12 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.

Overviews of health management and the health management performance measurement framework are provided in sections 12.1 and 12.2 respectively. Sections 12.3 and 12.4 report on the performance of breast cancer and mental health management respectively. Section 12.5 outlines the future directions for the chapter, while jurisdictions' comments relating to all the health chapters appear in section 12.6. Definitions are listed in section 12.7. Attachment tables are identified in references throughout this chapter by an 'A' suffix (for example, table 12A.3 is table 3 in the attachment). Attachment tables are available on the CD-ROM enclosed with the Report and from the Review website www.pc.gov.au/gsp. Section 12.8 lists the attachment tables for this chapter and section 12.9 lists references used in the chapter.

12.1 Overview of health management

Health management is the 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.

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. 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). The national health priority areas represent almost 80 per cent of the total burden of disease and injury in Australia, and their management offers considerable scope for reducing this burden (AIHW 2003b).

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). 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).

Specialist mental health management services 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, Aboriginal health workers, Aboriginal mental health workers, 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, Aboriginal community controlled health services, 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.

Both breast cancer and mental health 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 10 and the performance of primary and community health services generally is discussed in chapter 11.

Several improvements have been made to the chapter this year:

- Time series data on five year relative breast cancer survival rates are reported.
- BreastScreen Australia geographic location participation rates have changed from reporting on two categories ('metropolitan or capital city' and 'rural and remote or rest of State') to reporting on five Australian Standard Geographical Classification categories: major cities, inner regional, outer regional, remote and very remote.

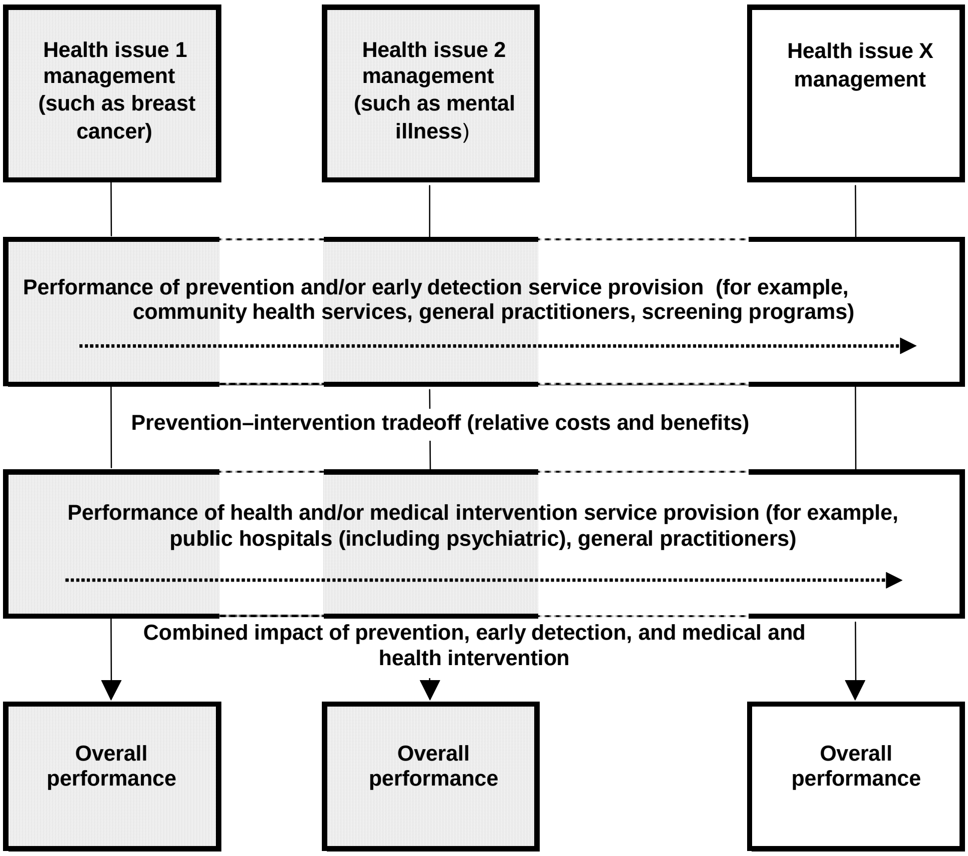
- Public health expenditure on breast cancer screening has been refined to present expenditure on a per female aged 40 years and over basis, rather than a per person basis.
- Data for Indigenous people on levels of psychological distress (K5) have been included.
- The following ‘yet to be developed’ indicators for mental health are included (it is expected that data for these indicators will be reported in the 2009 Report):
  - ‘rates of community follow up for people within the first seven days of discharge from hospital’
  - ‘readmissions to hospital within 28 days of discharge’.

12.2 Framework for measuring the performance of health management

Policy makers are seeking alternative service delivery settings and a more coordinated approach to managing health problems. Measuring performance in the management of a health problem involves measuring the performance of both service providers, and the overall management of a spectrum of services, including prevention, early detection and treatment programs.

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 is represented diagrammatically in figure 12.1.

Figure 12.1 **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 specific 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 early detection and medical intervention strategies, which should inform the decisions 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.

12.3 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 12.1).[1] 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 12.1 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.

(Continued on next page)

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[1] Breast cancer in males is rare. It is not examined in this Report.

Box 12.1 **(Continued)**

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.

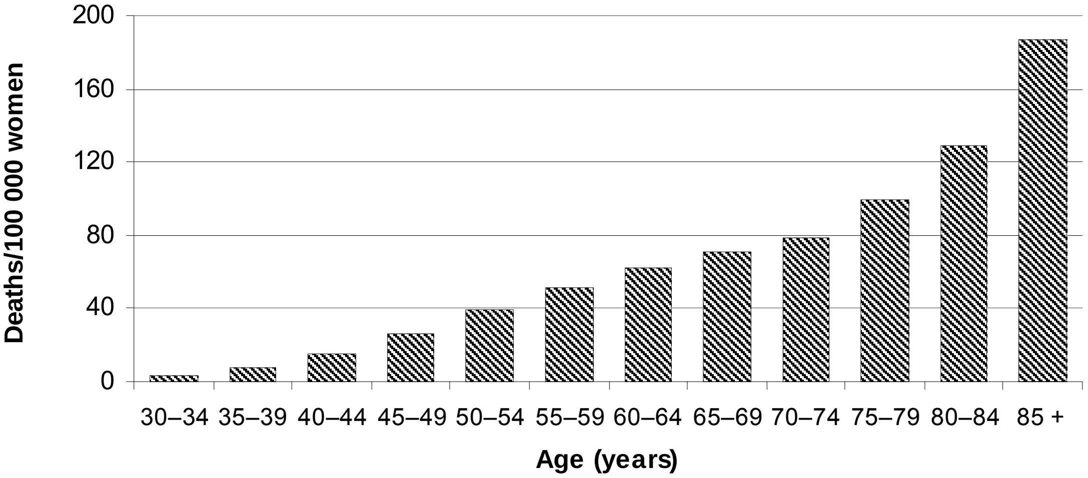
screening round (first): a woman's first visit to a BreastScreen Australia service.

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 2719 female deaths in 2005, making it one of the most frequent causes of death from cancer for females (ABS 2007). The strong relationship between age and the mortality rate from breast cancer is shown for the period 2001–2005 in figure 12.2. Women aged 40–44 years had an annual average mortality rate over this period of 15.6 per 100 000, whereas women aged 75–79 years had an annual average mortality rate of 99.3 per 100 000.

Figure 12.2 **Annual average mortality rates from breast cancer, by age group, 2001–2005**

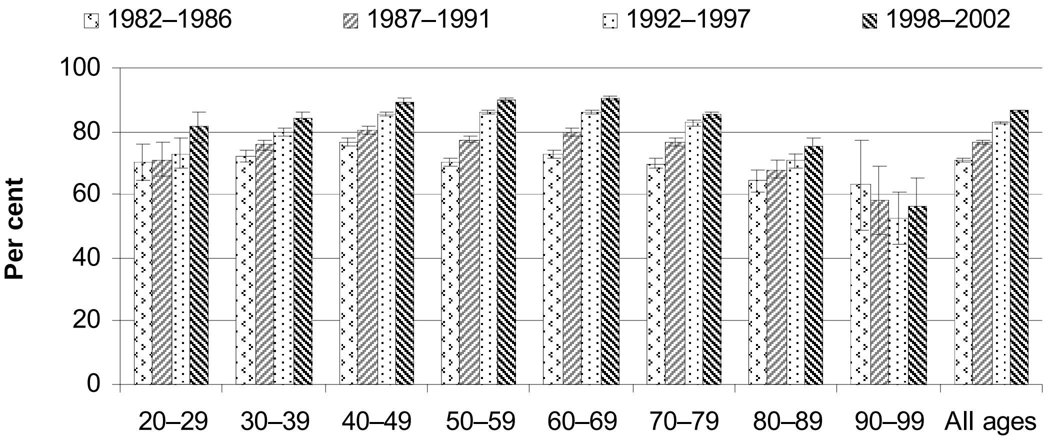


Source: Australian Institute of Health and Welfare (unpublished); table 12A.1.

Relative survival after diagnosis of breast cancer in females is good compared with other cancers. The relative survival rate 10 years after diagnosis was 73.6 per cent for women diagnosed in 1992–1997 (AIHW and NBBC 2006). For women diagnosed during the period 1998–2002, the relative survival rate was 96.7 per cent one year after diagnosis, and 86.6 per cent five years after diagnosis.

There was a significant increase in the five year relative survival rate after diagnosis of breast cancer in females between 1982–1986 and 1998–2002 (figure 12.3). Five year relative survival for breast cancer in Australia at diagnosis over the period 1998–2002 increased with age from the age group 20–29 years (81.5 per cent) to a peak for the age groups 40–49 years (89.5 per cent), 50–59 years (90.0 per cent) and 60–69 years (90.4 per cent). The five year relative survival rate declined with age for women over 70 years (figure 12.3).

Figure 12.3 **Breast cancer five year relative survival at diagnosis, by age group**[a]



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[a] Five year relative survival results for the 0–19 age group are not presented because interpretation is made difficult by statistical instability.

Source: AIHW and NBBC (2006); table 12A.2.

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 10 526 over the period 1996–2000 to an annual average of 11 823 over the period 2000–2004 (table 12.1). 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).

