).<sup>5</sup> State and Territory governments made the largest contribution (\$2.4 billion, or 64 per cent), although this included some Australian Government funds under the Australian Health Care Agreements (table 11A.21). The Australian Government spent \$1.4 billion. Real Australian Government expenditure per person rose from \$66 in 2003-04 to \$68 in 2004-05 (figure 11.17). National average State and Territory expenditure per head in 2004-05 was \$118, up from \$111 in 2003-04 (table 11A.21).

Data in this Report relating to publicly funded mental health services come from State and Territory governments. These data for 2004-05 are preliminary and should be interpreted with care.

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<sup>5</sup> The data include revenue from other sources (including patient fees and reimbursement by third party compensation insurers) and 'other Australian Government funds'.

Figure 11.17 Real Australian Government recurrent expenditure on mental health services per person (2004-05 dollars)<sup>a, b</sup>



<sup>a</sup> 2004-05 data are preliminary only; final validation is ongoing prior to publication in the *National Mental Health Report 2007*. <sup>b</sup> Constant price expenditure for all years (2004-05 dollars), using the implicit price deflator for non-farm gross domestic product (table 11A.55).

Source: DHA (unpublished); tables 11A.22 and 11A.55.

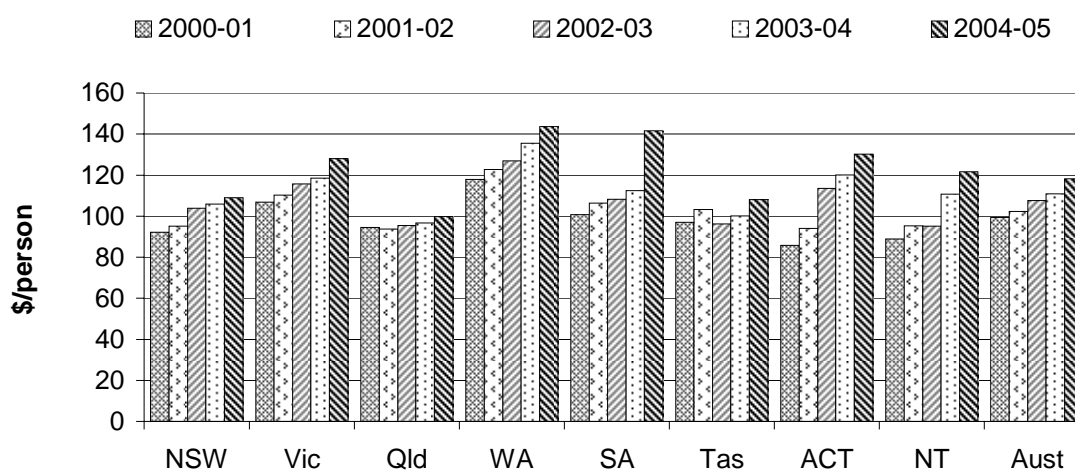
The largest component of Australian Government expenditure on mental health services in 2004-05 was expenditure under the Pharmaceutical Benefits Schedule for psychiatric medication (\$626 million). Expenditure on psychiatric medication increased by an annual average rate of 5.8 per cent between 2000-01 and 2004-05 and rose from 42.0 per cent of Australian Government expenditure on mental health services in 2000-01 to 45.7 per cent in 2004-05. The annual rate of growth of expenditure on psychiatric medication has declined over the reporting period (from 9.9 per cent from 2000-01 to 2001-02 to 1.3 per cent from 2003-04 to 2004-05) (table 11A.20).

In 2004-05, Medicare Benefits Schedule payments for consultant psychiatrists accounted for 15.6 per cent of Australian Government expenditure on mental health services, followed by expenditure for mental health care by GPs (14.7 per cent). The residual was provided by DVA (8.9 per cent), the National Mental Health Strategy (NMHS) (8.0 per cent), private hospital insurance premium rebates (4.5 per cent), and research and other time limited program and project support (2.0 per cent) (table 11A.20).

Real expenditure per person at State and Territory discretion has increased over time (figure 11.18). Data in figure 11.18 for State and Territory government expenditure include Australian Government funds provided as part of base grants under the Australian Health Care Agreements, but exclude special purpose grants provided for mental health reform and also funding provided to states and territories

by the DVA. The data are thus referred to as expenditure 'at State and Territory discretion'. The data in figure 11.18 exclude depreciation. Estimates of depreciation are presented in table 11A.24. State and Territory government expenditure estimates excluding revenue from other sources and other Australian Government funds are presented in table 11A.23. The revenue categories are subject to minimal validation and may be inconsistently treated across jurisdictions. In addition, it is not possible to extract revenue from other sources and other Australian Government funds uniformly across time.

**Figure 11.18 Real recurrent expenditure at the discretion of State and Territory governments, per person (2004-05 dollars)<sup>a, b, c, d, e, f</sup>**



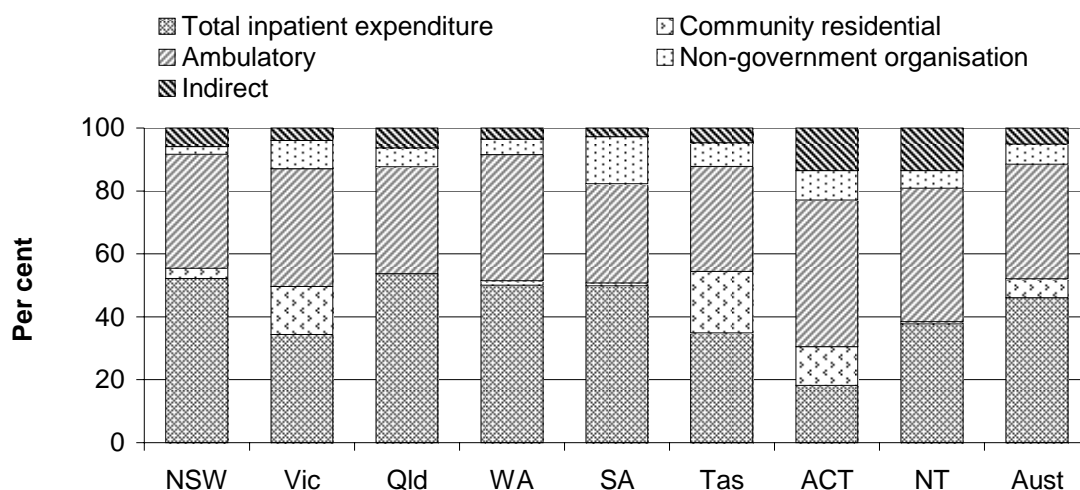
<sup>a</sup> 2004-05 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2007*. <sup>b</sup> Constant price expenditure (2004-05 dollars), using State and Territory implicit price deflators for general government final consumption on hospital clinical services (table 11A.54). <sup>c</sup> Estimates of State and Territory government spending include revenue from other sources (including patient fees and reimbursement by third party compensation insurers) and 'other Australian Government funds', but exclude Australian Government funding provided under the NMHS and through the DVA. <sup>d</sup> Depreciation is excluded for all years. Depreciation estimates are reported in table 11A.24. <sup>e</sup> Funding is a mix of Australian Government funds provided under the base grants of the Australian Health Care Agreements, funds provided by State and Territory governments and revenue from other sources noted above (footnote c). <sup>f</sup> SA data for 2004-05 contains a one-off payment of around \$25 million made to NGOs for services to be provided over the subsequent 2-3 year period.

Source: State and Territory governments (unpublished); table 11A.21; DHA (unpublished); table 11A.54.

Figure 11.19 shows how expenditure at the discretion of State and Territory governments was distributed across the range of mental health services in 2004-05. It does not show the distribution of the Australian Government expenditure discussed under figure 11.17.



Figure 11.19 **State and Territory recurrent expenditure, by service category, 2004-05**<sup>a, b, c, d, e, f, g</sup>



<sup>a</sup> 2004-05 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2007*. <sup>b</sup> Includes all spending regardless of source of funds. <sup>c</sup> Depreciation is excluded. Depreciation estimates are reported in table 11A.24. <sup>d</sup> Community residential is defined as all staffed community-based units (external to the campus of a general hospital or psychiatric institution) regardless of the number of hours that staff are present. <sup>e</sup> The differential reporting of clinical service providers and non-government organisations artificially segregates the mental health data. Given that the role of non-government organisations varies across jurisdictions, the level of non-government organisation resourcing does not accurately reflect the level of community support services available. <sup>f</sup> Queensland does not fund community residential services, but it funds a number of extended treatment services (both campus and non-campus-based), which provide longer term inpatient treatment and rehabilitation services with full clinical staffing for 24 hours a day, seven days a week. <sup>g</sup> SA data for 2004-05 contains a one-off payment of around \$25 million made to NGOs for services to be provided over the subsequent 2-3 year period.

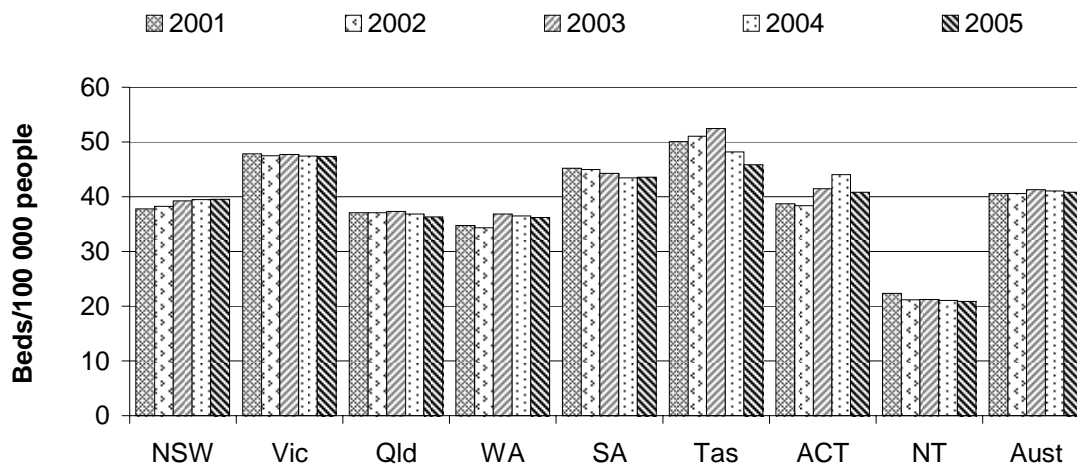
Source: State and Territory governments (unpublished); table 11A.25.

### Size and scope of sector

#### *The number of mental health beds*

Beds are counted as those immediately available for use at 30 June by admitted patients if required. They are available immediately — or within a reasonable period of time — for use if located in a suitable place for care with nursing or other auxiliary staff available. Also included are beds in wards that are temporarily closed for reasons such as renovation or strike, but that would normally be open. Figure 11.20 presents the number of beds per 100 000 people for public hospitals and community residential facilities combined.

Figure 11.20 **Mental health beds in public hospitals and publicly funded community residential units, 30 June<sup>a, b</sup>**

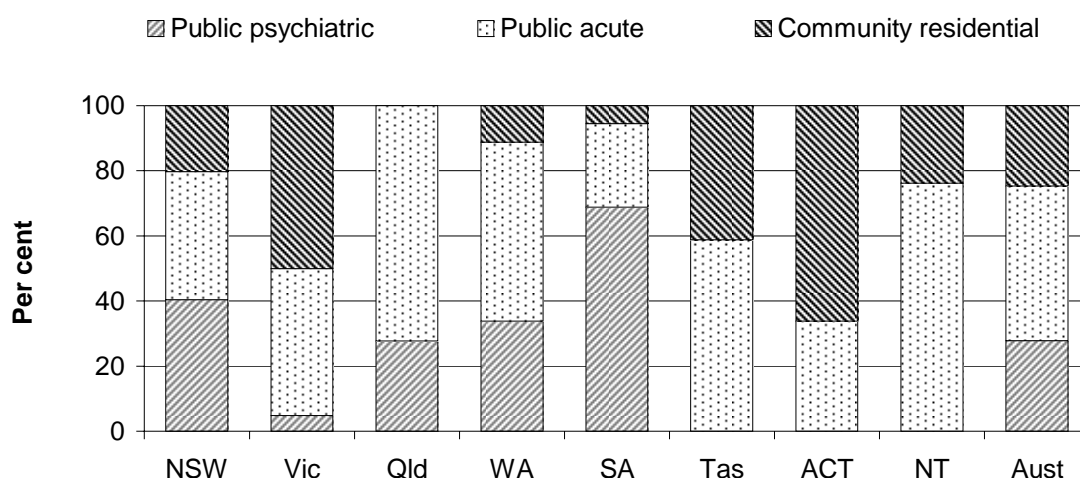


<sup>a</sup> 2005 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2007*. <sup>b</sup> Includes beds in public hospitals and publicly funded community residential units.

Source: State and Territory governments (unpublished); table 11A.26.

Figure 11.21 presents the number of beds by service category for 2005. These data show the differences in service mix across states and territories. Queensland does not fund community residential services, but it funds a number of extended treatment services (both campus- and non-campus-based) that provide longer term inpatient treatment and rehabilitation services with full clinical staffing for 24 hours a day, seven days a week. Queensland does not report these beds as community residential beds because it considers them to be substantially different from beds described as such in other states and territories.

Figure 11.21 Beds, by service category, 30 June 2005<sup>a, b, c</sup>



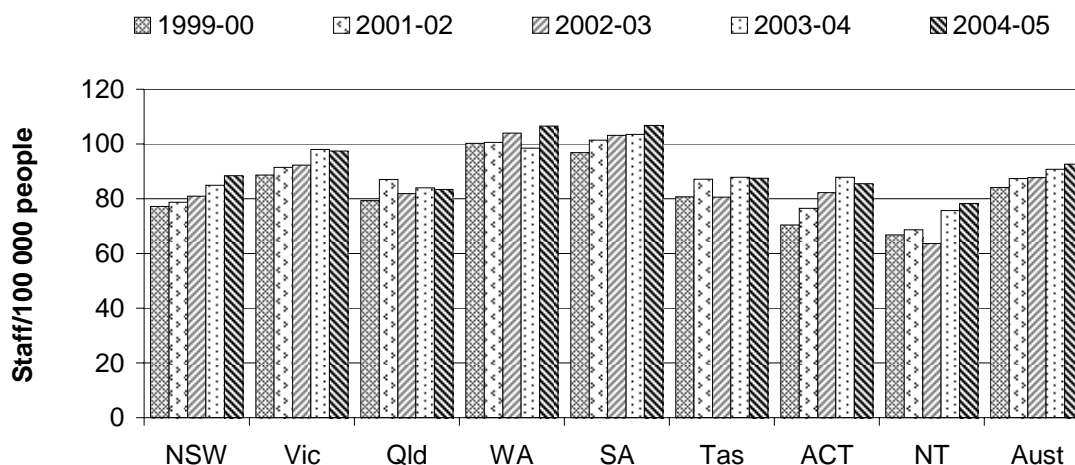
<sup>a</sup> 2005 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2007*. <sup>b</sup> Queensland does not fund community residential services, but it funds a number of campus-based and non-campus-based extended treatment services. These services are reported either as beds in public acute hospitals or beds in public psychiatric hospitals. <sup>c</sup> Tasmania, the ACT and the NT did not have public psychiatric beds in 2005.

Source: State and Territory governments (unpublished); table 11A.26.

### Staff

Figure 11.22 reports full time equivalent (FTE) direct care staff per 100 000 people and includes only staff within the health professional categories of ‘medical’, ‘nursing’ and ‘allied health’. ‘Other personal care’ direct care staff are excluded. ‘Medical’ staff consist of consultant psychiatrists, psychiatry registrars, and other medical officers who are neither registered as psychiatrists within the State or Territory, nor are formal trainees of the Royal Australian and New Zealand College of Psychiatrists’ Postgraduate Training Program. ‘Nursing’ consists of registered and non-registered nurses. ‘Allied health’ consists of occupational therapists, social workers, psychologists and other allied health staff. ‘Other personal care’ staff include attendants, assistants, home companions, family aides, ward helpers, orderlies, ward assistants and nursing assistants who are engaged primarily in the provision of personal care to patients or residents and who are not formally qualified or are still training in nursing or allied health professions. Definitions for staffing categories are provided in more detail in section 11.7.

Figure 11.22 FTE health professional direct care staff per 100 000 people<sup>a, b, c</sup>



<sup>a</sup> 2004-05 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2007*. <sup>b</sup> Includes health professional occupational categories only. <sup>c</sup> Community residential incorporates all staffed community-based units, regardless of the number of hours that staff are present.

Source: State and Territory governments (unpublished); table 11A.27.

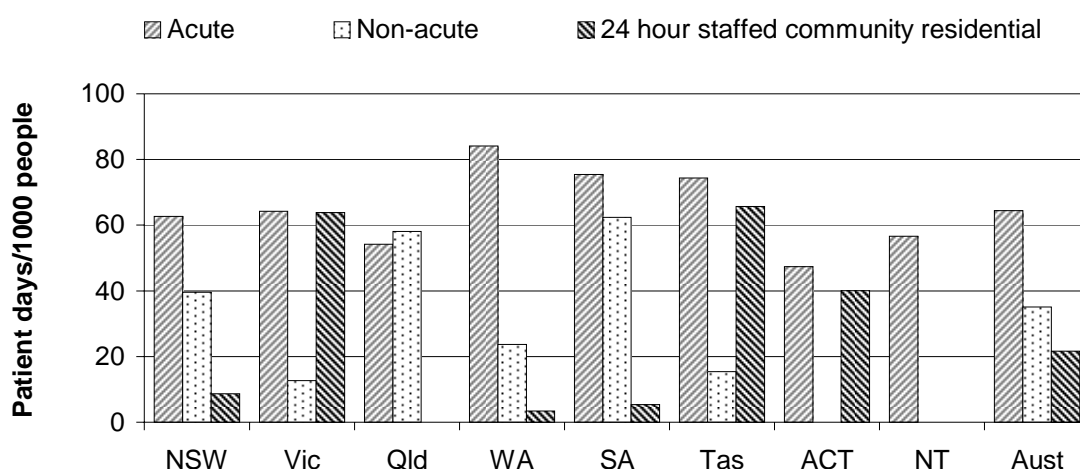
Nursing staff comprise the largest FTE component of health care professionals employed in mental health services. Across Australia in 2004-05, 60.2 nurses per 100 000 people were working in specialised mental health services, compared with 21.9 allied health care staff and 10.5 medical staff (table 11A.27). FTE direct care staff employed in specialised mental health services, by service setting, are reported in table 11A.28.

### *Services provided*

Estimating activity across the specialised mental health services sector is problematic. Data for patient days are provided in figure 11.23 by acute, non-acute and 24 hour staffed community residential care (as defined in box 11.17).<sup>6</sup> Hospital inpatient days and community residential patient days are included in figure 11.23, but other types of community service are not covered. Collection of data outlining community mental health care patient contacts commenced in July 2000 as part of the national minimum data set, although there are difficulties with data quality. The earlier caveat for the apparent absence of community residential beds in Queensland also applies to the data in figure 11.23.

<sup>6</sup> Under the NSMHS, patient days are all days or part days for which the patient was in hospital during the survey period, regardless of the original date of admission or discharge.

Figure 11.23 Mental health patient days, 2004-05<sup>a, b, c, d</sup>



<sup>a</sup> 2004-05 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2007*. <sup>b</sup> Queensland does not fund community residential services, but it funds a number of campus-based and non-campus-based extended treatment services. Data from these services are included as non-acute. <sup>c</sup> The ACT and the NT did not provide mental health care in non-acute units. <sup>d</sup> The NT did not provide mental health care in 24 hour staffed community residential facilities.

Source: State and Territory governments (unpublished); table 11A.29.

In public psychiatric hospitals in 2003-04, there were 12 905 overnight separations and 1283 same day separations with specialised psychiatric care (table 11A.30). In public acute hospitals there were 70 293 overnight separations and 5749 same day separations with specialised psychiatric care. Schizophrenia accounted for a large proportion of overnight separations related to mental disorders in public hospitals (24.1 per cent in public acute hospitals and 26.9 per cent in public psychiatric hospitals) (table 11A.30).

Unlike the general acute hospital sector, mental health has few procedural same day admissions, these being mainly related to electroconvulsive therapy treatment of people living in the community, which represented 6–10 per cent of all same day separations. Work for the Mental Health Classification and Service Costs Project suggested that the majority of same day hospitalisations are better described as ambulatory care and involve consumer attendance at a variety of day and group-based programs that otherwise could be provided in community settings (Buckingham *et al.* 1998).

### *Services by general practitioners*

Limited data are available on GP care of mental health patients. The following data are collected from a sample of 1000 GPs as part of the BEACH (Bettering the

Evaluation and Care of Health) survey. In 2005-06, 11.1 of every 100 encounters with a GP involved mental health problems. The most frequently reported mental health related problem managed in GP encounters was depression (3.6 per 100 GP encounters). Anxiety (1.8 per 100 GP encounters) and sleep disturbance (1.6 per 100 GP encounters) were the next most common psychological problems managed. In 2005-06, depression was the fourth most frequently managed problem by a GP (Britt *et al.* 2007).<sup>7</sup>

### *Indigenous patients*

Limited data are available on specialised psychiatric care of Indigenous patients in hospital. Comparisons are difficult because data on Indigenous status are incomplete and Indigenous people and other Australians may differ in their use of hospital services relative to other health services. The data reflect a range of factors, such as: the spectrum of public, primary care and post-hospital care available; Indigenous people's access to these as well as hospital services; social and physical infrastructure services for Indigenous people; and differences in the complexity, incidence and prevalence of disorders. The average length of stay for Indigenous people was slightly more than that for the total population (table 11.7).

**Table 11.7 Specialised psychiatric care, by Indigenous status, 2003-04<sup>a, b, c</sup>**

No.	Same day separations	Overnight separations	Total separations	Total patient days	Total psychiatric care days	Average length of stay (overnight)	Psychiatric care days per overnight separation
Indigenous	109	2 295	2 404	54 406	54 051	23.7	23.6
Total population	3 492	30 779	34 271	941 723	934 985	20.7	30.4

<sup>a</sup> The completeness of data on Indigenous status varies, so these data need to be used with care.

<sup>b</sup> Specialised psychiatric care refers to separations in which at least one day of specialised psychiatric care was received. <sup>c</sup> Data are for Queensland, WA, SA and the NT only.

Source: AIHW (2005b); table 11A.31.

Schizophrenia disorders accounted for a large proportion of overnight specialised psychiatric care separations reported for Indigenous patients in Australia in 2003-04 (30.7 per cent). They also accounted for around 37.4 per cent of patient days for Indigenous patients and a similar percentage of psychiatric care days (37.6 per cent) (table 11A.32).

<sup>7</sup> A GP often managed more than one problem at a single encounter. Problems managed reflect the GP's understanding of the health problem presented by the patient.

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## Framework of performance indicators

The distinction between prevention and intervention is difficult to maintain in the case of mental illness. Preventing the onset of mental illness is challenging, primarily because individual disorders have many origins. Most efforts have been directed at treating mental illness when it occurs, determining the most appropriate setting for providing treatment, and emphasising early intervention. The indicators used in this Report focus on service delivery reforms that commenced under the First National Mental Health Plan (1993–1998) and were extended under the Second and Third Plans (1998–2003 and 2003–2008 respectively). The second plan emphasised promoting mental health and preventing mental illness. The performance indicator framework will be redeveloped in future reports to reflect these components of mental illness management and the new mental health plan.

The framework of performance indicators for mental health services builds on government objectives for mental health service delivery (box 11.18) as encompassed in the NMHS. The framework reports on the equity, effectiveness and efficiency of specialised mental health services. It covers a number of service delivery types (institutional and community-based services) and indicators of systemwide performance. Improving the framework is a priority of the Review and the Australian Health Ministers Advisory Council's National Mental Health Working Group.

### Box 11.18 Objectives for mental health service delivery

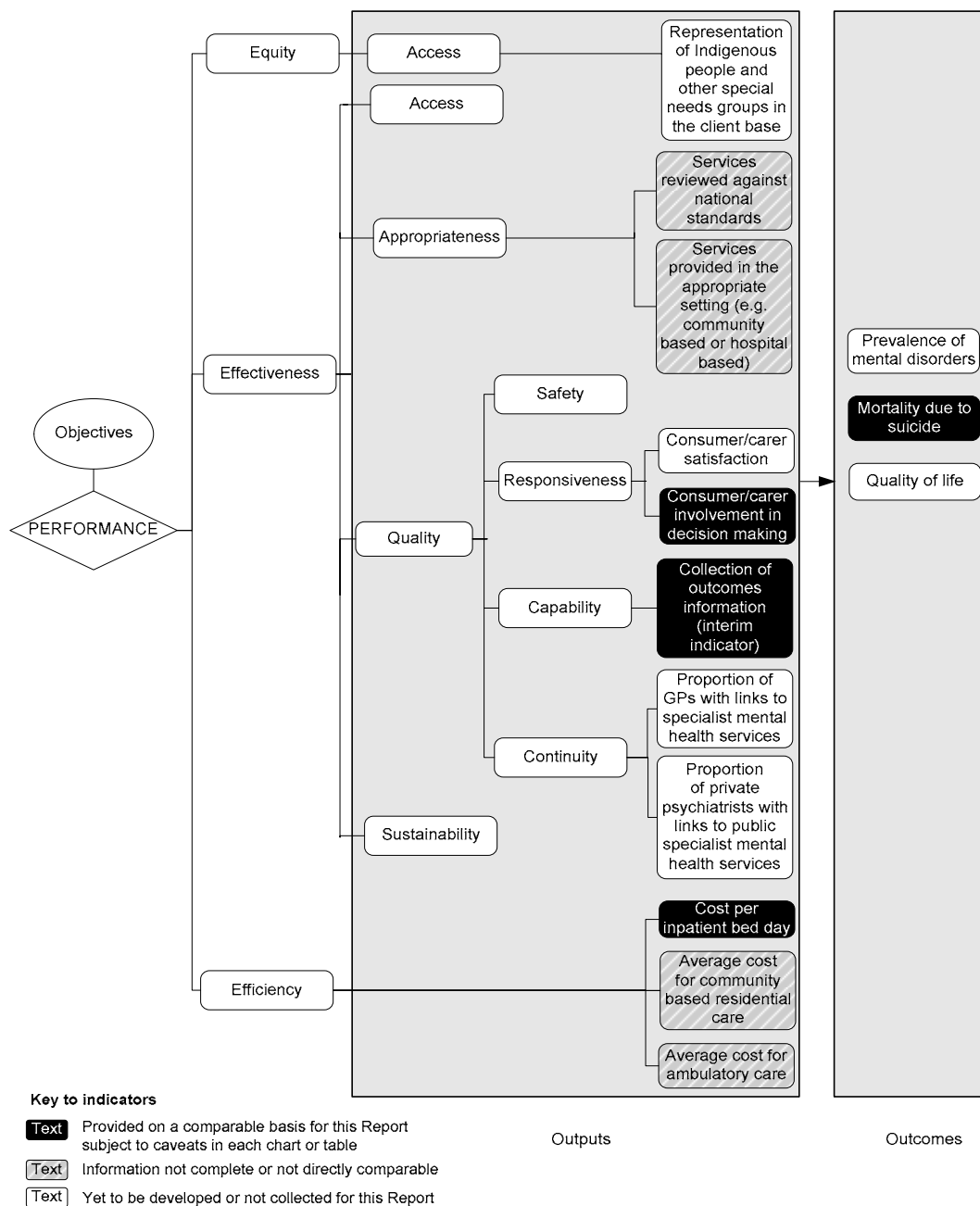
Key objectives include to:

- improve the effectiveness and quality of service delivery and outcomes
- promote, where appropriate, community awareness of mental health problems
- prevent, where possible, the development of mental health problems and mental disorders
- undertake, where appropriate, early intervention of mental health problems and mental disorders
- reduce, where possible, the impact of mental disorders on individuals, families and the community
- assure the rights of persons with mental disorders
- encourage partnerships among service providers and between service providers and the community.