Table 12.1 **Annual average new cases of breast cancer diagnosed (number)[a]**

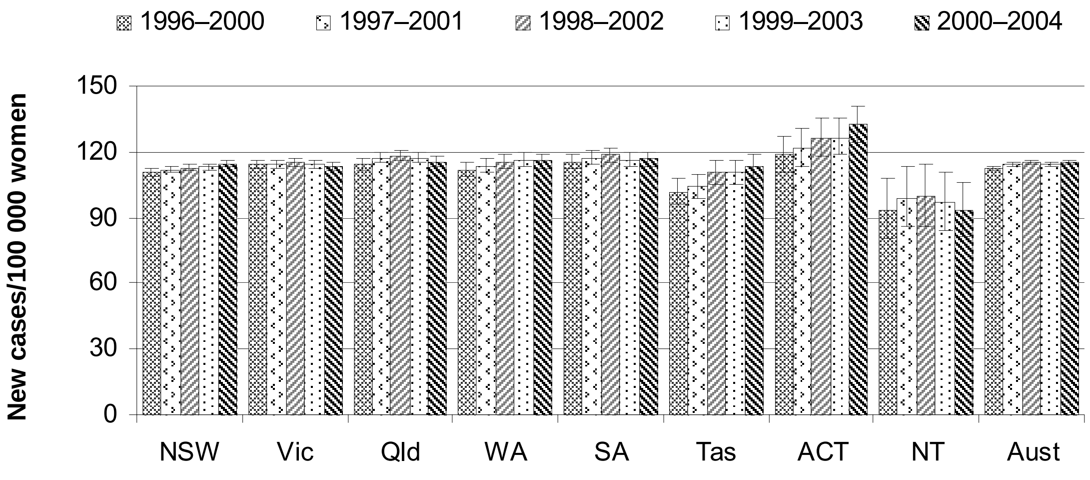
	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
1996–2000	3 573	2 726	1 887	953	930	249	159	50	10 526
1997–2001	3 698	2 792	2 000	999	962	261	169	54	10 936
1998–2002	3 813	2 864	2 078	1 045	991	282	182	55	11 310
1999–2003	3 895	2 892	2 132	1 087	989	287	187	59	11 529
2000–2004	4 023	2 940	2 177	1 112	1 010	300	200	60	11 823

[a] 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 12A.3.

Annual average age standardised incidence rates of breast cancer are presented in figure 12.4. 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 and relatively large variations in rates from year to year. The Australian incidence rate increased from an annual average of 112.4 per 100 000 women for the period 1996–2000 to an annual average of 114.9 for the period 2000–2004.

Figure 12.4 **Annual average age standardised incidence rates of breast cancer for women of all ages[a, b]**

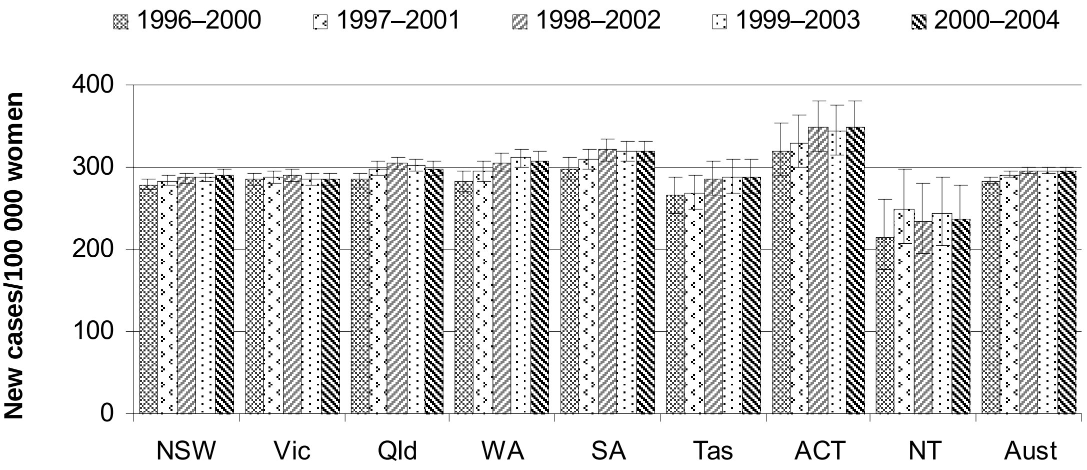


[a] Incidence refers to the number of new cases of breast cancer per 100 000 women. [b] Rates are age standardised to the Australian 2001 population standard.

Source: AIHW (unpublished); table 12A.4.

Annual average age standardised incidence rates of breast cancer for women aged 50–69 years are shown in figure 12.5.

Figure 12.5 **Annual average age standardised incidence rates of breast cancer for women aged 50–69 years**[a, b]



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

Source: AIHW (unpublished); table 12A.4.

Size and scope of breast cancer detection and management services

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.

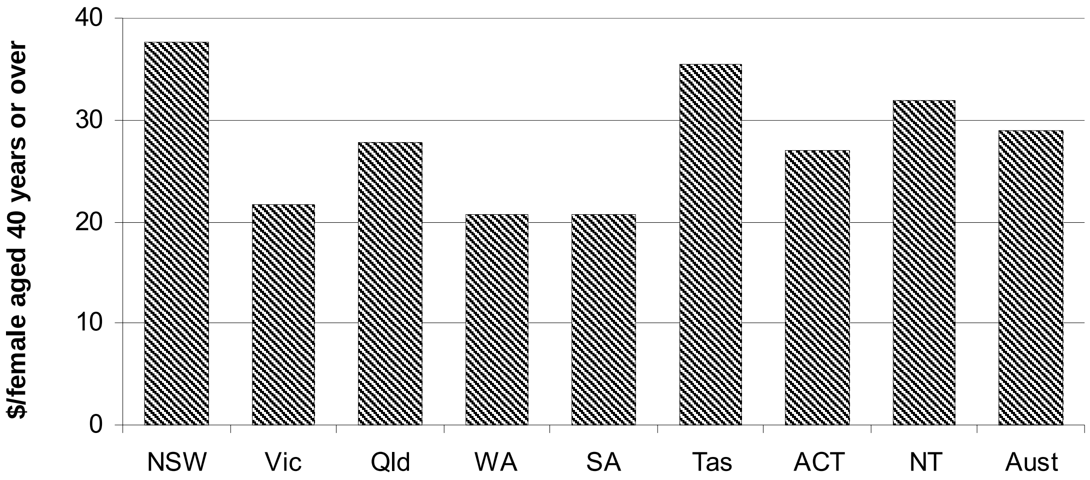
BreastScreen Australia, jointly funded by the Australian, State and Territory governments, undertakes nationwide breast cancer screening. It targets women aged 50–69 years for screening once every two years. The program aims to have 70 per cent or more of women aged 50–69 years participating in screening over a 24 month 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 Queensland, SA, Tasmania and the NT do not include open biopsies in the funded program (table 12A.5).

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 2007 (AIHW 2007b).

Governments spent around $139 million on breast cancer screening in 2005-06 (table 12A.6). Estimates of government expenditure on breast cancer screening per woman aged 40 years or over are presented by jurisdiction in figure 12.6. 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 12.6 Public health expenditure on breast cancer screening, 2005-06[a, b, c, d, e, f, g]



[a] 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. [b] 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. [c] 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. [d] Medicare funding for radiographic breast examinations is excluded because it is not public health expenditure. [e] Victorian data include depreciation. [f] Data for the ACT include expenditure on BreastScreen ACT and the Cancer Registry. [g] 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 (unpublished); ABS, Estimated Residential Population Cat. no. 3101.0 (unpublished); tables AA.1 and 12A.6.

The number of women aged 40 years or over screened by BreastScreen Australia indicates the size of the BreastScreen Australia program. Over 857 000 women in this age group were screened in 2006, compared with 835 000 in 2002 (table 12.2).

Table 12.2 Number of women aged 40 years or over screened by BreastScreen Australia[a]

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
2002	294 027	187 714	177 281	69 697	68 571	22 204	11 793	4 167	835 454
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	4 481	827 502
2006	257 211	202 462	200 992	88 667	67 476	24 963	11 446	4 136	857 353

[a] First and subsequent screening rounds, for women aged 40 years or over.

Source: State and Territory governments (unpublished); table 12A.7.

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.

Inpatient separations in public hospitals for selected breast-cancer related Australian refined diagnosis related groups (AR-DRGs)[2] in 2005-06 are presented in table 12.3. 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 12.3 **Separations for selected AR-DRGs related to breast cancer, public hospitals, 2005-06 (per 10 000 people)[a, b]**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Breast cancer related conditions									
Major procedures for malignant breast conditions	3.0	3.3	2.6	2.7	3.1	3.1	2.8	1.2	3.0
Minor procedures for malignant breast conditions	1.1	1.2	1.4	1.1	1.0	1.3	1.0	0.5	1.2
Skin, subcutaneous tissue and breast plastic operating room procedures	2.8	3.1	3.5	2.9	5.7	3.1	1.8	2.0	3.2
Other skin, subcutaneous tissue and breast procedures	12.5	24.2	19.6	18.1	21.2	22.2	8.9	12.6	18.2
Malignant breast disorders (Age >69 W CC) or W (Cat or Sev CC)	0.6	0.6	0.4	0.3	0.8	1.5	0.4	0.3	0.6
Malignant breast disorders (Age>69 W/O CC) or W/O (Cat or Sev CC)	0.3	0.9	0.3	1.5	0.4	0.5	0.2	np	0.6
All conditions[c]	2 029.5	2 451.4	1 808.5	1 894.9	2 378.8	1 894.6	2 133.9	4 034.0	2 121.8

W=with. W/O=without. CC=complications and co-morbidities. Cat or Sev=catastrophic or severe. **a** Care needs to be taken when comparing jurisdictions because admission practices vary. **b** AR-DRG version 5.0. **c** The total includes separations for which the care type was reported as acute, or newborn with qualified patient days, or was not reported. Crude rate based on the Australian population as at 31 December 2005. **np** Not published.

Source: AIHW (2007a); table 12A.8.

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

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[2] 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 5.0 is based on the ICD-10-AM classification (see chapter 10 for more detail).

disease (box 12.2). 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. 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. 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.

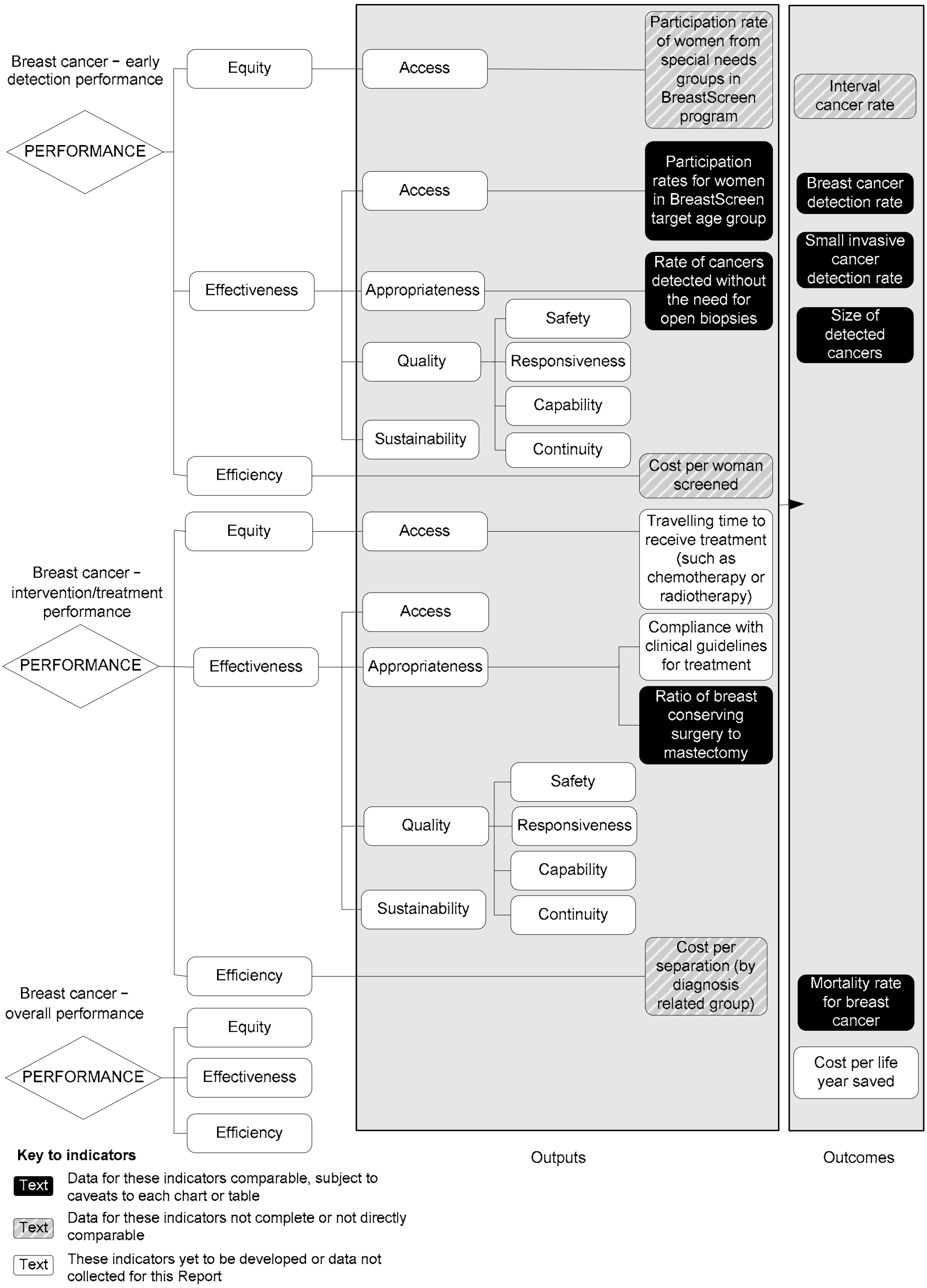
The performance indicator framework shows which data are comparable in the 2008 Report (figure 12.7). For data that are not considered directly comparable, the text includes relevant caveats and supporting commentary. Chapter 1 discusses data comparability from a Report-wide perspective (see section 1.6).