Governments also aim to provide services in an equitable and efficient manner.

The performance indicator framework shows which data are comparable in the 2007 Report (figure 11.24). For data that are not considered directly comparable, the text includes relevant caveats and supporting commentary. Chapter 1 discusses data comparability from a Report-wide perspective (see section 1.6). The ‘Health preface’ explains the performance indicator framework for health services as a whole, including the sub-dimensions for quality and sustainability that have been added to the standard Review framework for health services.

Figure 11.24 Performance indicators for mental health management





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## Key performance indicator results

### *Outputs*

#### *Equity — representation of Indigenous people and others in the client base*

The Steering Committee has identified the ‘representation of Indigenous people and other special needs groups in the client base’ as a key area for development in future reports (box 11.19).

**Box 11.19 Representation of Indigenous people and other special needs groups in the client base**

The ‘representation of Indigenous people and other special needs groups in the client base’ is an indicator of governments’ aim to provide mental health services in an equitable manner, including access to services by special needs groups such as Indigenous people.

### *Access*

The Steering Committee has identified access as an area for reporting, but no indicators have yet been developed.

#### *Appropriateness — services reviewed against the national standards*

‘Services reviewed against the national standards for Mental Health Services and assessed as meeting all or most standards’ is an effectiveness indicator of mental health management (box 11.20).

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**Box 11.20 Services reviewed against the national standards**

‘Services reviewed against the national standards for Mental Health Services and assessed as meeting all or most standards’ is a process indicator of appropriateness, reflecting progress being made in meeting the national standards for mental health care. Data are reported separately for the proportion of services assessed at level 1 and at level 2, where level 1 and level 2 are defined as:

- Services assessed at level 1. The number of specialised public mental health services that have formally been reviewed against the National Standards for Mental Health Services by an external accreditation agency and assessed as meeting all Standards.
- Services assessed at level 2. The number of specialised public mental health services that have formally been reviewed against the National Standards for Mental Health Services by an external accreditation agency and assessed as meeting some but not all Standards.

The national standards are outlined in box 11.21.

External accreditation agencies, such as the Australian Council on Healthcare Standards, undertake accreditation of a parent health organisation (for example, a hospital) that may cover a number of specialist services, including mental health services. Accreditation of a parent organisation does not currently require a mental health service to be separately assessed against the national standards; rather, assessment against the national standards must be specifically requested and involves a separate review process.

### Box 11.21 The National Standards for Mental Health Services

The National Standards for Mental Health Services were developed under the First National Mental Health Plan for use in assessing service quality and as a guide for continuous quality improvement in all Australian mental health services. They comprise 11 major criteria:

1. rights
2. safety
3. consumer and carer participation
4. promoting community acceptance
5. privacy and confidentiality
6. prevention and mental health promotion
7. cultural awareness
8. integration
9. service development
10. documentation
11. delivery of care.

Source: DHA (2002).

Data in table 11.8 show the percentage of specialised public mental health services that have completed an external review process against the National Standards for Mental Health Services and have been assessed as meeting ‘all standards’ (level 1) or of meeting ‘some but not all Standards’ (level 2).

**Table 11.8 Specialised public mental health services reviewed against the National Standards for Mental Health Services (per cent)**

	<i>NSW</i>	<i>Vic<sup>a</sup></i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
2002-03									
Level 1	na	na	31.1	na	11.7	na	81.3	–	na
Level 2	na	na	62.2	na	14.6	na	na	–	na
2003-04									
Level 1	na	100.0	84.2	na	49.5	na	81.3	50.0	na
Level 2	na	–	9.2	na	5.6	na	na	–	na
2004-05									
Level 1	73.4	100.0	80.0	64.5	72.7	46.9	87.5	50.0	74.8
Level 2	0.6	–	7.5	12.9	2.7	–	–	50.0	2.2

<sup>a</sup> Victoria has some services currently in the process of re-accreditation.

na Not available. – Nil or rounded to zero.

Source: State and Territory governments (unpublished); table 11A.33.

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*Appropriateness — services provided in the appropriate setting*

‘Services provided in the appropriate setting’ is an effectiveness indicator of mental health management (box 11.22).

**Box 11.22 Services provided in the appropriate setting**

‘Services provided in the appropriate setting’ is an indicator of the development of local comprehensive mental health service systems advocated by the NMHS. Mental health services must be capable of responding to the individual needs of people with mental disorders and of providing continuity of care, so consumers can move between services as their needs change. The strategy advocates:

- a reduced reliance on stand-alone psychiatric hospitals
- the expanded delivery of community-based care integrated with inpatient care
- mental health services being mainstreamed with other components of health care.

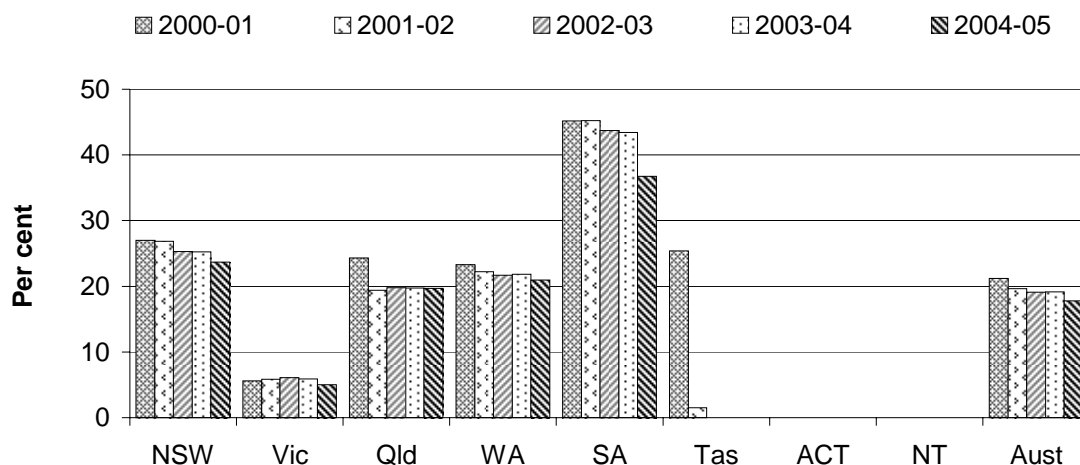
More appropriate treatment options can be provided if the service setting is substituted by encouraging the treatment of patients in community settings and public (non-psychiatric) hospitals rather than in stand-alone psychiatric hospitals.

Two measures of ‘services provided in the appropriate setting’ are reported.

- Recurrent expenditure on stand-alone psychiatric hospitals as a proportion of total spending on mental health services. A low proportion for this indicator is desirable, reflecting a low reliance on stand-alone hospitals.
- Acute patient days in public acute hospitals as a proportion of the total acute inpatient bed days in public acute and psychiatric hospitals. A high proportion for this indicator is desirable, reflecting greater mainstreaming of mental health services.

Figure 11.25 shows recurrent expenditure on stand-alone psychiatric hospitals as a proportion of total expenditure on mental health services.

Figure 11.25 Recurrent expenditure on stand-alone psychiatric hospitals as a proportion of total expenditure on mental health services<sup>a, b, c</sup>

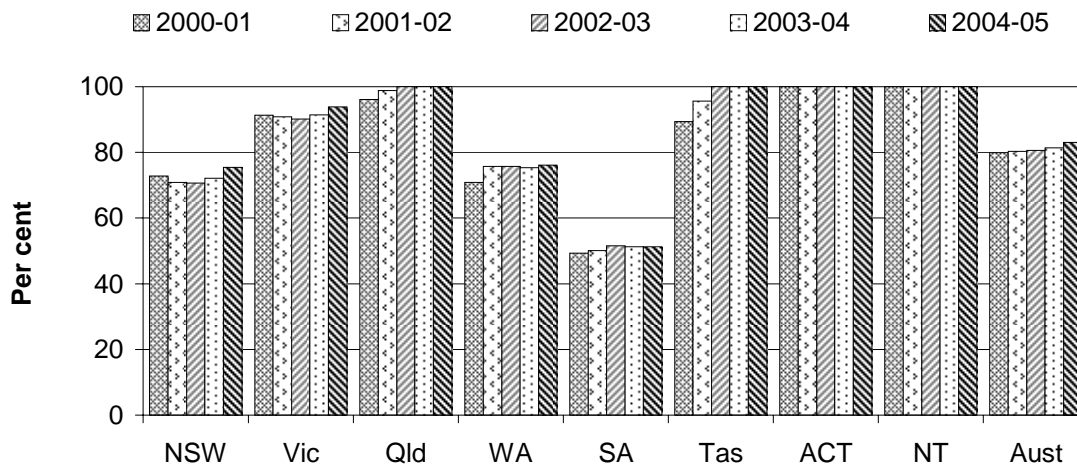


<sup>a</sup> 2004-05 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2007*. <sup>b</sup> The ACT and the NT do not have public psychiatric hospitals. Tasmania did not have public psychiatric hospitals in 2002-03, 2003-04 or 2004-05. <sup>c</sup> SA data for 2004-05 contains a one-off payment of around \$25 million made to NGOs for services to be provided over the subsequent 2-3 year period.

Source: State and Territory governments (unpublished); table 11A.34.

Figure 11.26 shows acute patient days in public acute hospitals as a proportion of the total acute inpatient bed days in public acute and psychiatric hospitals. The proportion of acute patient days in public acute hospitals as a proportion of total acute inpatient bed days in public acute and psychiatric hospitals has increased slightly over the period from 2000-2001 to 2004-05.

**Figure 11.26 Acute patient days in public acute hospitals as a proportion of total acute inpatient bed days in public acute and psychiatric hospitals<sup>a</sup>**



<sup>a</sup> 2004-05 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2007*.

Source: State and Territory governments (unpublished); table 11A.34.

### *Quality — consumer and carer satisfaction*

The Steering Committee has identified ‘consumer and carer satisfaction’ as an area for development in future reports (box 11.23).

#### **Box 11.23 Consumer and carer satisfaction**

‘Consumer and carer satisfaction’ is an indicator of satisfaction with both clinician’s responses and with services provided in all areas of mental health. Both are important aspects of the NMHS.

### *Quality — consumer and carer involvement in decision making*

‘Consumer and carer involvement in decision making’ is an effectiveness indicator of mental health management (box 11.24).

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**Box 11.24 Consumer and carer involvement in decision making**

'Consumer and carer involvement in decision making' is an important aspect of the NMHS. It is an indicator of consumers' and carers' involvement at the service delivery level, where they have the opportunity to influence the services they receive.

The indicator relates to the arrangements that allow consumers and carers to contribute to local service planning and delivery in specialised mental health services. Arrangements are grouped into four categories:

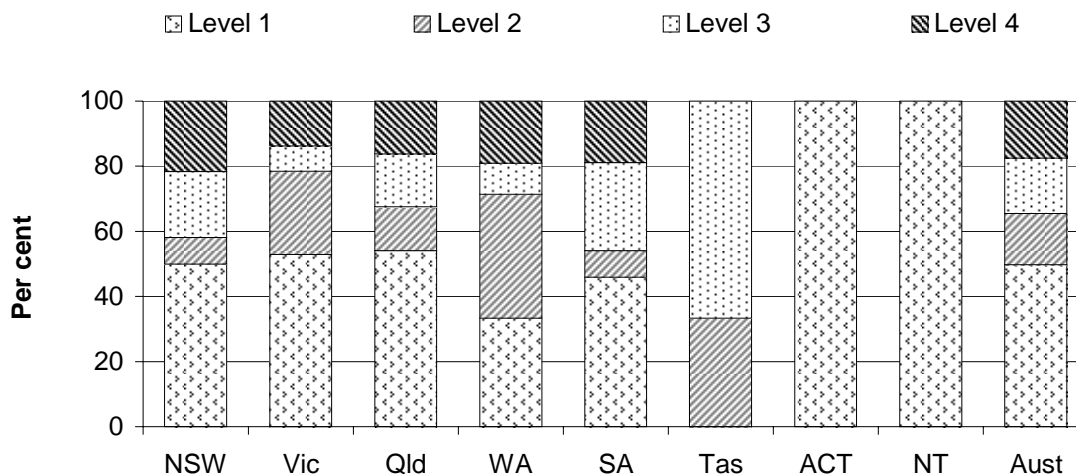
- level 1 — appointment of a person to represent the interests of consumers and carers on the organisation management committee, or a specific consumer and carer advisory group to advise on all aspects of service delivery
- level 2 — a specific consumer and carer advisory group to advise on some aspects of service delivery
- level 3 — participation of consumers and carers in broad-based committees
- level 4 — other/no arrangements.

An organisation can be classified at only one level. A high proportion of organisations with level 1 arrangements is desirable, while a high proportion of organisations with level 4 arrangements is undesirable.

'Paid consumer and carer consultants per 10 000 clinicians' reports the number of paid consumer consultants per 10 000 clinical staff and the number of paid carer consultants per 10 000 clinical staff. Higher numbers of these imply a greater chance that paid consumers and carers can be involved in decision making.

Figure 11.27 illustrates the degree of consumer and carer participation in decision making. Consumer and carer involvement in decision making will be considered for improved reporting in the future.

**Figure 11.27 Organisations with consumer and carer participation in decision making, 2005<sup>a, b, c, d, e</sup>**



<sup>a</sup> 2004 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2007*. Non-government organisations are included only where they provide staffed residential services.

<sup>b</sup> NSW advised that the government has no authority to require consumer participation in services delivered through the primary care program. <sup>c</sup> Victoria advised that its model of consumer consultants fits poorly with the Australian Health Care Agreement categories. It has paid consumer consultants working in mental health services. Many agencies report these consultants in the 'other' category, which has a low ranking and, according to Victoria, does not reflect the active role played by consumer consultants in service operation.

<sup>d</sup> WA advised that the National Survey of Mental Health Services does not accurately represent consumer and carer participation strategies used in WA. High priority is given to the involvement of consumers and carers at a state, regional and health service level in developing a responsive mental health service. Several key consumer and carer advisory groups are supported and provided with financial assistance by the Office of Mental Health. Collectively, these groups provide advice and representation on consumer and carer issues. The Department of Health Executive has endorsed stage 1 of a comprehensive 'Consumer Participation Plan'. The Plan outlines a framework for a coordinated statewide consumer participation system. Stage 1 introduces initiatives related to education, training and advocacy, that will result in the introduction of consumer consultants in all public Mental Health Services in WA. <sup>e</sup> An expanded range of indicators of consumer and carer participation are reported in the National Mental Health Report.

Source: State and Territory governments (unpublished); table 11A.35.

Table 11.9 illustrates the number of paid consumer and carer consultants per 10 000 clinicians. This is the first time this indicator has been reported and many jurisdictions either do not have paid consultants or are unable to extract the data.



**Table 11.9 Paid consumer and carer consultants per 10 000 clinical staff<sup>a</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Paid consumer consultants per 10 000 clinicians									
2003	na	na	19.5	na	12.6	na	na	–	na
2004	25.9	na	21.6	na	16.4	na	na	–	na
2005	26.7	na	24.4	na	23.7	na	na	–	na
Paid carer consultants per 10 000 clinicians									
2003	na	na	3.2	na	–	na	na	–	na
2004	1.4	na	3.1	na	–	na	na	–	na
2005	3.3	na	3.1	na	–	na	na	–	na

<sup>a</sup> 2004-05 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2007*. – Nil or rounded to zero. **na** Not available. .. Not applicable.

Source: State and Territory governments (unpublished); table 11A.35.

### *Quality — collection of outcomes information (interim indicator)*

The ‘Collection of outcomes information’ is an interim effectiveness indicator of mental health management (box 11.25).

#### **Box 11.25 Collection of outcomes information (interim indicator)**

The ‘Collection of outcomes information’ is an interim indicator until information on client outcomes is available. Establishing a system for the routine monitoring of consumer outcomes was introduced as part of the National Mental Health Plan 2003–2008. Jurisdictions are introducing a collection that will enable reporting in future (section 11.5).

States and territories have taken the following approach to introducing consumer outcome measurement as part of day-to-day service delivery:

- measures to include ratings by clinicians and self-ratings by consumers
- all clinical staff to have undergone training in collection
- processes established to ensure uniformity in collection
- funding for information systems to store, analyse and report on the data
- a national approach to data analysis, reporting and benchmarking (DHA 2002).

This indicator is the proportion of specialised mental health services that have introduced routine collection of consumer outcome measurement. A high proportion is desirable for this indicator.

The percentages of specialised mental health services that have introduced routine consumer outcome measurement are shown in table 11.10.

**Table 11.10 Specialised mental health services that introduced the routine collection of consumer outcome measurement (per cent)<sup>a</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
June 2003	77.3	72.6	47.1	7.4	–	94.4	100.0	100.0	63.3
June 2004	100.0	98.1	100.0	71.0	49.5	94.4	100.0	100.0	82.9
June 2005	100.0	98.2	100.0	100.0	78.1	96.9	100.0	100.0	93.2

<sup>a</sup> Data are based on reports from jurisdictions. Jurisdictions report at varying levels, reflecting differences in service structure — for example, data may be reported at area health service level or at hospital level, with each level containing a number of specialist mental health services. Data are thus aggregated. – Nil or rounded to zero.

Source: State and Territory governments; table 11A.36.

*Quality — proportion of general practitioners with links to specialist mental health services*

The Steering Committee has identified the ‘proportion of GPs with links to specialist mental health services’ as an indicator of the effectiveness of mental health management (box 11.26). Data for this indicator were not available for the 2007 Report.

**Box 11.26 Proportion of general practitioners with links to specialist mental health services**

The ‘proportion of GPs with links to specialist mental health services’ is an indicator of the objective of mental health service delivery to provide continuity of care. GPs can be an important first point of contact for those with a mental illness.

*Quality — proportion of private psychiatrists with links to public specialist mental health services*

The Steering Committee has identified the ‘proportion of private psychiatrists with links to public specialist mental health services’ as an indicator of the effectiveness of mental health management (box 11.27). Data for this indicator were not available for the 2007 Report.

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**Box 11.27 Proportion of private psychiatrists with links to public specialist mental health services**

The 'proportion of private psychiatrists with links to public specialist mental health services' is an indicator of the objective of mental health service delivery to provide continuity of care.

*Sustainability*

The Steering Committee has identified sustainability as an area for reporting but no indicators have yet been identified.

*Efficiency*

Data for 2004-05 are preliminary and will be further validated as part of the production of the annual National Mental Health Report. They therefore need to be interpreted with caution.

*Efficiency — cost per inpatient bed day*

'Cost per inpatient bed day' is an efficiency indicator of mental health management (box 11.28).

**Box 11.28 Cost per inpatient bed day**

The 'cost per inpatient bed day' is a proxy indicator of the efficiency of mental health service delivery. An aim of mental health service delivery is to provide services in an efficient manner.

This indicator is defined as the cost of providing inpatient services per inpatient bed day. A low cost per inpatient bed day can indicate efficiency, although caution must be used because the cost per inpatient bed day does not provide any information on the quality of service provided.

This indicator is affected by factors such as differences in the client mix and average length of stay. The client mix in inpatient settings may differ — for example, some jurisdictions treat a higher proportion of less complex patients in inpatient settings rather than in the community. Longer lengths of stay may also be associated with lower average inpatient day costs because the costs of admission, discharge and more intensive treatment early in a stay are spread over more days of care.

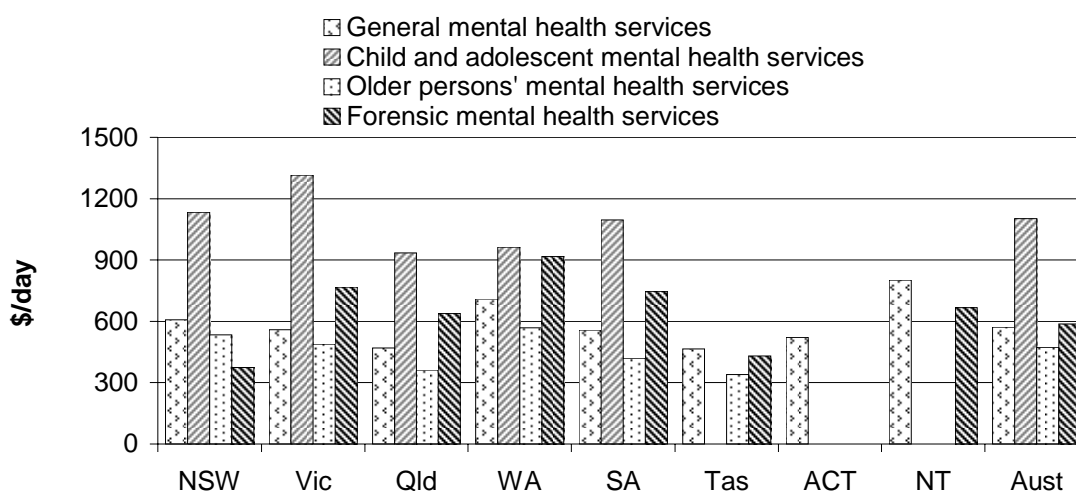
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**Box 11.28 (Continued)**

The most suitable indicator for mental health services would be to adjust the number of separations by the type and complexity of cases, to develop a cost per casemix-adjusted separation similar to that presented for public hospitals (chapter 9), but casemix data for specialised mental health services are not available.

Reported real inpatient costs per day are disaggregated by inpatient program type (general mental health services, child and adolescent mental health services, older persons' mental health services and forensic mental health services) and hospital type (psychiatric hospitals [acute units], psychiatric hospitals [non-acute units] and general hospitals). Disaggregating these data improves comparability across jurisdictions. Real inpatient costs per day are presented in figures 11.28 (by inpatient program type) and 11.29 (by hospital type). Changes over time partly reflect institutional change in accordance with the NMHS.

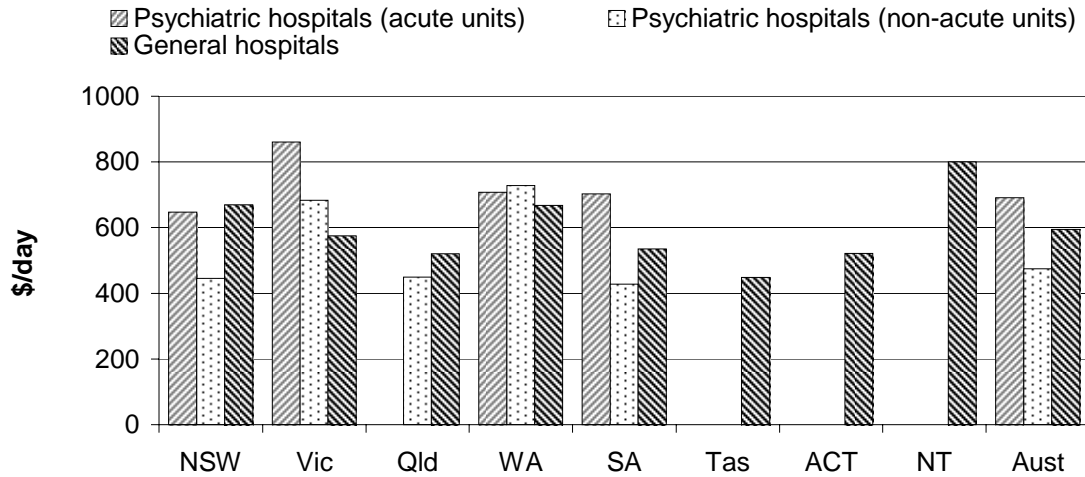
**Figure 11.28 Real average recurrent cost per inpatient bed day, public hospitals, by inpatient program type, 2004-05<sup>a, b, c, d, e, f</sup>**



<sup>a</sup> 2004-05 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2007*. <sup>b</sup> Depreciation is excluded. <sup>c</sup> Costs are not adjusted for differences in the complexity of cases across jurisdictions and may reflect differences in the rate of institutional change (that is, the mainstreaming of mental health services). <sup>d</sup> Constant price expenditure (in 2004-05 dollars), using State and Territory implicit price deflators for general government final consumption expenditure on hospital clinical services (table 11A.54). <sup>e</sup> Queensland advised that it provides older persons' mental health services using different service models, including campus-based and non-campus-based options. All service types are reported as older persons' mental health services, which may have the effect of lowering the average patient day costs compared with the costs of jurisdictions that report older persons' care units separately. <sup>f</sup> In 2004-05, child and adolescent mental health services were not available, or could not be separately identified, in Tasmania, the ACT and the NT. Older persons' mental health services programs were not available, or could not be separately identified, in the ACT and the NT. Tasmanian figures include child and adolescent mental health services within the general mental health services category. Forensic mental health services was not available, or could not be separately identified, in the ACT.

Source: State and Territory governments (unpublished); DHA (unpublished); table 11A.37.

**Figure 11.29 Real average recurrent cost per inpatient bed day, public hospitals, by hospital type, 2004-05<sup>a, b, c, d, e, f, g</sup>**



<sup>a</sup> 2004-05 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2007*. <sup>b</sup> Depreciation excluded. <sup>c</sup> Costs are not adjusted for differences in the complexity of cases across jurisdictions and may reflect differences in the rate of institutional change (that is, the mainstreaming of mental health services). <sup>d</sup> Constant price expenditure (in 2004-05 dollars), using State and Territory implicit price deflators for general government final consumption expenditure on hospital clinical services (table 11A.54). <sup>e</sup> Mainstreaming has occurred at different rates in different jurisdictions. Victoria advised that the data for psychiatric hospitals comprise mainly forensic services, because nearly all general psychiatric treatment occurs in mainstreamed units in general acute hospitals. This means the client profile and service costs are very different from those of a jurisdiction in which general psychiatric treatment still occurs mostly in psychiatric hospitals. <sup>f</sup> Queensland data for general hospitals include costs associated with extended treatment units that report through general acute hospitals. <sup>g</sup> Tasmania, the ACT and the NT did not have psychiatric hospitals in 2004-05.

Source: State and Territory governments (unpublished); DHA (unpublished); tables 11A.38.

### *Efficiency — average cost for community-based residential care*

The ‘average cost for community-based residential care’ is an efficiency indicator of mental health management (box 11.29).

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**Box 11.29 Average cost for community-based residential care**

The 'average cost for community-based residential care' is an indicator of the efficiency of mental health service delivery. An aim of mental health service delivery is to provide services in an efficient manner.

This indicator is defined as the cost of providing community-based residential care per patient day. A low average cost can indicate efficiency, although caution must be used because the average cost does not provide any information on the quality of service provided.