No changes have been made to the breast cancer detection and management framework for the 2008 Report.

Box 12.2 **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 12.7 **Performance indicators for breast cancer detection and management**



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 it is a Steering Committee priority 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 cancinoma in situ, recall to assessment and rescreening rates. Data are collected at the jurisdictional level and provide 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

Outputs are the actual services delivered (while outcomes are the impact of these services on the status of an individual or group) (see chapter 1, section 1.5).

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 12.3). This year, for the first time participation rates by geographic area are reported using the five Australian Standard Geographical Classification categories: major cities, inner regional, outer regional, remote and very remote (table 12.4). In previous reports, data were reported using two geographic categories (‘metropolitan or capital city’ and ‘rural and remote or rest of State’). Data are reported according to the classification for previous years in table 12A.10.

Box 12.3 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 outer regional, remote and very remote areas — in breast cancer screening is an indicator of equity of access. 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.

In 2005-06, the national age standardised participation rate for Indigenous women aged 50–69 (38 per cent) was below the total participation rate in that age group (56.7 per cent), although this may be influenced by problems with Indigenous identification (table 12A.10). For the same 24 month period and age group, the national participation rate for NESB women (49.6 per cent) was also lower than that of the national total female population (table 12.4). 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.

Table 12.4 **Age standardised participation rates of women aged 50–69 years from selected communities in BreastScreen Australia programs, 2005 and 2006 (24 month period) (per cent)**[a, b]

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Indigenous[c]	38.6	35.9	49.9	30.4	31.3	33.0	50.4	24.5	38.0
NESB[d]	51.4	37.6	67.0	65.0	58.3	36.2	52.3	38.6	49.6
Major cities and inner regional[e]	53.1	56.9	58.3	58.4	58.5	48.7	60.3	na	na
Outer regional, remote and very remote[e]	78.2	53.6	59.9	56.3	67.3	70.1	..	na	na
All women aged 50–69 years	55.5	56.8	58.0	57.4	59.0	57.1	58.4	40.8	56.7

[a] First and subsequent rounds. [b] Rates are standardised to the 2001 Australian population standard. [c] Those women who self-identify as being of Aboriginal or Torres Strait Islander descent. [d] Non-English speaking background (NESB) is defined as speaking a language other than English at home. [e] Remoteness categories are based on Census Collection Districts (CDs) and defined using the Australian Standard Geographical Classification categories. The Australian Standard Geographical Classification is a measure of the remoteness of a location from the services provided by large towns or cities. **na** Not available. **..** Not applicable.

Source: State and Territory governments (unpublished); tables 12A.9 and 12A.10.

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 reaching its target population (box 12.4).

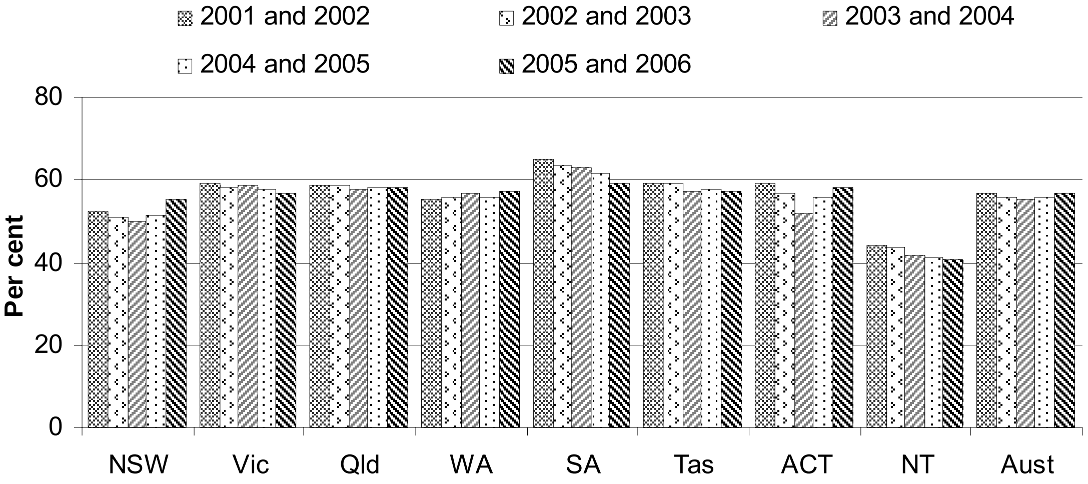
Box 12.4 **Participation rate of women in the BreastScreen target age group**

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 reaching 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 national participation rate of women aged 50–69 years in BreastScreen Australia screening programs was 56.7 per cent in the 24 month period 2005 and 2006. At a national level, the participation rate has been relatively steady since 2001-2002, well below the 70 per cent aim under the National Accreditation Standards (figure 12.8).

Figure 12.8 **Age standardised participation rates of women aged 50–69 years in BreastScreen Australia screening programs (24 month period)**[a, b]



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[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). [b] Rates are standardised to the 2001 Australian population standard.

Source: State and Territory governments (unpublished); table 12A.9.

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 12.5).

Box 12.5 **Rate of cancers detected without the need for open biopsies**

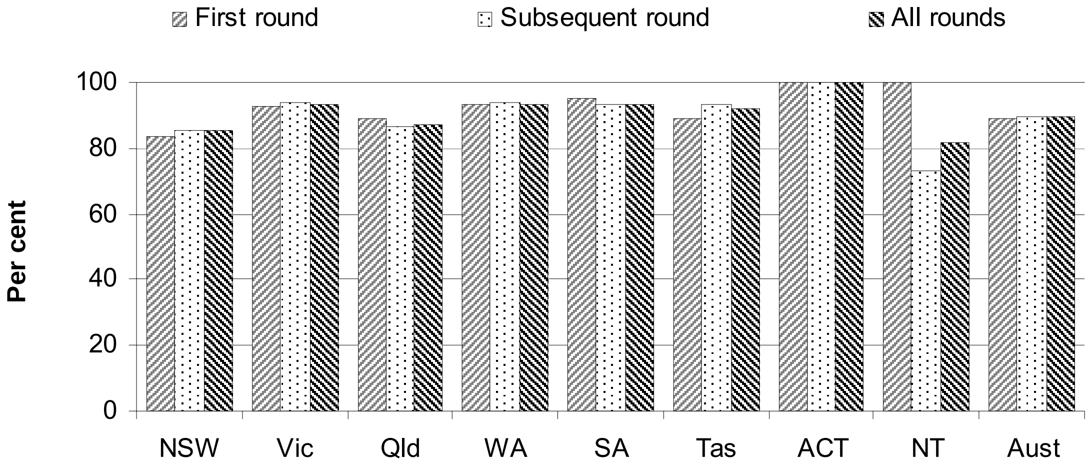
The 'rate of cancers detected without the need for open biopsies' is an indicator of the effectiveness of BreastScreen Australia in diagnosing breast cancer without the need for invasive procedures.

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.[3]

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 2006, for women attending their first screening round, the rate of cancers detected without the need for open biopsies was 89.1 per cent Australia wide. For women attending a subsequent round the rate was 89.5 per cent Australia wide, well above the National Accreditation Standard of 75 per cent (figure 12.9).

Figure 12.9 **Rate of cancers detected without the need for open biopsies, all women, 2006**



Source: State and Territory governments (unpublished); table 12A.11.

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[3] A breast biopsy is a procedure for obtaining a breast tissue specimen for microscopic examination to establish a diagnosis.

Early detection — cost per woman screened

The ‘cost per woman screened’ is an indicator of the efficiency of early detection performance (box 12.6).

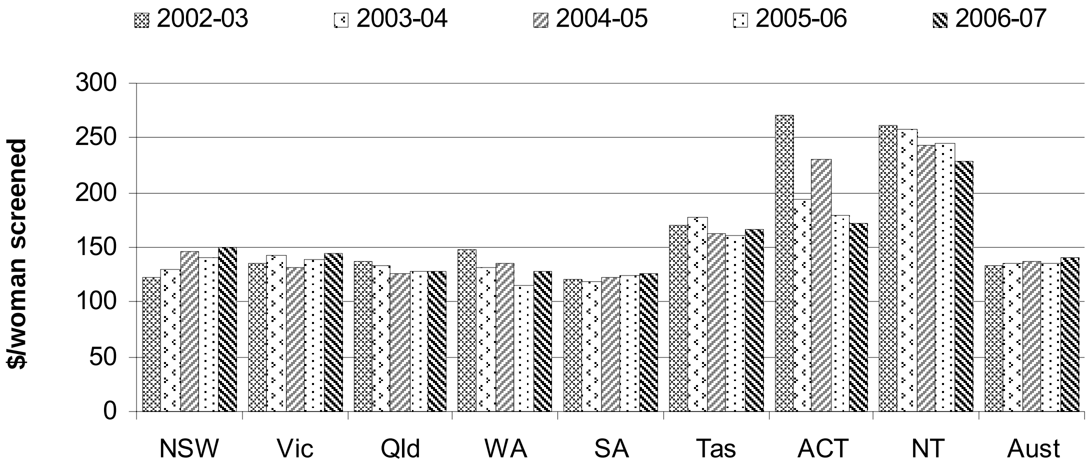
Box 12.6 **Cost per woman screened**

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 12A.13). Preliminary estimates of costs in each jurisdiction are presented in figure 12.10. The average cost per woman screened in Australia in 2006-07 was around $141.

Figure 12.10 **Real cost per woman screened, BreastScreen Australia services (2006-07 dollars)**[a, b, c]



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[a] Constant price expenditure (in 2006-07 dollars) using the Gross Domestic Product price deflator (table AA.26). [b] Data for NSW do not include subsidies. [c] Data for Queensland include depreciation and user cost of capital for 2002-03.