These data are likely to be affected by institutional changes occurring as a result of the NMHS. In addition, differences across jurisdictions in the types of patient admitted to community residential care affect average costs in these facilities. Average recurrent costs to government per patient day for these services are reported for both the care of adults and the care of older people. The distinction is made to reflect the differing unit costs of treating the two groups.

The average recurrent cost to government per patient day for community residential services is presented in table 11.11. For general adult units in 2004-05, the average cost to government per patient day for 24 hour staffed community residential services was an estimated \$326 nationally. For non-24 hour staffed community residential units, the average cost to government per patient day was \$202 nationally.

For jurisdictions that had community-based older persons' care units in 2004-05, the average recurrent cost to government per patient day for 24 hour staffed community residential services was \$272 nationally (table 11.11).

**Table 11.11 Average recurrent cost to government per patient day for community residential services, 2004-05<sup>a, b, c</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld<sup>d</sup></i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
General adult units									
24 hour staffed units	306	324	na	301	191	431	405	na	326
Non-24 hour staffed units	na	136	na	136	293	na	74	67	202
Older persons' care units									
24 hour staffed units	288	270	na	na	na	294	142	na	272
Non-24 hour staffed units	na	na	na	na	na	..	..	..	na

<sup>a</sup> 2004-05 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2007*. <sup>b</sup> Depreciation is excluded, although treated differently across jurisdictions. <sup>c</sup> Costs are not adjusted for differences in the complexity of cases across jurisdictions and may reflect differences in the rate of institutional change (that is, the mainstreaming of mental health services). <sup>d</sup> Queensland does not fund community residential services, although it funds a number of campus-based and non-campus-based extended treatment services. **na** Not available. **..** Not applicable.

Source: State and Territory governments (unpublished); table 11A.39.

### *Efficiency — average cost for ambulatory care*

The 'Average cost for ambulatory care' is an efficiency indicator of mental health management (box 11.30).

#### **Box 11.30 Average cost for ambulatory care**

The 'average cost for ambulatory care' is an indicator of the efficiency of mental health service delivery. An objective of mental health service delivery is to provide services in an efficient manner.

This indicator is defined as the cost of providing ambulatory care per treated patient in the community. A low average cost can indicate efficiency, although caution must be used because the average cost does not provide any information on the quality of service provided.

The provision of ambulatory treatment, rehabilitation and support to non-inpatients, and post-acute care are important components of service provision, and the Steering Committee has identified continued improvement in reporting in these areas as a priority.

Unit costs (dollars per treated patient in the community) for 2004-05 are presented here for all states and territories. The data reported for this indicator are unreliable, however, and comparisons across jurisdictions are not possible for several reasons. First, information about service costs across jurisdictions is incomplete. Second, the

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absence of unique patient identifiers in many jurisdictions means clients who use mental health services other than their usual service may be counted twice. This double counting may artificially reduce average costs in some states or territories. Victoria, WA and the NT have statewide systems of unique identifiers, so the potential for overcounting of patients in these jurisdictions is relatively low compared with that in other jurisdictions. Third, differences across jurisdictions in the complexity of cases treated, the service options available for treatment and the admission practices adopted reduce the comparability of data across states and territories. Finally, cost components such as depreciation are not measured consistently across jurisdictions.

- NSW reported ambulatory care unit costs of \$1509 per treated patient in the community in 2004-05, with 24.5 per cent of services (accounting for 12.1 per cent of expenditure) not reporting (table 11A.40).
- Victoria reported ambulatory care unit costs of \$2844, with 12.8 per cent of services (accounting for 2.7 per cent of expenditure) not reporting (table 11A.41).
- Queensland reported ambulatory care unit costs of \$1653 with all services reporting (table 11A.42).
- WA reported ambulatory care unit costs of \$2525, with all services reporting (table 11A.43).
- SA reported ambulatory care unit costs of \$1735, with 5.6 per cent of services (accounting for 3.2 per cent of expenditure) not reporting (table 11A.44).
- Tasmania reported ambulatory care unit costs of \$2030 with all services reporting (table 11A.45).
- The ACT reported ambulatory care unit costs of \$1532, with 16.7 per cent of services (accounting for 0.7 per cent of expenditure) not reporting (table 11A.46).
- The NT reported ambulatory care unit costs of \$1695, with all services reporting (table 11A.47).
- Across Australia, average ambulatory care unit costs per treated patient in the community were \$1930, with 14.5 per cent of services (accounting for 4.8 per cent of expenditure) not reporting (table 11A.48).



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## Outcomes

### *Prevalence of mental disorders*

The Steering Committee has identified the ‘prevalence of mental disorders’ as an indicator for development in future reports (box 11.31).

#### **Box 11.31 Prevalence of mental disorders**

The ‘prevalence of mental disorders’ is an outcome indicator of the objective of mental health service delivery to prevent and reduce mental health problems where possible.

There are no nationally comparable data on the prevalence of mental disorders treated by specialised mental health services, other than the data discussed in the profile (section 11.4).

### *Mortality due to suicide*

‘Mortality due to suicide’ is an outcome indicator of mental health management (box 11.32).

#### **Box 11.32 Mortality due to suicide**

‘Mortality due to suicide’ is an indicator because evidence indicates that people with a mental disorder are at a higher risk of suicide than are the general population. (They are also at a higher risk of death from other causes, such as cardiovascular disease.)

This indicator is reported as the suicide rate per 100 000 people for all people, people aged 15–24 years, people living in capital cities, people living in other urban areas, people living in rural areas and Indigenous people. While the performance of mental health services is important in reducing suicide, other government services also play a significant role. Public mental health programs are primarily concerned with providing treatment and support services for individual clients affected by serious mental illness, some of whom have either attempted, or indicated the intention, to commit suicide. Suicide prevention targeted at the wider population is also addressed through the initiatives of other government departments, non-government organisations and other special interest groups. Any impact on suicide rates, therefore, will be a result of a coordinated response across a range of collaborating agencies, including police, education, housing, justice and community services agencies.

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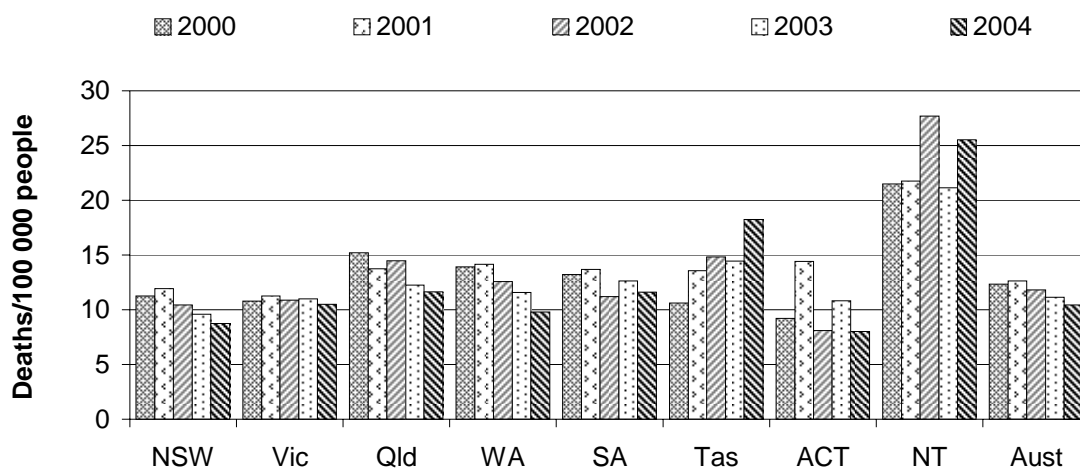
**Box 11.32 (Continued)**

In addition, many factors outside the control of mental health services may influence a person's decision to commit suicide. These include environmental, sociocultural and economic risk factors — for example, adverse childhood experiences (such as sexual abuse) can increase the risk of suicide, particularly in adolescents and young adults. Alcohol and other drugs are also often associated with an increased risk of suicidal behaviour. Other factors that can influence suicide rates include economic growth rates, which affect unemployment rates and social disadvantage. Often, a combination of these factors can increase the risk of suicidal behaviour.

Not all of those who commit suicide are patients of mental health services. An improved indicator would be restricted to suicide by patients of mental health services.

In 2004, 2098 deaths by suicide were recorded in Australia — equivalent to 10.4 deaths per 100 000 people. The national rate fell each year from 1997 to 2000, followed by a slight increase in 2001 and then further falls in 2002, 2003 and 2004. The rate for males (16.8 per 100 000 males) was almost four times that for females (4.3 per 100 000 females) in 2004 — a ratio that was constant over the 10 years to 2004 (figure 11.30 and table 11A.49). The quality of suicide data can be affected by changes in the way information is reported by certifiers, by lags in completion of coroner cases and the processing of the findings. There has been an increase in recent years in the number of open coroners' cases. Where cases are not finalised and the findings are not available to the ABS in time for publication of causes of death statistics, deaths are coded to other accidental, ill-defined or unspecified causes rather than suicide. The causes of death statistics are not revised once a coronial enquiry is finalised. Part of the reported decline in the number of deaths due to suicide may therefore reflect the increase in open coroners' cases when the statistics were finalised.

Figure 11.30 **Suicide rate**<sup>a, b, c</sup>



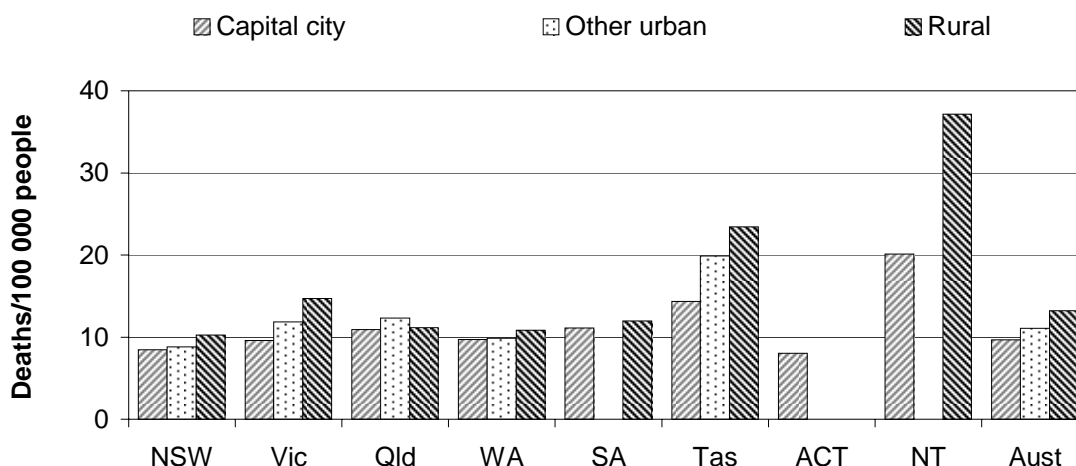
<sup>a</sup> By year of registration of death. Year-to-year variation can be influenced by coronial workloads. <sup>b</sup> The death rate is age standardised to the mid-year 2001 population. <sup>c</sup> Low populations can result in small variations in the number of suicides appearing as large changes in rates (which are not statistically significant).

Source: ABS (various issues, Cat. no. 3303.0); table 11A.50.

In 2004, suicide was the second leading cause of death (after transport accidents) for people aged 15–24 years, accounting for 19.6 per cent of deaths in this age group. Suicide was the leading cause of death for 25–34 year olds in 2004, with 22.6 per cent of deaths in this age group resulting from suicide (ABS 2006a). Table 11A.51 shows suicide death rates for 15–24 year olds for all states and territories.

Nationally the suicide rate in 2004 was higher in rural areas. There were 9.7 suicides per 100 000 people in capital cities and 11.1 suicides per 100 000 people in other urban areas, compared with 13.2 suicides per 100 000 people in rural areas in Australia in 2004 (figure 11.31).

Figure 11.31 Suicide rate, by area, 2004<sup>a, b, c, d, e</sup>



<sup>a</sup> 'Other urban' comprises centres with more than 20 000 people. 'Rural' comprises all areas except capital cities and other urban. <sup>b</sup> Death rate is age standardised to the mid-year 2001 population. <sup>c</sup> By year of registration of death. Year-to-year variation can be influenced by coronial workloads. <sup>d</sup> The ACT does not have any 'other urban' or 'rural' areas. <sup>e</sup> The NT and SA do not publish data for 'other urban'.

Source: ABS (unpublished); table 11A.52.

The Indigenous suicide rate is presented for the period 2000–2004 for four jurisdictions: Queensland, WA, SA and the NT (table 11A.53). The rate calculations have not been adjusted for differences in the completeness of identification of Indigenous deaths across jurisdictions. After adjusting for age differences between populations, the suicide rates for Indigenous people for the period 2000–2004 in the jurisdictions for which data are presented in table 11A.53 are at least twice as high as the rates for the non-Indigenous populations in those jurisdictions in 2004.

Care needs to be taken when interpreting these data because data for Indigenous people are incomplete and data for some jurisdictions are not published. In addition, Indigenous people are not always accurately identified in administrative collections (such as hospital records, and birth and death registrations) due to definition variations, different data collection methods and failure to record Indigenous status. The 'Health preface' discusses the quality of Indigenous mortality and other data.

### *Quality of life*

The Steering Committee has identified 'quality of life' as an indicator for development in future reports, but no indicators have yet been developed (box 11.33).

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**Box 11.33 Quality of life**

'Quality of life' is an outcome indicator of the objective of mental health service delivery to prevent and reduce mental health problems so as to improve the quality of life for people with a mental illness.

## 11.5 Future directions in performance reporting

### Breast cancer

Key challenges for improving reporting of breast cancer include:

- expanding the scope of reporting to include management of breast cancer
- further developing indicators of outcomes
- improving the measurement and comparability of existing indicators.

Existing performance data for breast cancer management place more emphasis on the performance of State and Territory BreastScreen Australia programs than on the treatment and ongoing management of breast cancer. This emphasis is largely due to the relative availability of breast cancer screening data across jurisdictions. The Review aims to expand reporting to incorporate treatment and clinical outcomes data.

The BreastScreen Australia program is being reviewed over July 2006 to June 2008. The evaluation will examine the benefits of the program and the risks associated with mammographic screening at two-yearly intervals for various age groups including the impact of assessment and investigation of women without a subsequent breast cancer diagnosis. The evaluation will address the appropriateness and adequacy of the reporting arrangements and key performance indicators for the Program. The Review will draw upon this evaluation when determining an appropriate indicator of early detection safety.

For some indicators, such as waiting times, the population variance provides an indication of how equitably people are treated. It avoids the definitional problems associated with other measures and fits in well with a quality improvement perspective. A small number of indicators which are best suited to reporting variance will be considered for inclusion in the 2008 Report.

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## Mental health

Key challenges for improving the reporting of mental health management are similar to those of the past year:

- improving the reporting of effectiveness and efficiency indicators for Indigenous, rural/remote and other special needs groups
- revising the performance indicator framework to account for the Third National Mental Health Plan, to ensure reporting remains consistent with government policy objectives for mental health
- improving the reporting of effectiveness/efficiency indicators for community-based mental health care.

A set of key performance indicators for use in Australia's public sector mental health services has been developed, based on the National Health Performance Framework and linked to the strategic directions of the National Mental Health Plan 2003–2008. Data on all indicators are currently available through existing collections. Work is proceeding on their implementation. Further work is required to develop indicators and measures for their collection in the areas of safety and responsiveness of services. This will then provide data covering all the domains of the National Health Performance Framework. Further information can be found in NMHWG Information Strategy Committee Performance Indicator Drafting Group (2005). The Review will investigate including some or all of the new indicators in future reports

### 11.6 Jurisdictions' comments

This section provides comments from each jurisdiction on the services covered in this section of the Report. Appendix A contains data that may assist in interpreting the performance indicators presented in this chapter. These data cover a range of demographic and geographic characteristics, including age profile, geographic distribution of the population, income levels, education levels, tenure of dwellings and cultural heritage (such as Indigenous and ethnic status).

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## Australian Government comments

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The Australian Government contributed \$660 million towards the \$1.1 billion Council of Australian Governments (COAG) reform package to achieve better health for all Australians. The initiatives include establishing a new approach to promotion, prevention and early intervention, and providing better care for people in the community, including rural and remote Australia, for older people in hospitals and for younger people with disabilities in nursing homes.

Over four years, the Australian Government will also provide an additional \$120 million to fund 605 new medical places, \$93 million to fund 1000 more nursing places, and about \$31 million to increase its contribution towards the cost of nurses' clinical training.

The 2006 Federal Budget provided \$1.9 billion in new funding over five years to improve services for people with a mental illness, their families and carers. This represents the Australian Government's commitment to the COAG National Action Plan on Mental Health. Key measures under the Australian Government's mental health package include: a major increase in clinical and health services available in the community and new team work arrangement for psychiatrists, GPs, psychologists and mental health nurses; new non-clinical and respite services for people with mental illness and their families and carers; an increase in the mental health workforce; and new programs for community awareness.

Through the 2003-08 Australian Health Care Agreements the Australian Government will maintain its commitment to the public hospital system. Assistance will be provided to the States and Territories of up to \$42 billion over five years, an increase of \$10 billion over the previous Agreements. This includes funding for Mental Health, Palliative Care and the Pathways Home program. State and Territory governments are responsible for ensuring the provision of public hospital services free of charge to public patients on the basis of clinical need and within clinically appropriate times. In 2003-04, \$7.5 billion was provided to States and Territories towards the provision of public hospital services.

The Australian Government is committed to achieving sustainable gains in the health of Aboriginal and Torres Strait Islander Australians. In 2006-07 the Australian Government committed \$485.8 million for Indigenous-specific health programs across the Health and Ageing portfolio. This includes funding to increase access to mainstream primary health care through health brokerage services in urban and regional areas; funding for additional health professionals in rural and remote areas; continuation of the Healthy for Life program, funding to combat petrol sniffing and other substance abuse, and to assist Indigenous health services in responding to mental illness and related substance abuse. These funds are in addition to the funding provided through mainstream programs, such as Medicare and the Pharmaceutical Benefits Scheme, which are becoming more responsive to meeting the health needs of Indigenous Australians.

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## **New South Wales Government comments**

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New South Wales supports the ongoing development and monitoring of performance indicators for health. These provide a framework for understanding the delivery of services both within and between jurisdictions.

The 2004-05 reporting period was a year in which the NSW health system began a major undertaking to change the way health care is provided in NSW. Like other international systems, the NSW health system faces many pressures that impact on the capacity to deliver quality health services. These include:

- increasing demand for health services
- population changes, particularly the ageing of the population
- clinical workforce shortages
- changes in the nature of illness
- introduction of new technologies
- increasing expectations of patients and providers.

In 2004, NSW developed a range of new strategies to cope with demand more effectively. These strategies include additional funding for increased bed capacity, and also for rural and regional hospitals and community-based health services to enable people to receive health care closer to home.

This is complemented by a number of business redesign strategies to improve performance to meet increasing demand, these include:

- Patient Flow Units
- Clinical services re-design
- Better ways of managing emergency patient demand and admission
- Predictable surgery plans.

NSW has adopted a performance framework to support the implementation of these strategies and monitor progress to achieving targets.

NSW is pleased with the inclusion of new performance indicators in this year's report, particularly those relating to primary and community health and the quality of public hospital performance.

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## Victorian Government comments

“ The 2006 Report on Government Services continues to provide valuable insights into the performance of key areas of public service provision. However, a key challenge continues to be the development of the Report so that it better reflects performance and outcomes of changing models of care both within and across traditional service systems, for example, Victoria’s strong focus on expanding the provision of community based care/service options and improving the integration of care across traditional organisational and program boundaries, as exemplified in the Care in your community: A planning framework for integrated ambulatory health care, is not currently captured in the measures reported.

In other areas, existing performance measures for public hospitals are becoming less useful in measuring performance, due to differences across States and Territories in how services are provided. One clear illustration of this occurs in the data on breast cancer separation rates, where differences in admission practices and service provision outside the hospital setting may largely account for what otherwise might appear to be significant differences in the level of provision of chemotherapy and radiotherapy services across jurisdictions. Another example relates to the continuing validity of available beds as a measure of health system capacity. This measure is being rendered less meaningful due to the growing shift of services from hospital to the community (for example, dialysis, rehabilitation and hospital in the home), together with new models of care such as short stay units for emergency patients and the growing trend to same day services.

Victoria strongly supports the expansion of the Report to better capture emerging new models of care as well as ensuring that the interrelationships between services across the health and aged care systems are better captured. This reflects the reality that many consumers will use multiple services and their satisfaction and health outcomes will be impacted by performance dimensions related to continuity of care, timely referral between services, and coordinated management of care and information.

A focus on interface issues is also important in recognising that, even for consumers without complex care needs, the availability of one type of health or aged care service can strongly influence the utilisation of related services. Victorian data demonstrate the direct relationship between access to affordable general practice services and the demand on public hospital emergency departments for primary-care type services. Similarly, the utilisation of acute hospitals by older people is impacted by the availability of timely assessment, rehabilitation and aged care services across different service settings.

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## Queensland Government comments



The Report on Government Services provides a valuable source of comparative information on key publicly provided health services. Queensland has performed well across a range of health indicators.

Queensland Health delivers a comprehensive health service to Queensland's population of more than 4 million people, including health promotion, disease prevention, acute hospital and non-admitted patient services, rehabilitation, mental health services, community-based care and aged care.

The Queensland Government is continuing to implement health system reforms through a five-year plan launched in October 2005, Action Plan: Building a better health service for Queensland. The action plan addresses pressures identified in the independent review of the health system led by Peter Forster, the Queensland Health Systems Review, including rapid population growth, an ageing population, new medicines and technologies, worldwide critical staff shortages across all health professions and insufficient community-based health infrastructure.

Under the action plan, the Queensland Government invested almost \$6.4 billion in just over five years to relieve pressure on health services, and this investment has been increased to \$9.7 billion. Much of this extra funding has been allocated to improve wages and other conditions for health services staff. In 2005-06, \$548 million was invested, including \$42 million extra for elective surgery, \$38 million extra for emergency departments and \$31 million extra for intensive care units.

Excellent results have been achieved in 2005-06 in relation to the key area of clinical staff recruitment under the action plan:

- 272 extra doctors were appointed by May 2006, which represented good progress towards the target of 300 appointments by December 2006
- 1082 extra nurses were appointed by May 2006, which exceeded the target of 500 appointments by December 2006
- 413 extra allied health staff were appointed by May 2006, which exceeded the target of 400 appointments by December 2006.
- Other key initiatives included:
  - \$155 million investment in the Queensland Strategy for Chronic Disease 2005-2015 which aims to prevent chronic diseases and risk factors, improve quality of life and reduce avoidable hospital admissions
  - establishment of clinical networks to improve results for patients
  - establishment of the Health Quality and Complaints Commission
  - hospital upgrades and redevelopments and other capital works.



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## Western Australian Government comments

“ The commitment to providing high-quality safe and accessible health care to all Western Australians continues. Whilst the recommendations of the Health Reform Committee remain the focus of the reform agenda, WA Health has broadened its approach, incorporating reform into the everyday business of delivering and improving the health care system. The reform program is providing more community care options. The changing focus is towards proactive and patient-participatory care models that are community-based.

Healthy Workforce – The number of undergraduate and postgraduate scholarships for nurses and midwives was doubled. Thirty-six registered nurse practitioners were established with 67 currently completing qualifications. More than 80% of the workforce required for delivering the Mental Health Strategy was recruited. The Healthy Workforce Strategic Framework was developed to guide workforce planning for the next decade. A Chief Health Professions Officer is being recruited to communicate allied health/health sciences staff views.

Healthy Hospitals – The new Metropolitan Infrastructure Development Plan maps the capital works needed to implement clinical reconfiguration. Planning for the new \$742 million Fiona Stanley Hospital is underway, new hospitals and health resource centres around the state were opened. The Healthy@Home ambulatory care program increased the number and range of services patients received in settings other than hospitals. Hospital in the Home services are saving about 100 hospital beds a day. Eight chronic disease management teams now provide community care across the metropolitan area and 24-hour phone coaching and advice for people with diabetes or chronic respiratory disease.

Healthy Partnerships – Fourteen Clinical Networks were established giving a comprehensive health care planning system that better fits community need. Partnership with local university and research institutes will see the building of two multi-million dollar medical and biotech research centres. Joint initiatives are underway with key stakeholders including consumer groups and GP divisions.

Healthy Communities – The Consumer, Carer & Community Engagement Framework developed assists staff in implementing effective engagement strategies. The first specialised eating disorder clinic opened, breast cancer services were upgraded and more localised dialysis services provided to make it easier for patients and to relieve some pressure on the tertiary hospital system. After consultation, the WA Aboriginal Primary Care Action Plan was developed, aligning Aboriginal Health with the rest of the population and the reform vision.

Healthy Resources – Procurement reform has been delivering a healthy benefit from better buying and utilisation activities saving \$16.5 million in 2005-06.

Healthy Leadership – Through initiatives such as the Leading 100 Emerging Health Leaders program, the Vital Leadership program for middle and senior managers, and the Executive Focus program, a healthier culture is developing. The WA Health Operational Plan has been developed and will build on the strengths of the health system and the third year of the health reform agenda.

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## South Australian Government comments

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The Department of Health is committed to protecting and improving the health of all South Australians by providing leadership in health reform, policy development and planning. One of the challenges for the Department of Health is achieving the health targets in SA's Strategic Plan. This involves monitoring and developing strategies to achieve the targets relating to healthy life expectancy, infant mortality, psychological distress, smoking, overweight and obesity, and Aboriginal wellbeing. Work on the SA Strategic Plan has continued throughout 2006, with an extensive community consultation conducted across SA. This was undertaken to prioritise issues and develop specific recommendations for improving the plan. Suggestions for changes to existing plan targets and ideas for how to achieve those targets formed part of this process.

Guided by findings from the Generational Health Review of the SA health system, the SA Government has progressed its commitment to reform of the State's health system by increasing prevention, early intervention and health promotion. Preventative health care has been central to health planning in SA with the establishment of the GP Plus health care centres. The centres aim to make health care more accessible by increasing collaboration between general practice and other community based health providers.

The GP Plus health care centres, in collaboration with other agencies, will provide a range of services including: antenatal and postnatal care, child health services, parenting groups, nutrition services, diabetes education, counselling for adults and families, mental health care, self management programs for people with chronic illness such as diabetes, heart and respiratory disease and education programs to promote good health and wellbeing.

Other health initiatives being undertaken in SA include:

- Increased funding for elective surgery procedures;
- Funding 50 nurses to provide support in GP clinics;
- Increasing the number of mental health workers to provide services in GPs' offices and therapy for young people;
- Extra doctors and specialists for hospitals, including an increase in emergency department doctors for public hospitals; and
- Expansion of the Family Home Visiting program for families with newborns.

Strengthening primary health care will be paramount in addressing health inequalities among our Indigenous population as well as other disadvantaged groups, and improving the health of the whole community.

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## Tasmanian Government comments



In responding to the growth in demand and cost within a sustainable budget setting, and the Government's firm commitment to improving the health status and wellbeing of Tasmanians, a number of major strategies are being progressed by the Department of Health and Human Services (DHHS). These include building systems and processes to ensure the sustainability of frontline service delivery; increasing capacity in the service system; developing innovative approaches to service delivery; and a focus on quality and safety.