Source: State and Territory governments (unpublished); tables AA.26 and 12A.12.

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 12.7). Data on this indicator were not available for the 2008 Report.

Box 12.7 **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 shorter 'travelling time to receive treatment' suggests that intervention and treatment services are accessible in terms of distance travelled. A shorter 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 and treatment performance (box 12.8). Data for this indicator were not available for the 2008 Report.

Box 12.8 **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 12.9).

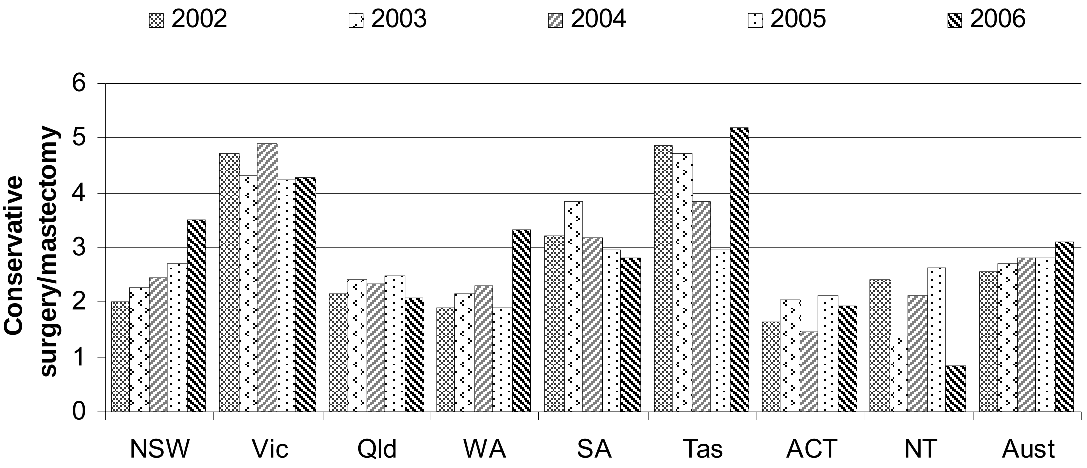
Box 12.9 **Ratio of conserving surgery to mastectomy**

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 2006, the ratio of conserving surgery to mastectomy averaged 3.1:1 nationally, but varied across jurisdictions (figure 12.11).

Figure 12.11 **Ratio of conserving surgery to mastectomy**[a, b]



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[a] Applies for women of all ages. [b] The numbers used to measure this indicator were small, resulting in large variations from year to year. It is advisable to view this indicator over time rather than from one year to the next.

Source: State and Territory governments (unpublished); table 12A.14.

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 12.10).

Box 12.10 **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 coverage is improving over time). 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 (DoHA 2007).

Table 12.5 summarises costs per separation for selected breast cancer AR-DRGs. The average cost of major procedures for malignant breast conditions across Australia was $6056 per separation in 2005-06; minor procedures for malignant breast conditions cost $3213 per separation on average. Table 12A.15 summarises the average length of stay (in public hospitals) associated with each AR-DRG.

Table 12.5 **Average cost per separation, public hospitals by selected breast cancer AR-DRGs, 2005-06 (dollars)**[a, b, c]

AR-DRG	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Major procedures for malignant breast conditions									
	5 700	6 692	5 942	6 079	5 221	6 109	7 974	8 984	6 056
Minor procedures for malignant breast conditions									
	3 235	2 917	3 374	3 172	3 554	3 099	3 889	2 450	3 213
Malignant breast disorders (Age >69 W CC) or W (Cat or Sev CC)									
	5 176	4 179	4 985	4 974	5 985	6 212	3 492	9 991	5 015
Malignant breast disorders (Age>69 W/O CC) or W/O (Cat or Sev CC)									
	1 915	1 884	3 023	606	1 818	1 352	np	np	1 682

W=with. W/O=without. CC=complications and co-morbidities. Cat or Sev=catastrophic or severe. **a** Estimated population costs are obtained by weighting the sample results according to the known characteristics of the population. **b** Average cost is affected by a number of factors, including 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. **c** 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: DoHA 2007; table 12A.15.

Outcomes

Outcomes are the impact of services on the status of an individual or group (while outputs are the actual services delivered) (see chapter 1, section 1.5).

Early detection — interval cancer rate

The ‘interval cancer rate’ is an outcome indicator of the effectiveness of early detection (box 12.11).

Box 12.11 **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 at risk of interval or screen-detected breast cancer. Those at risk are women aged 50–69 years who attend for screening less than 12 months following a negative screening episode. A low interval cancer rate is desirable because it suggests the breast screening process is effective in detecting breast cancer.

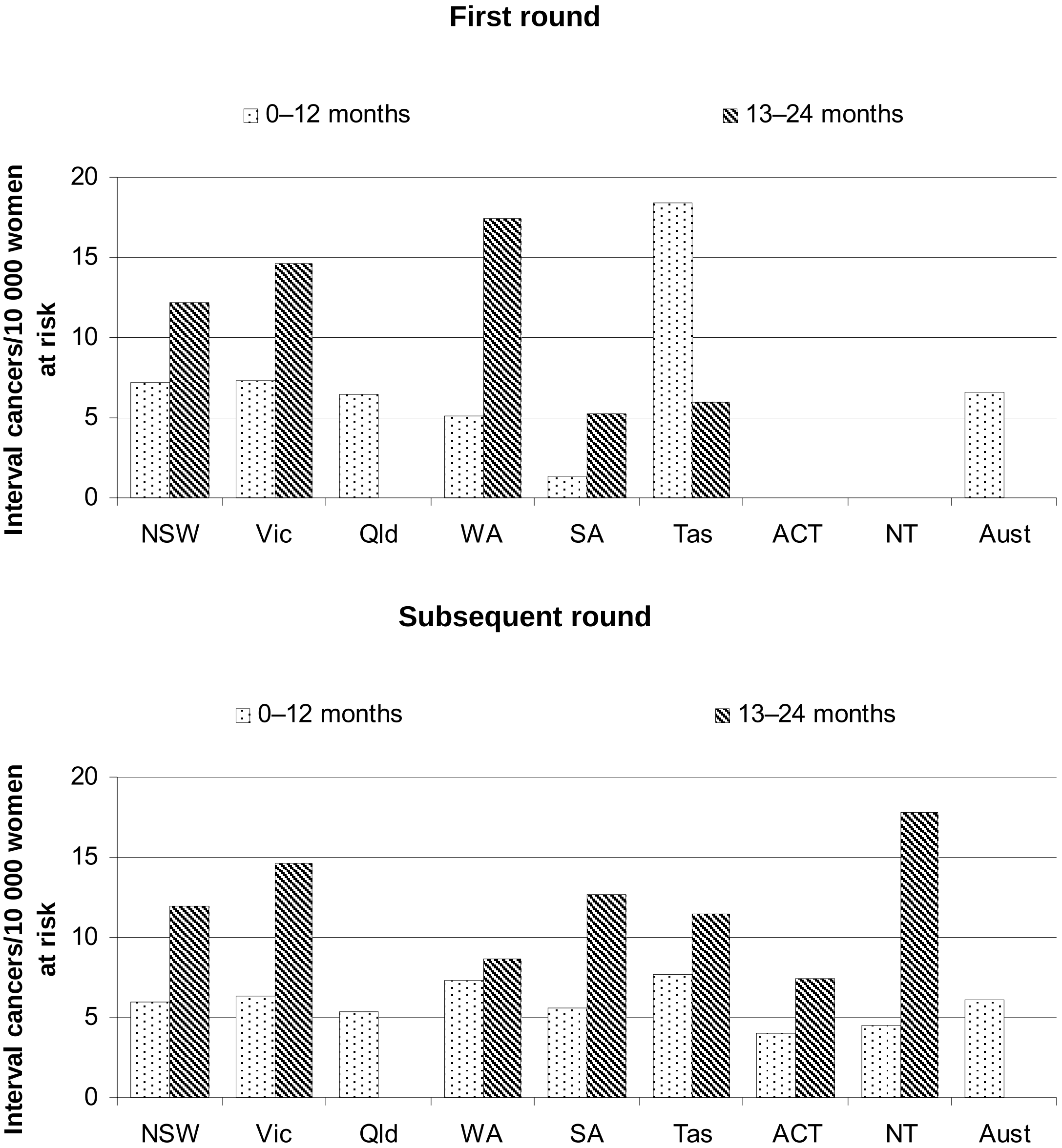
This rate should be interpreted in conjunction with the breast cancer detection indicators.

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 2003. Stratification is by first and subsequent screening rounds to allow for expected variation in interval cancer rates between rounds.

Figure 12.12 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 2003, for all women aged 50–69 years in the first round of screening, the interval cancer rate 0–12 months following screening was 6.6 per 10 000 women at risk. In subsequent rounds this decreased to 6.0 per 10 000 women at risk. Interval cancer rates 13–24 months following screening are also shown in figure 12.12.

Figure 12.12 **Age standardised interval cancer rate, women aged 50–69 years, 2003**[a, b, c, d]



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[a] Rates are expressed as the number of interval cancers per 10 000 women at risk. [b] The numbers used to measure this indicator were small, resulting in large variations from year to year. It is advisable to view this indicator over time rather than from one year to the next. [c] Data for Queensland for 13–24 months for the first and subsequent screening rounds were not available. [d] Data for the ACT and the NT were zero in the first round for 0–12 and 13–24 months.

Source: State and Territory governments (unpublished); table 12A.16.

Early detection — breast cancer detection rate

The ‘breast cancer detection rate’ is an outcome indicator of early detection (box 12.12).

Box 12.12 **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. Although a high incidence of breast cancer is not desirable, a high rate of detecting these cancers is desirable.