During 2004-05, the period for which most of the data in the public hospital chapter reports, the Tasmanian Government assumed management of the Mersey Campus of the North West Regional Hospital. This was after a decade of private ownership and management. This was accompanied by the provision of additional funding for the Mersey Campus and for an increase in ambulance services in the region.

DHHS is currently developing a Statewide Primary Health Plan which will provide a strategic planning tool for the provision of primary health services in Tasmania over the next ten years. At the same time, the Department is developing a Tasmanian Clinical Services Plan to look at the needs and priorities across the state and the roles that individual hospitals play in meeting these needs. These plans will fit together to provide a statewide framework for sustainable health services at the primary and tertiary levels.

Initiatives implemented in 2005-06 to maintain and improve acute health services include developments at the Royal Hobart Hospital included a Geriatric Evaluation and Management Unit, a new Department of Emergency Medicine and neonatal/paediatric intensive care units. A new Department of Emergency Medicine is planned at the Launceston General Hospital and a Hospital Medical Equipment Fund to support the long-term sustainability of acute care services has been established.

Mental health reform includes the implementation of a model of care for Mental Health Services that is integrated, comprehensive, multi-disciplined and focused on recovery. This will include a twenty-four hour, seven day a week triage service to provide a single point of entry to Mental Health Services, which will enhance effective patient assessment and treatment.

Community service initiatives include:

- a comprehensive dental care package that will abolish fees for clients requiring emergency dental treatment, establish additional dental surgeries in the state's hospitals, and implement a scheme for purchasing additional private treatment for eligible adults waiting for general dental care; and
- the implementation of the new palliative care service delivery model to ensure clients can access palliative care appropriate to their needs.



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## Australian Capital Territory Government comments

“ ACT Health has six key health service delivery agencies: The Canberra Hospital, Calvary Public Hospital (run by Calvary Health Care Limited), Community Health, Mental Health ACT, the Capital Region Cancer Service and the Aged Care and Rehabilitation Service. A range of health promotion, public and environmental health services are run by the Population Health Division and there is a small core of policy and corporate staff in other divisions who support the service providers in meeting their goals. Only around 300 of the approximately 4500 ACT Health staff are employed outside the service agencies.

The ACT provides a near complete range of health services to its own residents, as well as to many people living in adjoining regions of NSW. In 2004-05, 95 per cent of ACT residents requiring public hospital services were treated within the ACT. Some of the remaining 5 per cent of patients referred interstate were those requiring very specialised high-cost, low volume services, such as organ transplantations, which are clinically unviable within the relatively small population of the region. Others may have needed medical attention while travelling outside the ACT, or chose to seek treatment in another jurisdiction for personal or family reasons.

The ACT supports the reporting of data across jurisdictions as a means of evaluating the performance of its own health system against other States and Territories and over time. However, comparisons of data across jurisdictions need to be treated with caution, because the size of the ACT's population can make indicators for selected services and target groups subject to large variations over time. Furthermore, readers need to be aware of the ACT's role as a service hub for the entire region and keep in mind that approximately 25 per cent of all ACT public hospital separations relate to NSW residents.

Caution also needs to be exercised when comparing costs across jurisdictions, because States and Territories may use different accounting methods for costing their health services. Smaller jurisdictions such as the ACT are more likely to be disadvantaged when it comes to economies of scale.

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## Northern Territory Government comments

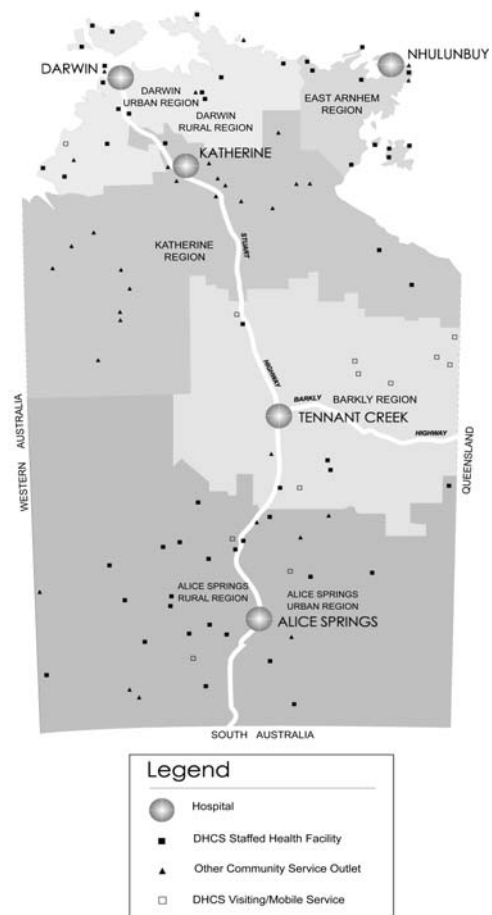
“ The Department of Health and Community Services is the major provider and funding source for hospital, health and community services in the Territory.

Comparing performance data with other jurisdictions has some difficulty due to the geographic spread, sparse population, extreme climate variations and difficulty of access to services for people living in remote areas, illustrated by the adjacent NT service outlet map.

Services are integrated between five public hospitals, a network of 98 community health centres and 100 GP practices. Hospitals are located in five population centres with a total of 620 inpatient beds. A feature of health services in the NT is the movement of people from outlying areas to hospitals, intra hospital transfers and travel assistance to receive some specialist services interstate to overcome access barriers.

Few GPs in smaller communities and only one private hospital result in a greater reliance on public health services in the NT than elsewhere. The employment of health professionals in making the system work, both in numbers and continuity of service, is paramount. ROGS indicates that FTE Practitioners and Nurses ratios per 100 000 people is the highest in the NT of any jurisdiction. In part, this has contributed to the declining deaths of infants and reduced mortality rates in the NT over a five year period, as cited in the Health Preface. Despite the absence of GPs in many smaller communities, immunisation rates compare favourable with other jurisdictions, an important beginning for a later healthier life.

The challenge for the Territory is to improve the wellbeing of Indigenous people to approximate that of the total population, particularly improvements in life expectancy/median age of death. While expenditure on hospitals dominates the health budget, more monies in the NT are targeted at preventing and arresting chronic diseases through primary care, environmental health and nutrition services. Activities in these areas will be better reported in ROGS Primary and Community Care sections over time as indicators are developed and information collected.

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## 11.7 Definitions of key terms and indicators

<b>AR-DRG v5.0 (Australian refined diagnosis related group, version 5.0)</b>	A patient classification system that hospitals use to match their patient services (hospital procedures and diagnoses) with their resource needs. AR-DRG v5.0 is based on the ICD-10-AM classification.
<b>Casemix adjustment</b>	Adjustment of data on cases treated to account for the number and type of cases. Cases are sorted into diagnosis related groups (AR-DRGs) that represent a class of patients with similar clinical conditions requiring similar hospital services.
<b>General practice</b>	The organisational structure in which one or more GPs provide and supervise health care for a 'population' of patients. This definition includes medical practitioners who work solely with one specific population, such as women's health and Indigenous health.
<b>Health management</b>	The ongoing process beginning with initial client contact and including all actions relating to the client. Includes assessment/evaluation, education of the person, family or carer(s), and diagnosis and treatment. Involves problems with adherence to treatment and liaison with, or referral to, other agencies.
<b>Incidence rate</b>	Proportion of the population suffering from a disorder or illness for the first time during a given period (often expressed per 100 000 people).
<b>Separation</b>	An episode of care for an admitted patient, which can be a total hospital stay, or a portion of a hospital stay beginning or ending in a change of type of care (for example, from acute to rehabilitation). Separation also means the process by which an admitted patient completes an episode of care.
<b>Breast cancer</b>	
<b>Breast conserving surgery</b>	An operation to remove the breast cancer but not the breast. Types of breast conserving surgery include lumpectomy (removal of the lump), quadrantectomy (removal of one quarter of the breast) and segmental mastectomy (removal of the cancer as well as some of the breast tissue around the tumour and the lining over the chest muscles below the tumour).
<b>Cost per woman screened</b>	The total cost of the provision of breast screening services, divided by the number of women screened. The total cost should include the cost of providing the BreastScreen Australia program in each jurisdiction, in addition to the cost of providing the program to women.
<b>Detection rate for small cancers</b>	The rate of small (less than or equal to 15 millimetres) invasive breast cancers detected per 10 000 women screened.
<b>Ductal carcinoma in situ</b>	Abnormal cells that involve only the lining of a duct. The cells have not spread outside the duct to other tissues in the breast. Also known as intraductal carcinoma.
<b>Invasive cancer</b>	A tumour whose cells invade healthy or normal tissue.
<b>Modified radical mastectomy</b>	Surgery for breast cancer in which the breast, some of the lymph nodes under the arm, the lining over the chest muscles, and sometimes part of the chest wall muscles are removed.



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<b>Mortality rate from breast cancer</b>	The age-specific and age standardised mortality rates of women who die as a result of breast cancer, expressed per 100 000 women in the population.
<b>Participation</b>	The number of women resident in the catchment area screened, divided by the number of women resident in the catchment area, expressed as a per cent. If a woman is screened more than once during the reference period, then only the first screen is counted.. Catchment area is a geographic region based on service size in relation to the population, accessibility and the location of other services. It is uniquely defined for each service based on postcode or statistical local area.
<b>Radiation therapy</b>	The use of high energy radiation from X-rays, gamma rays, neutrons, and other sources to kill cancer cells and shrink tumours. Radiation may come from a machine outside the body (external beam radiation therapy) or from materials called radioisotopes. Radioisotopes produce radiation and can be placed in or near the tumour or in the area near cancer cells. This type of radiation treatment is called internal radiation therapy, implant radiation, interstitial radiation or brachytherapy. Systemic radiation therapy uses a radioactive substance (such as a radiolabeled monoclonal antibody) that circulates throughout the body.
<b>Screening</b>	The performance of tests on apparently well people to detect a medical condition at an earlier stage than otherwise would be the case.
<b>Screening round (first)</b>	A woman's first visit to a BreastScreen Australia mammography screening service.
<b>Screening round (subsequent)</b>	A woman's visit to a BreastScreen Australia mammography screening service when she has previously attended such a service.
<b>Size of detected cancers</b>	The percentage of invasive cancers detected, classified according to tumour size.
<b>Total mastectomy</b>	Removal of the breast — also known as simple mastectomy.
 <b>Mental health</b>	
<b>Acute services</b>	<p>Services that provide specialist psychiatric care for people who present with acute episodes of mental illness. These episodes are characterised by recent onset of severe clinical symptoms of mental illness that have potential for prolonged dysfunction or risk to self and/or others. The key characteristic of acute services is that the treatment effort focuses on symptom reduction with a reasonable expectation of substantial improvement. In general, acute psychiatric services provide relatively short term treatment. Acute services may:</p> <ul style="list-style-type: none"> <li>• focus on assisting people who have had no prior contact or previous psychiatric history, or individuals with a continuing psychiatric disorder for whom there has been an acute exacerbation of symptoms</li> <li>• target the general population or be specialist in nature, targeting specific clinical populations. The latter group include psychogeriatric, child and adolescent, and forensic mental health services.</li> </ul>
<b>Affective disorders</b>	A mood disturbance, including mania, hypomania, bipolar affective disorder, depression and dysthymia.

<b>Ambulatory care services</b>	Mental health services dedicated to the assessment, treatment, rehabilitation or care of non-admitted inpatients, but not confined to crisis assessment and treatment services, mobile assessment and treatment services, outpatient clinic services (whether provided from a hospital or community mental health centre), child and adolescent outpatient treatment teams, social and living skills programs (including day programs, day hospitals and living skills centres), and psychogeriatric assessment teams and day programs.
<b>Anxiety disorders</b>	Feelings of tension, distress or nervousness. Includes agoraphobia, social phobia, panic disorder, generalised anxiety disorder, obsessive-compulsive disorder and post-traumatic stress disorder.
<b>Available beds</b>	<p>The number of immediately available beds for use by admitted patients if required at 30 June. Beds are immediately available for use if located in a suitable place of care with nursing or other auxiliary staff available within a reasonable period. Includes beds in wards that are temporarily closed due to factors such as renovations or strikes but that would normally be open and, therefore, available for admission of patients.</p> <p>In many cases, available beds will be less than the number of approved beds, with the former controlled by utilisation factors and resourcing levels, while the latter refers to the maximum capacity allowed for the hospital, given sufficient resources and community demand.</p>
<b>Child and adolescent mental health services</b>	Services principally targeted at children and young people up to the age of 18 years. Classification of services in this category requires recognition by the regional or central funding authority of the special focus of the inpatient service on children or adolescents.
<b>Co-located services</b>	Psychiatric inpatient services established physically and organisationally as part of a general hospital.
<b>Community-based residential services</b>	Staffed residential units established in community settings that provide specialised treatment, rehabilitation or care for people affected by a mental illness or psychiatric disability. To be defined as community-based residences, the services must: provide residential care to people with psychiatric illness or disability; be located in a community setting external to the campus of a general hospital or psychiatric institution; employ onsite staff for at least some part of the day; and be government funded.
<b>Co-morbidity</b>	The simultaneous occurrence of two or more disorders such as depressive disorder with anxiety disorder, or depressive disorder with anorexia.
<b>Consumer and carer involvement in decision making</b>	Consumer and carer participation arrangements in public sector mental health service organisations according to the scoring hierarchy (levels 1–4) developed for monitoring State and Territory performance under Medicare Agreements Schedule F1 indicators.
<b>Cost per inpatient bed day</b>	The average patient day cost according to the inpatient type.
<b>Depression</b>	A state of gloom, despondency or sadness lasting at least two weeks. The person usually suffers from low mood, loss of interest and enjoyment, and reduced energy. Sleep, appetite and concentration may be affected.
<b>Forensic mental health</b>	Services principally providing assessment, treatment and care of mentally disordered individuals whose behaviour has led them to

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<b>services</b>	commit criminal offences or makes it likely that they will offend in the future if not adequately treated and contained.
<b>General mental health services</b>	<p>Services that principally target the general adult population (18–65 years old) but that may provide services to children, adolescents or the aged. Includes, therefore, those services that cannot be described as specialist child and adolescent, older persons’ or forensic services.</p> <p>General mental health services include hospital units whose principal function is to provide of some form of specialised service to the general adult population (for example, inpatient psychotherapy) or to focus on specific clinical disorders within the adult population (for example, post-natal depression, anxiety disorders).</p>
<b>Inpatient services</b>	Services provided to admitted patients in stand-alone psychiatric hospitals or specialist psychiatric units located within general hospitals.
<b>Mental disorder</b>	A diagnosable illness that significantly interferes with an individual’s cognitive, emotional and/or social abilities.
<b>Mental health</b>	The capacity of individuals within groups and the environment to interact with one another in ways that promote subjective wellbeing, the optimal development and use of mental abilities (cognitive, affective and relational) and the achievement of individual and collective goals consistent with justice.
<b>Mental health problems</b>	Diminished cognitive, emotional or social abilities, but not to the extent of meeting the criteria for a mental disorder.
<b>Mental health promotion</b>	Activities designed to improve the mental health functioning of persons through prevention, education and intervention activities and services.
<b>Mental illness prevention</b>	Interventions that occur before the initial onset of a disorder.
<b>Mortality rate from suicide</b>	The percentage of the population who die as a result of suicide.
<b>Non-acute services</b>	<p>Rehabilitation services that have a primary focus on intervention to reduce functional impairments that limit the independence of patients. Rehabilitation services focus on disability and the promotion of personal recovery. They are also characterised by an expectation of substantial improvement over the short to medium term. Patients treated by rehabilitation services usually have a relatively stable pattern of clinical symptoms. Non-acute services also consist of extended care services that provide care over an indefinite period for patients who have a stable but severe level of functional impairment and inability to function independently without extensive care and support. Patients of extended care services usually show a relatively stable pattern of clinical symptoms, which may include high levels of severe unremitting symptoms of mental illness. Treatment effort focuses on preventing deterioration and reducing impairment. Improvement is expected only over a long period.</p>
<b>Non-government organisations</b>	Private not-for-profit community managed organisations that receive State and Territory government funding specifically for the purpose of providing community support services for people affected by a mental illness or psychiatric disability. Programs provided by the non-government organisation sector may include supported accommodation services (including community-based crisis and respite beds), vocational rehabilitation programs, advocacy programs (including system advocacy), consumer self-help services, and

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	support services for families and primary carers.
<b>Older persons' mental health services</b>	Services principally targeting people in the age group 65 years or over. Classification of services in this category requires recognition by the regional or central funding authority of the special focus of the inpatient service on aged persons. Excludes general mental health services that may treat older people as part of a more general service.
<b>Outpatient services — community-based</b>	Services primarily provided to non-admitted patients on an appointment basis and delivered from health centres located in community settings, physically separated within hospital sites. They may include outreach or domiciliary care as an adjunct to services provided from the centre base.
<b>Outpatient services — hospital-based</b>	Services primarily provided to non-admitted patients on an appointment basis and delivered from clinics located within hospitals. They may include outreach or domiciliary care as an adjunct to services provided from the clinic base.
<b>Patient days (occupied bed days)</b>	All days or part days for which patient was in hospital during the reporting year (1 July to 30 June), regardless of the original data of admission or discharge. Key definitional rules include the following: <ul style="list-style-type: none"> <li>• For a patient admitted and discharged on different days, only the day of admission is counted as a patient day.</li> <li>• Admission and discharge on the same day are equal to one patient day.</li> <li>• Leave days are not included when they involve an overnight absence.</li> <li>• A patient day is recorded on the day of return from leave.</li> </ul>
<b>Percentage of facilities accredited</b>	The percentage of facilities providing mental health services that are accredited according to the National Standards for Mental Health Services.
<b>Prevalence</b>	The number of cases of a disease present in a population at a given time (point prevalence) or during a given period (period prevalence).
<b>Preventive interventions</b>	Programs designed to decrease the incidence, prevalence and negative outcomes of disorders.
<b>Psychiatrist</b>	A medical practitioner with specialist training in psychiatry.
<b>Public health</b>	The organised, social response to protect and promote health, and to prevent illness, injury and disability. The starting point for identifying public health issues, problems and priorities, and for designing and implementing interventions, is the population as a whole or population subgroups. Public health is characterised by a focus on the health of the population (and particular at-risk groups) and complements clinical provision of health care services.
<b>Public (non-psychiatric) hospital</b>	A hospital that provides at least minimum medical, surgical or obstetric services for inpatient treatment and/or care, and around-the-clock, comprehensive, qualified nursing services, as well as other necessary professional services.
<b>Schizophrenia</b>	A combination of signs and symptoms that may include delusions, hallucinations, disorganised speech or behaviour, a flattening in emotions, and restrictions in thought, speech and goal directed behaviour.
<b>Specialised mental health services</b>	Services whose the primary function is specifically to provide treatment, rehabilitation or community support targeted towards people affected by a mental disorder or psychiatric disability. This

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**Specialised residential services**

**Staffing categories (mental health)**

criterion applies regardless of the source of funds. Further, such activities are delivered from a service or facility that is readily identifiable as both specialised and serving a mental health function.

Services provided in the community that are staffed by mental health professionals on a 24 hour basis.

*Medical officers:* all medical officers employed or engaged by the organisation on a full time or part time basis. Includes visiting medical officers who are engaged on an hourly, sessional or fee-for-service basis.

*Other medical officers:* medical officers employed or engaged by the organisation who are not registered as psychiatrists within the State or Territory, or as formal trainees within the Royal Australian and New Zealand College of Psychiatrists' Postgraduate Training Program.

*Psychiatrists and consultant psychiatrists:* medical officers who are registered to practice psychiatry under the relevant state or territory medical registration board.

*Psychiatry registrars and trainees:* medical officers who are formal trainees within the Royal Australian and New Zealand College of Psychiatrists' Postgraduate Training Program.

*Nursing staff:* all categories of registered nurses, enrolled nurses, student nurses or trainee/pupil nurses employed or engaged by the organisation.

*Registered nurses:* people with at least a three year training certificate or tertiary qualification who are certified as being a registered nurse with the State or Territory registration board. This is a comprehensive category and includes general and specialist categories of registered nurses.

*Non-registered nurses:* enrolled nurses and student nurses not included in the previous category.

*Diagnostic and health professionals:* qualified staff (other than qualified medical or nursing staff) who are engaged in duties of a diagnostic, professional or technical nature. This category covers all allied health professionals, such as social workers, psychologists, occupational therapists, physiotherapists, pharmacists, speech pathologists and dieticians.

*Social workers:* people who have completed a course of recognised training and are eligible for membership of the Australian Association of Social Workers.

*Psychologists:* people who are registered as psychologists with the relevant State or Territory registration board.

*Occupational therapists:* people who have completed a course of recognised training and who are eligible for membership of the Australian Association of Occupational Therapists.

*Other personal care staff:* attendants, assistants, home companions, family aides, ward helpers, wardsmen, orderlies, ward assistants and nursing assistants who are engaged primarily in the provision of personal care to patients or residents, and who are not formally qualified or who are undergoing training in nursing or allied health professions.

*Administrative and clerical staff:* staff engaged in administrative and

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clerical duties. Excludes medical, nursing, diagnostic and health professional and domestic staff wholly or partly involved in administrative and clerical duties, who should be counted under their appropriate occupational categories.

*Domestic and other staff:* staff involved in the provision of food and cleaning services. Includes all staff not elsewhere included (for example, maintenance staff, tradespersons, gardening staff).

**Stand-alone hospitals**

Beds within health establishments that are primarily devoted to the treatment and care of inpatients with psychiatric, mental or behavioural disorders, and that are situated at physically separate locations from a general hospital. Stand-alone hospitals may or may not be managed by the mainstream health system. Psychiatric hospitals situated at physically separate locations from a general hospital are included within the 'stand-alone' category regardless of whether they are under the management control of a general hospital.

**Substance use disorders**

Disorders in which drugs or alcohol are used to such an extent that behaviour becomes maladaptive, social and occupational functioning is impaired, and control or abstinence becomes impossible. Reliance on the drug may be psychological (as in substance misuse) or physiological (as in substance dependence).

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## 11.8 Supporting tables

Supporting tables are identified in references throughout this chapter by an 'A' suffix (for example, table 11A.3 is table 3 in the attachment). Supporting tables are provided on the CD-ROM enclosed with the Report. Definitions for the indicators and descriptors in this attachment are in section 11.7 of the chapter. The files containing the supporting tables are provided in Microsoft Excel format as \Publications\Reports\2007\Attach11A.xls and in Adobe PDF format as \Publications\Reports\2007\Attach11A.pdf. This file is available in Adobe PDF format on the Review web page ([www.pc.gov.au/gsp](http://www.pc.gov.au/gsp)). Users without Internet access can contact the Secretariat to obtain these tables (details on the inside front cover of the Report).

### Breast cancer

<b>Table 11A.1</b>	Mortality rates from breast cancer for women, by age
<b>Table 11A.2</b>	Number of new cases of breast cancer, five year averages
<b>Table 11A.3</b>	Incidence rates of breast cancer, five year averages
<b>Table 11A.4</b>	BreastScreen Australia: Scope of services provided in each jurisdiction, 2005
<b>Table 11A.5</b>	Expenditure on breast cancer screening (current dollars)
<b>Table 11A.6</b>	Number of women screened by BreastScreen Australia
<b>Table 11A.7</b>	Separations and separation rates for selected AR-DRGs related to breast cancer, public hospitals 2004-05
<b>Table 11A.8</b>	Participation rates of women in BreastScreen Australia, (24 month period)
<b>Table 11A.9</b>	Participation rates of women screened by BreastScreen Australia, by special needs groups (24 month period) (first and subsequent rounds) (per cent)
<b>Table 11A.10</b>	Rate of cancers detected without the need for open biopsies, all women (per cent)
<b>Table 11A.11</b>	Real cost per woman screened (2005-06 dollars)
<b>Table 11A.12</b>	Scope of activities and expenditure items included in cost per woman screened calculations
<b>Table 11A.13</b>	Breast conserving surgery to mastectomy
<b>Table 11A.14</b>	Selected breast and other cancer AR-DRGs, public sector, population estimated, 2004-05
<b>Table 11A.15</b>	Interval cancer rate for women, by age, per 10 000 women screened
<b>Table 11A.16</b>	Breast cancer detection rate, by BreastScreen Australia
<b>Table 11A.17</b>	Rate of detection of small diameter (15mm or less) invasive cancers, BreastScreen Australia, all rounds of screening
<b>Table 11A.18</b>	Detected invasive cancers, by size and round, women aged over 40 years

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## Mental health

<b>Table 11A.19</b>	Level of psychological distress K10, 2004-05 (per cent)
<b>Table 11A.20</b>	Real estimated Australian Government expenditure on mental health services (2004-05 \$'000)
<b>Table 11A.21</b>	Real estimated recurrent expenditure at the discretion of State and Territory governments (2004-05 dollars)
<b>Table 11A.22</b>	Real Australian Government recurrent expenditure on mental health services per person (2004-05 dollars)
<b>Table 11A.23</b>	Real estimated recurrent expenditure at the discretion of State and Territory governments — excluding other revenue (2004-05 dollars)
<b>Table 11A.24</b>	Depreciation (current prices \$'000s)
<b>Table 11A.25</b>	Total state and territory recurrent expenditure on specialised mental health services (current prices)
<b>Table 11A.26</b>	Number of beds at 30 June, specialised mental health services
<b>Table 11A.27</b>	Full time equivalent (FTE) direct care staff employed in specialised mental health services by staff type (per 100 000 people)
<b>Table 11A.28</b>	Full time equivalent (FTE) direct care staff employed in specialised mental health services, by service setting (per 100 000 people)
<b>Table 11A.29</b>	Mental health patient days
<b>Table 11A.30</b>	Separations, with psychiatric care, public hospitals, Australia 2003-04
<b>Table 11A.31</b>	Specialised care separations reported for Indigenous patients, Australia 2003-04
<b>Table 11A.32</b>	Specialised psychiatric care separations reported for Indigenous patients, Australia 2003-04
<b>Table 11A.33</b>	Specialised public mental health services reviewed against National Standards for Mental Health Services, 30 June
<b>Table 11A.34</b>	Services provided in the appropriate setting (per cent)
<b>Table 11A.35</b>	Consumer and carer participation
<b>Table 11A.36</b>	Percent of specialised mental health services that have introduced routine consumer outcome measurement
<b>Table 11A.37</b>	Average patient day costs, by inpatient program type, public hospitals (2004-05 dollars)
<b>Table 11A.38</b>	Average patient day costs, by hospital type, public hospitals (2004-05 dollars)
<b>Table 11A.39</b>	Average cost to government (recurrent) per patient day for community-based residential services (2004-05 dollars)
<b>Table 11A.40</b>	Average cost to government (recurrent) per treated patient in the community NSW (2004-05 dollars)
<b>Table 11A.41</b>	Average cost to government (recurrent) per treated patient in the community Victoria (2004-05 dollars)
<b>Table 11A.42</b>	Average cost to government (recurrent) per treated patient in the community Queensland (2004-05 dollars)



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<b>Table 11A.43</b>	Average cost to government (recurrent) per treated patient in the community WA (2004-05 dollars)
<b>Table 11A.44</b>	Average cost to government (recurrent) per treated patient in the community SA (2004-05 dollars)
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