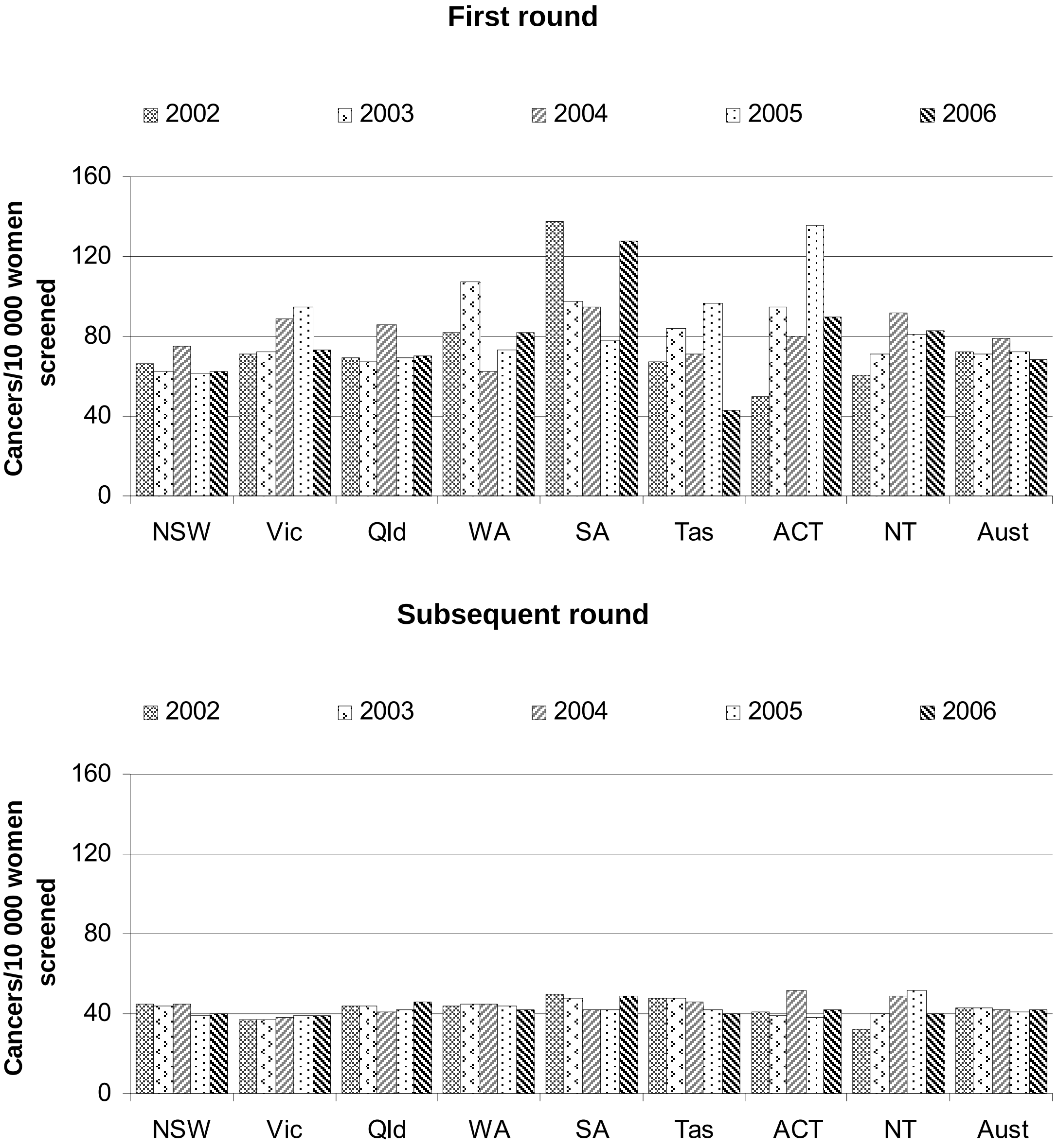
The following relevant BreastScreen Australia National Accreditation Standards for detection rates are based on the expected Australian rates (BreastScreen Australia 2004):

- 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 12.13 reports the age standardised number of invasive cancers detected per 10 000 women screened aged 50–69 years, by screening round. Nationally, in 2006 for the first screen, the age standardised invasive breast cancer detection rate for women aged 50–69 years was 68.4 per 10 000 attending their first screen. This was above the Breastscreen Australia National Accreditation Standard of greater than or equal to 50 per 10 000 women aged 50–69 years who attend for their first screen being diagnosed with invasive breast cancer. Nationally, for the second or subsequent screen, the age standardised invasive breast cancer detection rate for women aged 50–69 years was 41.9 per 10 000 attending their second or subsequent screen. This was above the National Accreditation Standard of greater than or equal to 35 per 10 000 women aged 50–69 years who attend for their second or subsequent screen being diagnosed with invasive breast cancer. DCIS detected per 10 000 women screened is reported in table 12A.17. (Relevant definitions can be found in box 12.1 and section 12.7.)

Figure 12.13 **Age standardised breast cancer detection rate for women aged 50–69 years, invasive cancers**[a]



[a] 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 12A.17.

Early detection — small invasive cancer detection rate

The ‘small invasive cancer detection rate’ is an outcome indicator of early detection performance (box 12.13).

Box 12.13 **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.

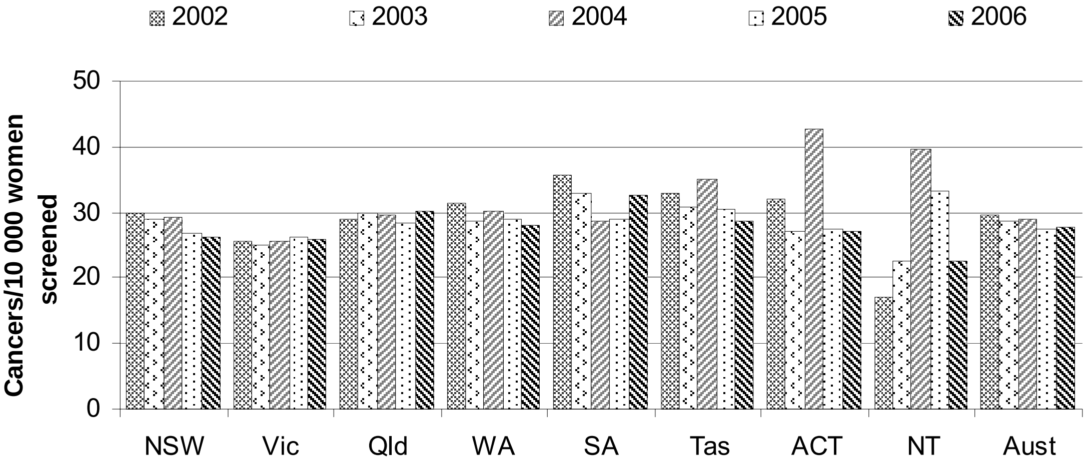
The ‘small invasive cancer detection rate’ is defined as the number of invasive cancers detected with a diameter of 15 millimetres or less, per 10 000 women screened. It is desirable that a high proportion of cancers detected are small cancers: detection of small cancers is generally associated with 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 (2004) 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 2004).

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 2006 are reported in figure 12.14. This shows that the rate for Australia was 27.7 cancers per 10 000 women screened in 2006, close to the Breastscreen Australia accreditation standard of 25 or more women per 10 000 women aged 50–69 years who attend screening to be diagnosed with a small invasive breast cancer.

Figure 12.14 **Age standardised small diameter cancer detection rate for women aged 50–69 years, all rounds of screening**[a, b]



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[a] 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. [b] 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 12A.18.

Early detection — size of detected cancers

The 'size of detected cancers' is an outcome indicator of the success of early detection (box 12.14).

Box 12.14 **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).

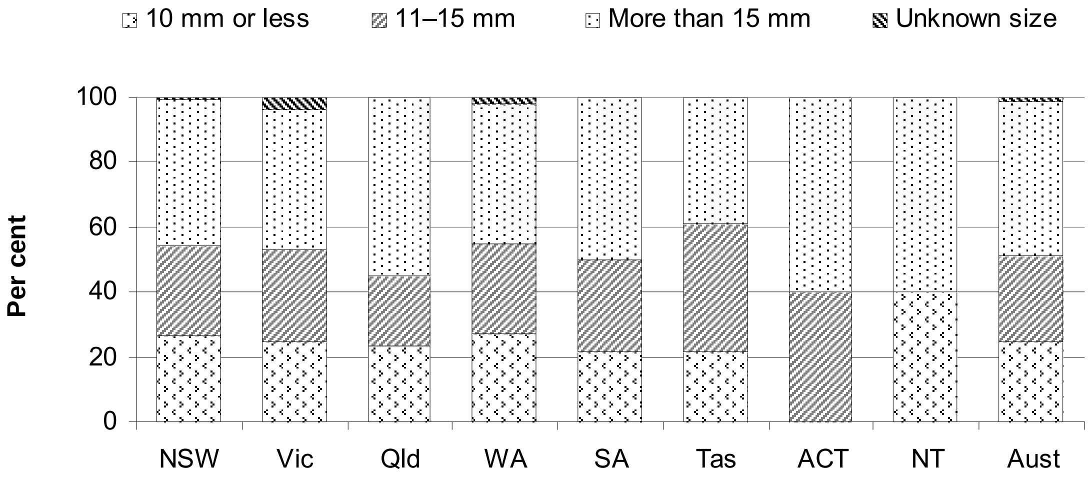
This indicator measures detected invasive cancers by size of cancer, as a proportion of total detected invasive cancers for women aged over 40 years. High detection of small cancers relative to large cancers is desirable because it is likely to result in reduced morbidity and mortality.

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).

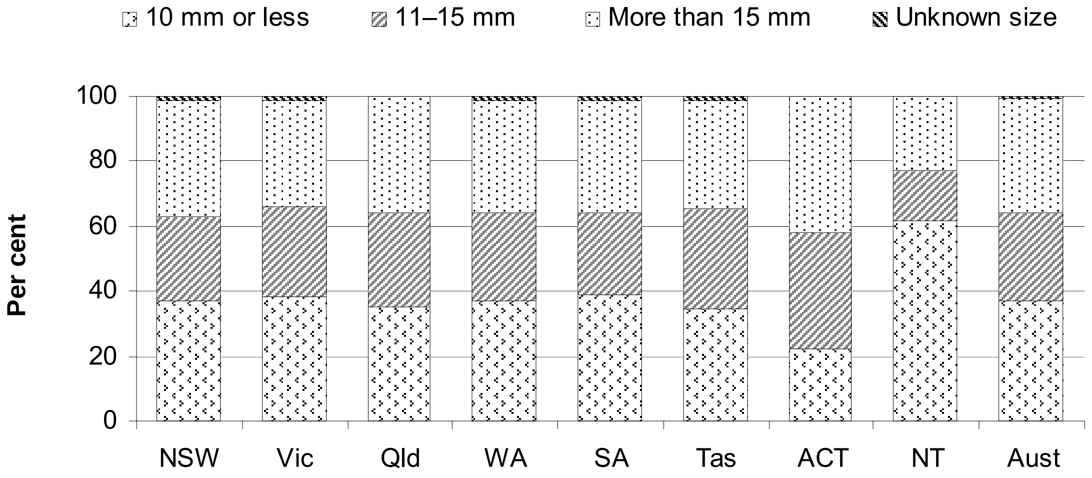
Figure 12.15 presents the proportion of cancers by size by screening round for 2006. The data are from BreastScreen Australia and cover only its clients.

Figure 12.15 **Detected invasive cancers, women aged over 40 years, by screening round and size of cancer 2006**[a, b]

First round



Subsequent round



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[a] Non-breast malignancies were not counted. [b] For small jurisdictions, fluctuations due to small numbers can make comparisons unreliable.

Source: State and Territory governments (unpublished); table 12A.19.

Overall performance — mortality rate for breast cancer

The ‘mortality rate for breast cancer’ is an outcome indicator of overall system performance (box 12.15).

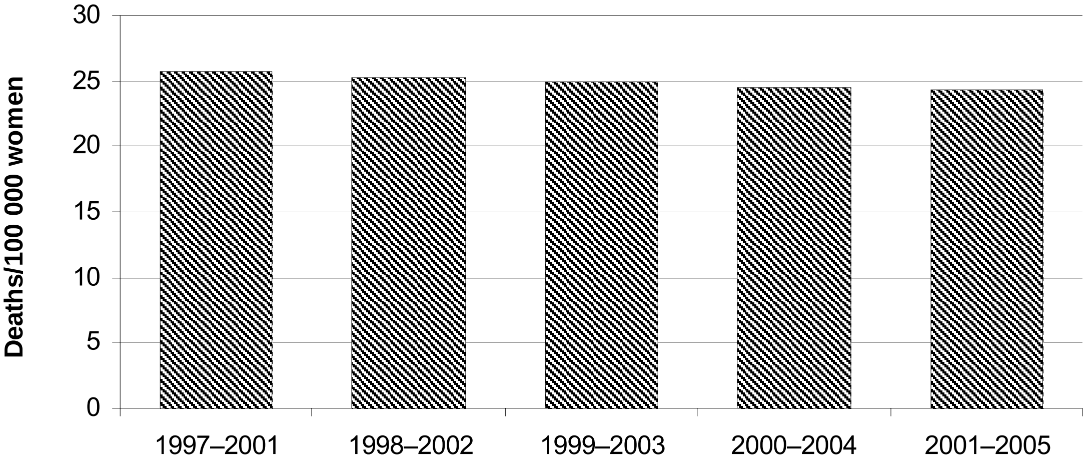
Box 12.15 **Mortality rate for breast cancer**

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 and relatively large variation in rates from year to year. Caution should still be used when comparing results for smaller jurisdictions (table 12A.1).

Age standardised mortality rates are the most appropriate measure for examining changes in mortality rates. The average annual age standardised mortality rate for breast cancer declined from 25.8 per 100 000 women over the period 1997–2001 to an average of 24.4 per 100 000 women over the period 2001–2005 (figure 12.16).

Figure 12.16 **Annual average age standardised mortality rate from breast cancer, all ages[a]**

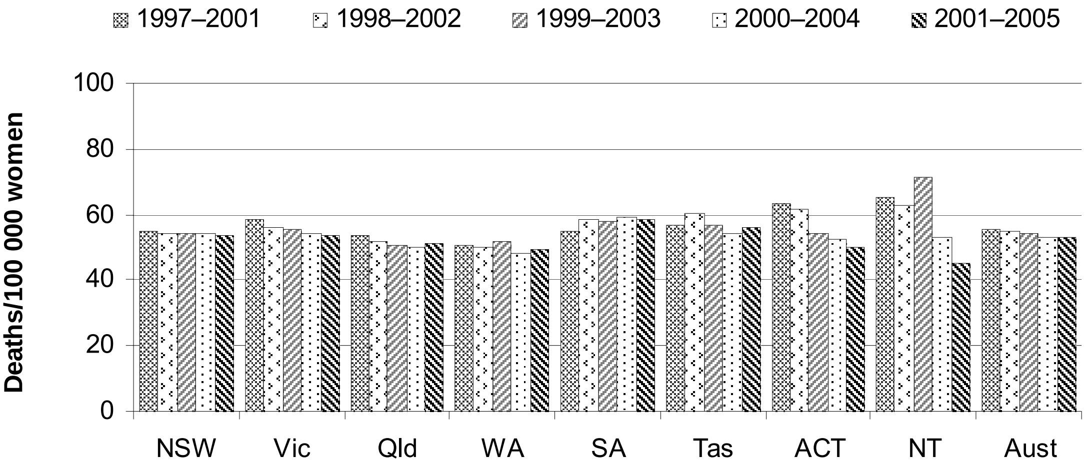


[a] Age standardised to the Australian population at 30 June 2001.

Source: AIHW (unpublished); table 12A.1.

The annual average age standardised mortality rate from breast cancer for women aged 50–69 years also declined, from 55.3 per 100 000 women over the period 1997–2001 to 53.1 per 100 000 women over the period 2001–2005 (figure 12.17).

Figure 12.17 **Annual average age standardised mortality rate from breast cancer, women aged 50–69 years**[a]



[a] Age standardised to the Australian population at 30 June 2001.

Source: AIHW (unpublished); table 12A.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 12.16). Data for this indicator were not available for the 2008 Report.

Box 12.16 **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.

12.4 Mental health

Profile

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 section covers specialist mental health care services that treat mostly low prevalence but severe mental disorders. Other health services are also important for people with a mental disorder. Other health and related service providers include GPs and alcohol and drug treatment services (chapter 11), public hospitals (chapter 10), and aged care services (chapter 13). This Report does not include specific performance information on these services treatment of people with a mental illness. Some common terms used in mental health management are outlined in box 12.17.

Mental health patients often have complex needs that may affect other services they receive, such as those covered in chapter 4 ('School education'), chapter 8 ('Corrective services'), chapter 9 ('Emergency management') and chapter 14 ('Services for people with a disability').

Box 12.17 **Some common terms relating to mental health**

acute services: mental health services that primarily provide specialist psychiatric care for people with acute episodes of mental disorder. These episodes are characterised by recent onset of severe clinical symptoms of mental disorder, that have potential for prolonged dysfunction or risk to self and/or others. The key characteristic of acute services is that treatment effort is focused on the short term. Acute services may focus on assisting people who have had no prior contact or previous psychiatric history, or individuals with a continuing mental 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.

(Continued on next page)

Box 12.17 **(Continued)**

community residential services: staffed residential units established in community settings that provide specialised treatment, rehabilitation and/or care for people affected by a mental disorder. To be defined as community-based residences, the services must provide residential care, 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.

early intervention: actions that are appropriate for and specifically target people displaying the early signs and symptoms of a mental health problem or mental disorder and people developing or experiencing a first episode of mental disorder.

inpatient services: mental health services that provide admitted patient care. These are stand-alone psychiatric hospitals or specialist psychiatric units located within general (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 this 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: any action taken to maximise mental health and wellbeing among populations and individuals. It is aimed at changing environments (social, physical, economic, educational, cultural) and enhancing the ‘coping’ capacity of communities, families and individuals by giving power, knowledge, skills and the necessary resources.

mental illness prevention: interventions that occur before the initial onset of a disorder to prevent its development. The goal of prevention interventions is to reduce the incidence and prevalence of mental health problems and disorders.

(Continued on next page)

Box 12.17 **(Continued)**

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 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: AIHW (2006); DoHA (2005).

Prevalence

As part of the National Health Survey (NHS) 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 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 2006c).[4] 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 12.6). Overall, in percentage terms, more females than males had experienced moderate and high to very high levels of distress (table 12A.20).

The 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) included for the first time selected questions from the Kessler Psychological Distress Scale–10 (K10). The K10 was reduced to five questions (K5) to provide an appropriate short set of questions to identify psychological distress (ABS 2006b). The wording of two of the K10 questions was modified slightly for the NATSIHS K5 version. Nevertheless, these modifications are unlikely to significantly affect the comparability of Indigenous and non-Indigenous (K5) data on levels of psychological distress.

In 2004-05, after adjusting for age differences between the Indigenous and non-Indigenous populations, 26.6 per cent of Indigenous people had experienced a high to very high level of psychological distress compared with 13.1 per cent of non-Indigenous people (figure 12.18).

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[4] 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 one for ‘none of the time’, to five 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 2006c).

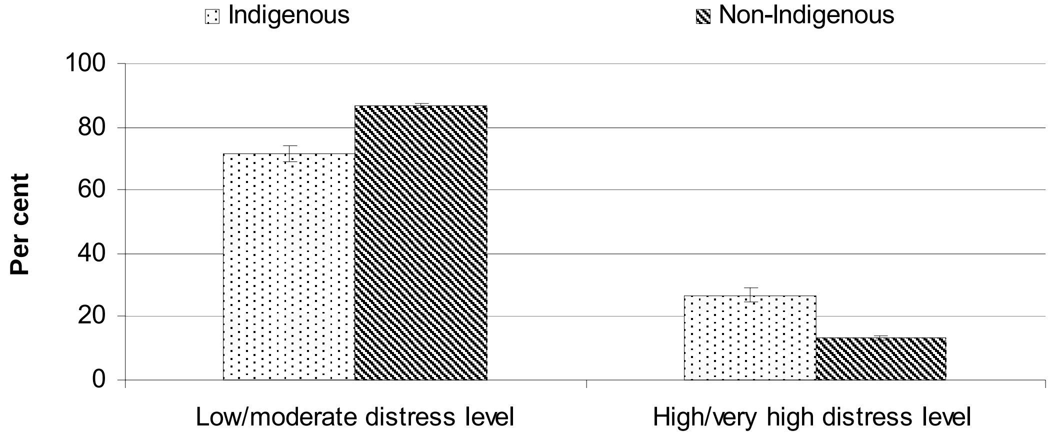
Table 12.6 K10 level of psychological distress, 2004–05 (per cent of population)[a, b]

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*[c]	*Aust*
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
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**na**	**100.0**
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[d]	12.1	9.5	14.1	7.2	8.6	10.0	9.7	na	11.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**na**	**100.0**
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
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**na**	**100.0**

[a] Psychological distress as measured by the K10 scale. [b] Numbers may not add up to 100 due to rounding. [c] Separate estimates for the NT are not available for this survey, but the NT contributed to national estimates. [d] The Queensland and Tasmanian estimates have relative standard errors of 25–50 per cent and need to be interpreted with caution. **na** Not available.

Source: ABS (2006c); table 12A.20.

Figure 12.18 K5 level of psychological distress, people aged 18 years and over, age standardised, 2004-05[a, b, c]



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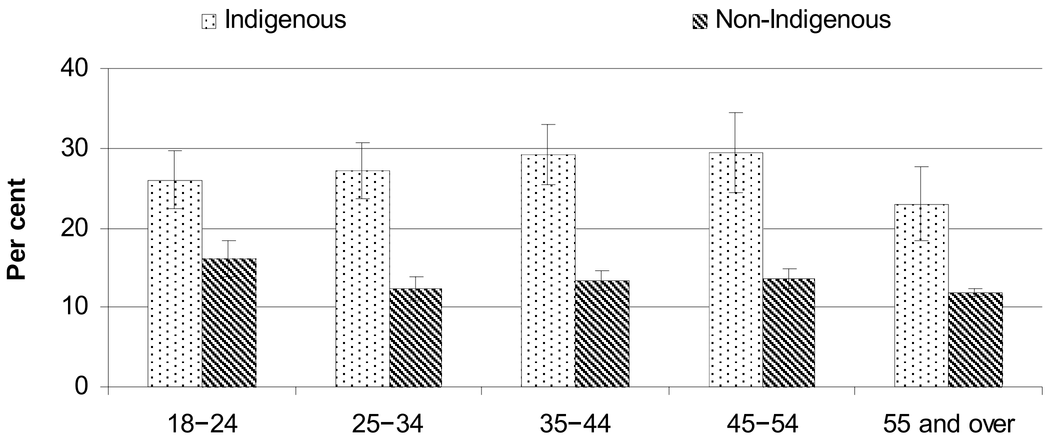
[a] Error bars represent 95 per cent confidence intervals around each estimate. [b] Low/moderate distress level represents a K5 score of 5–11 (maximum score is 25). [c] High/very high distress level represents a K5 score of 12–25 (maximum score is 25).

Source: ABS 2004-05 NATSIHS (unpublished); ABS 2004-05 NHS (unpublished); SCRGSP (2007).

In all age groups, Indigenous people were more likely to have experienced high to very high levels of psychological distress than non-Indigenous people in 2004-05 (figure 12.19).

Figure 12.19 **High to very high level of psychological distress, by age, Australia, 2004-05**[a, b]



[a] Error bars represent 95 per cent confidence intervals around each estimate. [b] High/very high distress level represents a K5 score of 12–25 (maximum score is 25).

Source: ABS 2004-05 NATSIHS (unpublished); ABS 2004-05 NHS (unpublished); SCRGSP (2007).

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) and 3.2 per cent of the total population, 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).

Roles and responsibilities

State and Territory governments are the primary sources of funding and service delivery for specialist public mental health services. The Australian Government provides funding to states and territories via the Australian Health Care Agreements and to private psychiatrists and GPs through the Medicare Benefits Schedule. On 1 November 2006, new Medicare items for GPs, psychiatrists and allied mental health professionals (clinical psychologists, psychologists, social workers and occupational therapists) were introduced for people with assessed mental disorder. The Australian Government also provides funding 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 (see chapters 13 and 14 respectively).

Funding

Real government recurrent expenditure of around $4.1 billion was allocated to mental health services in 2005-06 (tables 12A.21 and 12A.22).[5] State and Territory governments made the largest contribution ($2.7 billion, or 64.4 per cent), although this included some Australian Government funds under the Australian Health Care Agreements (table 12A.22). The Australian Government spent $1.5 billion (this does not include $8.6 million spent on the National Suicide Prevention Strategy). Real Australian Government expenditure per person rose from $69 in 2001-02 to $71 in 2005-06. National average State and Territory expenditure per head in 2005-06 was $129, up from $107 in 2001-02 (figure 12.20).

Data in this Report relating to publicly funded mental health services come from State and Territory governments. Data up until 2004-05 were collected under the National Survey of Mental Health Services. From 2005-06, these data are being collected under the Mental Health Establishments National Minimum Data Set (MHE NMDS). Data for 2005-06 are preliminary and should be interpreted with care. Final validation is ongoing prior to publication in future National Mental Health reports.

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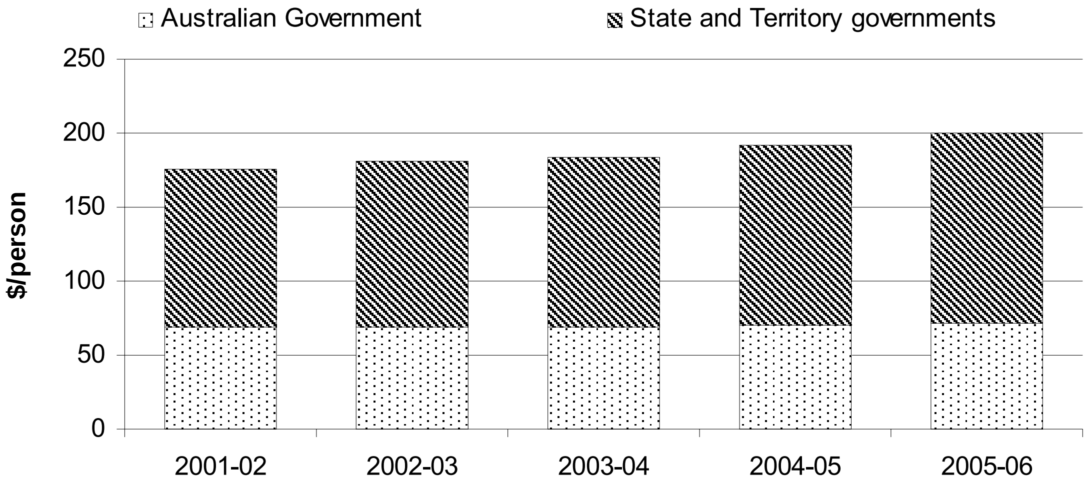
[5] These data include revenue from other sources (including patient fees and reimbursement by third party compensation insurers) and 'other Australian Government funds'.

Figure 12.20 **Real government recurrent expenditure on mental health services per person (2005-06 dollars)**[a, b, c]



[a] Data for 2005-06 are preliminary; final validation is ongoing. [b] Constant price expenditure for all years (2005-06 dollars), using the implicit price deflator for non-farm gross domestic product (table 12A.55) for Australian Government expenditure, and the State and Territory implicit price deflators for general government final consumption expenditure on hospital clinical services for State and Territory expenditure (table 12A.54). [c] Australian Government expenditure does not include expenditure on the National Suicide Prevention Strategy. In 2005-06, this expenditure was $8.6 million.

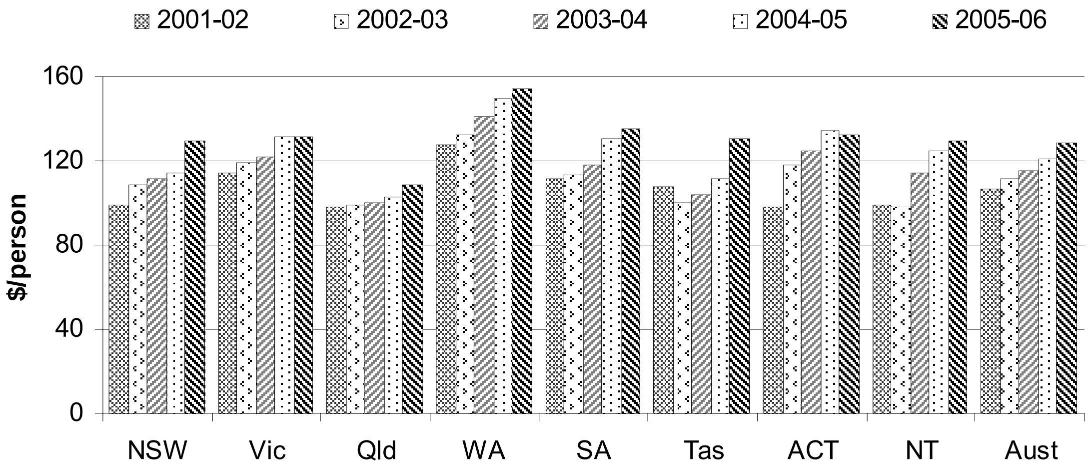
Source: Department of Health and Ageing (DoHA) (unpublished); State and Territory governments (unpublished); tables 12A.22 and 12A.23.

The largest component of Australian Government expenditure on mental health services in 2005-06 was expenditure under the Pharmaceutical Benefits Schedule for psychiatric medication ($638 million). Expenditure on psychiatric medication increased by an annual average rate of 2.4 per cent between 2001-02 and 2005-06 and rose slightly from 43.2 per cent of Australian Government expenditure on mental health services in 2001-02 to 43.5 per cent in 2005-06. The annual rate of growth of expenditure on psychiatric medication has declined over the reporting period (from 6.1 per cent from 2001-02 to 2002-03 to -2.9 per cent from 2004-05 to 2005-06) (table 12A.21). The reduced rate of growth in expenditure on psychiatric medication is due to a number of frequently prescribed medications coming off patent, which allowed lower cost generic medicines to be used.

In 2005-06, the next largest component of Australian Government expenditure for mental health services was GPs (15.9 per cent), followed by Medicare Benefits Schedule payments for consultant psychiatrists (15.1 per cent). The residual was provided by the National Mental Health Strategy (NMHS) (9.6 per cent), DVA (8.6 per cent), private hospital insurance premium rebates (4.4 per cent), and research and other time limited program and project support (3.0 per cent) (table 12A.21).

Real expenditure per person at State and Territory discretion has increased over time (figure 12.21). Data in figure 12.21 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 therefore referred to as expenditure 'at State and Territory discretion'. The data in figure 12.21 exclude depreciation. Estimates of depreciation are presented in table 12A.25. State and Territory government expenditure estimates excluding revenue from other sources and other Australian Government funds are presented in table 12A.24. 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 12.21 **Real recurrent expenditure at the discretion of State and Territory governments, per person (2005-06 dollars)[a, b, c, d, e]**

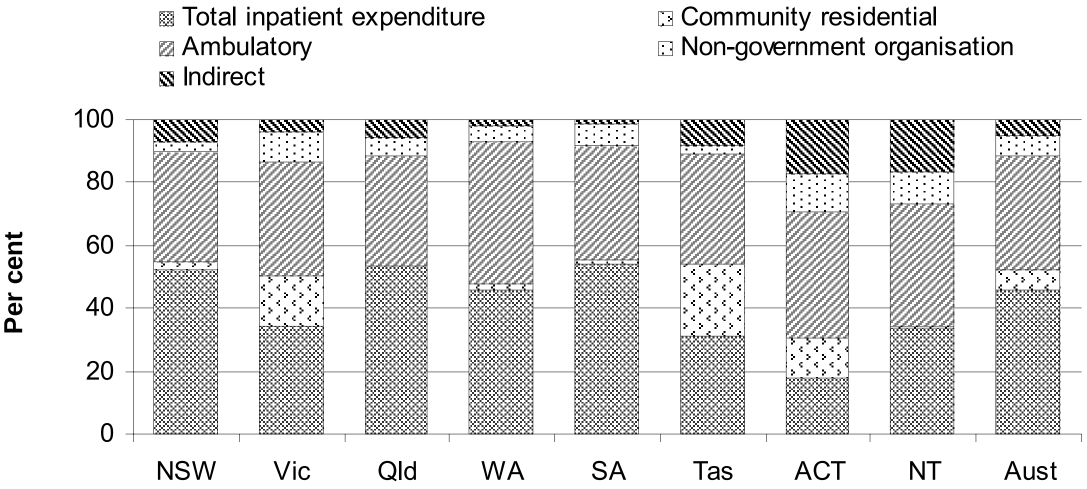


[a] Data for 2005-06 are preliminary; final validation is ongoing. [b] Constant price expenditure (2005-06 dollars), using State and Territory implicit price deflators for general government final consumption on hospital clinical services (table 12A.54). [c] Estimates of State and Territory government 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. [d] Depreciation is excluded for all years. Depreciation estimates are reported in table 12A.25. [e] SA total recurrent expenditure data used to derive these results for 2003-04 and 2004-05 have been revised.

Source: State and Territory governments (unpublished); DoHA (unpublished); table 12A.22.

Figure 12.22 shows how expenditure at the discretion of State and Territory governments was distributed across the range of mental health services in 2005-06. It does not show the distribution of the Australian Government expenditure discussed under figure 12.20.

Figure 12.22 State and Territory recurrent expenditure, by service category, 2005-06[a, b, c, d, e, f]



[a] Data for 2005-06 are preliminary; final validation is ongoing. [b] Includes all State and Territory expenditure on mental health services regardless of source of funds. [c] Depreciation is excluded. Depreciation estimates are reported in table 12A.25. [d] A community residential mental health service is a specialised mental health service that: employs mental health-trained staff on-site; provides rehabilitation, treatment or extended care to residents that is in a domestic-like environment and that is intended to be on an overnight basis; and encourages the resident to take responsibility for their daily living activities. These services include those that employ mental health trained staff on-site 24 hours per day and other services with less intensive staffing. However, all these services employ on-site mental health trained staff for some part of each day. [e] 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. [f] 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.

Source: State and Territory governments (unpublished); table 12A.26.

Size and scope of sector

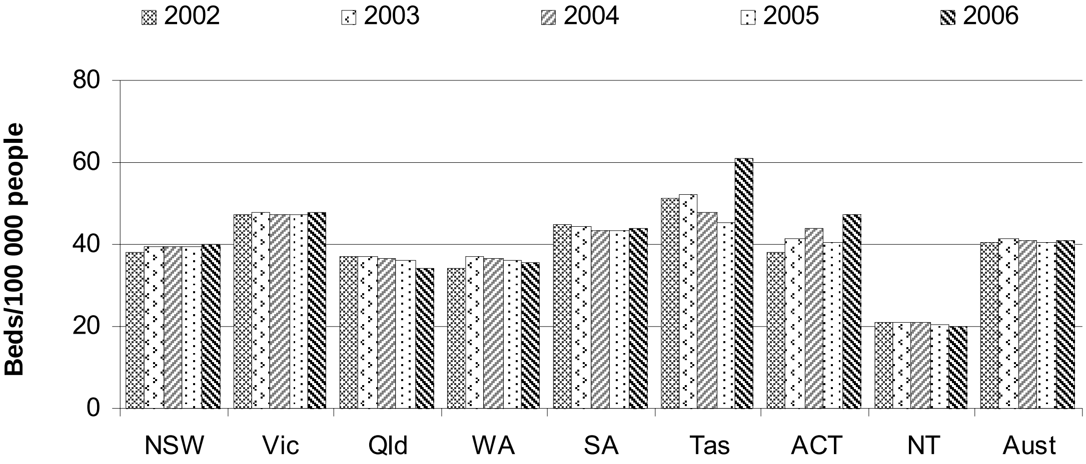
Mental health beds

Beds are counted as those immediately available for use by admitted patients if required. They are available for use immediately — or within a reasonable period of time — if located in a suitable place for care with nursing or other auxiliary staff available.

Available beds were counted differently across jurisdictions in 2005-06. Some jurisdictions counted available beds as the average of monthly available bed numbers. Other jurisdictions counted available beds as at 30 June. For previous years, all jurisdictions counted beds at 30 June. In addition, for 2005-06 some jurisdictions counted available beds as excluding beds in wards which were closed for any reason (except weekend closures for beds/wards staffed and available on weekdays only). Other jurisdictions included beds in wards that were temporarily closed for reasons such as renovation or strike, but that would normally have been open. For previous years, all jurisdictions included wards that were temporarily closed for reasons such as renovation or strike, but that would normally be open.

Figure 12.23 presents the number of beds per 100 000 people for public hospitals and community residential facilities combined.

Figure 12.23 **Mental health beds in public hospitals and publicly funded community residential units, 30 June**[a, b, c, d, e]

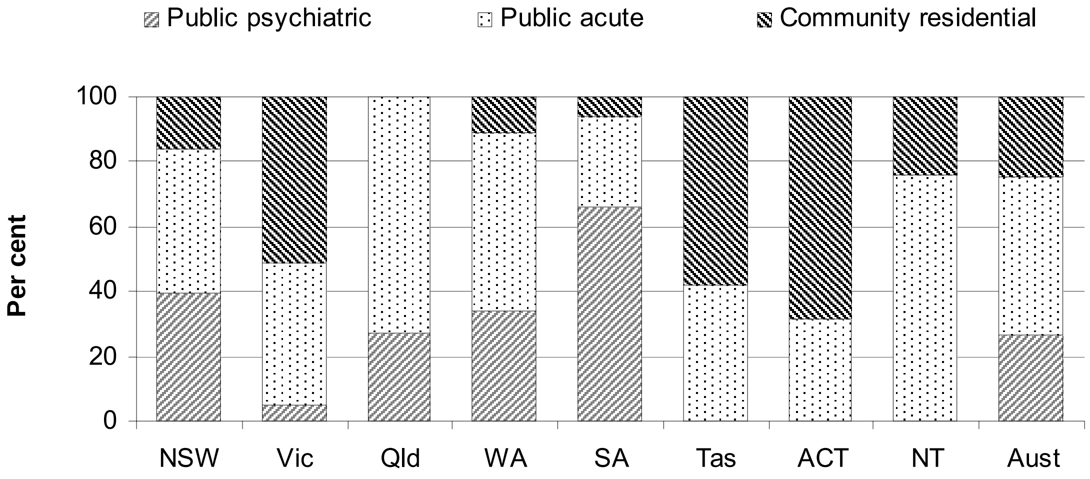


[a] Data for 2006 are preliminary; final validation is ongoing. [b] Includes beds in public hospitals and publicly funded community residential units. [c] The reduction in the number of beds in Queensland is a result of a temporary closure of some acute beds in one hospital and the permanent closure of some transitional extended treatment beds. [d] Bed numbers in WA for 2006 include emergency department observation beds in one hospital. [e] In Tasmania, for 2006, non-government organisations' residential beds funded by government are included for the first time in the publicly funded community residential facilities category. This has led to a significant change in the bed numbers between 2005 and 2006.

Source: State and Territory governments (unpublished); table 12A.27.

Figure 12.24 presents the number of beds by service category for 2006. These data show the differences in service mix across states and territories. Queensland 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.

Figure 12.24 **Beds, by service category, 30 June 2006**[a, b, c]



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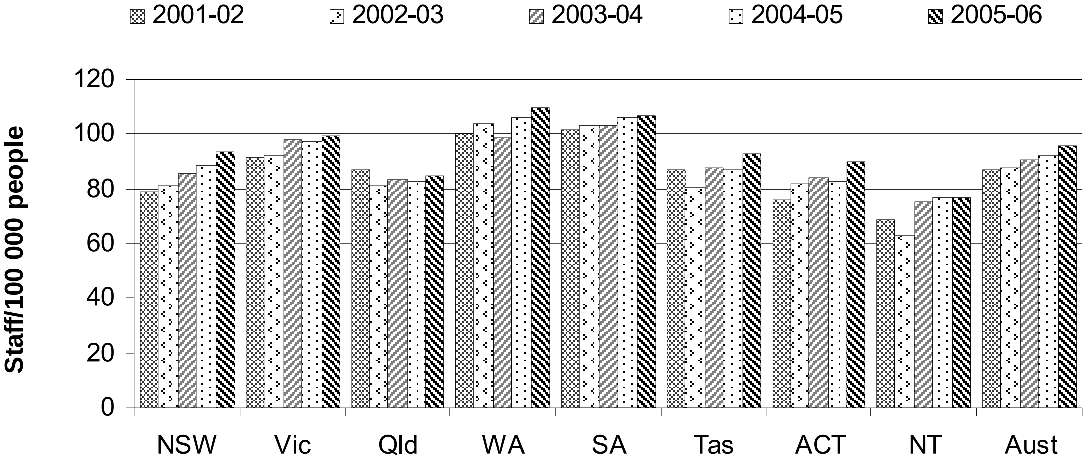
[a] Data for 2006 are preliminary; final validation is ongoing. [b] Queensland does not fund community residential services, but it funds a number of campus-based and non-campus-based extended treatment services. These services are reported either as beds in public acute hospitals or beds in public psychiatric hospitals. [c] Tasmania, the ACT and the NT do not have public psychiatric beds.

Source: State and Territory governments (unpublished); table 12A.27.

Staff

Figure 12.25 reports full time equivalent (FTE) health professional direct care staff per 100 000 people. It includes only staff within the health professional categories of ‘medical’, ‘nursing’ and ‘allied health’. ‘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’ staff consist of registered and non-registered nurses. ‘Allied health’ staff consist of occupational therapists, social workers, psychologists and other allied health staff. ‘Other personal care’ direct care staff are excluded. ‘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 12.7.

Figure 12.25 **FTE health professional direct care staff per 100 000 people**[a, b, c]



[a] Data for 2005-06 are preliminary; final validation is ongoing. [b] Includes health professional occupational categories only. [c] The apparent drop in the FTE staff rate for Queensland since 2001-02, is due in part to the completion of the downsizing and redevelopment of two of the psychiatric hospital campuses which resulted in substantial staff movements and some short term reduction in staffing. The decrease in the rate of FTE per 100 000 also reflects Queensland's high population growth rate.

Source: State and Territory governments (unpublished); table 12A.28.

Nursing staff comprise the largest FTE component of health care professionals employed in mental health services. Across Australia in 2005-06, 62.0 nurses per 100 000 people were working in specialised mental health services, compared with 22.8 allied health care staff and 10.8 medical staff (table 12A.28). FTE direct care staff employed in specialised mental health services, by service setting, are reported in table 12A.29.

Services provided

Estimating activity across the specialised mental health services sector is problematic. Data for patient days are provided in figure 12.26 by acute, non-acute and 24 hour staffed community residential care (as defined in box 12.17).[6] Hospital inpatient days and community residential patient days are included in figure 12.26, but other types of community services 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, but there are continuing difficulties with data quality. As noted earlier, Queensland does not fund community residential services,

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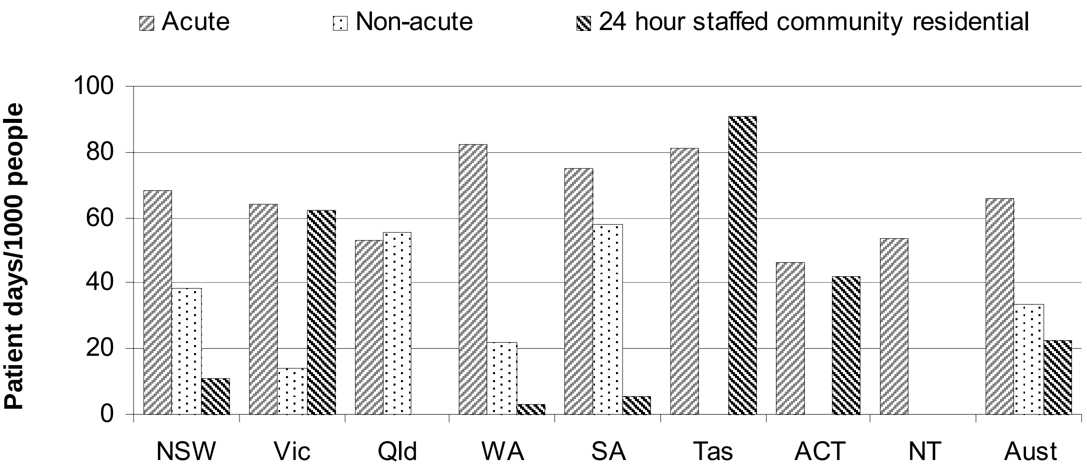
[6] Patient days are all days or part days for which the patient was in care during the relevant period, regardless of the original date of admission.

but a number of campus based and non-campus-based extended treatment services. Patient days in these services are included as non-acute.

Figure 12.26 **Mental health patient days, 2005-06**[a, b, c, d]



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[a] Data for 2005-06 are preliminary; final validation is ongoing. [b] 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. [c] Tasmania, the ACT and the NT did not provide mental health care in non-acute units. [d] The NT did not provide mental health care in 24 hour staffed community residential facilities.

Source: State and Territory governments (unpublished); table 12A.30.

In 2004-05, there were 76 172 separations with specialised psychiatric care in public acute hospitals and 12 887 specialised psychiatric care separations in public psychiatric hospitals (table 12A.31). Schizophrenia accounted for a large proportion of separations with specialised psychiatric care in public hospitals (22.9 per cent in public acute hospitals and 25.1 per cent in public psychiatric hospitals) (table 12A.31).

Unlike the general acute hospital sector, mental health has few procedural same day admissions. Electroconvulsive therapy treatment of people living in the community 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). In 2004-05, there were 10 510 ambulatory equivalent same day separations with specialised psychiatric care in public acute hospitals and 1775 in public psychiatric hospitals (AIHW 2007c).

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 2006-07, 11.0 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 (3.7 per 100 GP encounters). Anxiety (1.7 per 100 GP encounters) and sleep disturbance (1.6 per 100 GP encounters) were the next most common psychological problems managed. In 2006-07, depression was the seventh most frequently managed problem by a GP (Britt *et al*. 2008).[7]

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. For the jurisdictions for which data are available, the total average length of stay for Indigenous people was shorter than for non-Indigenous people (table 12.7).

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[7] 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.

Table 12.7 **Specialised psychiatric care, by Indigenous status, 2004-05**[a, b]

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Total*[c]
Indigenous										
Separations	no.	np	np	1 181	610	332	np	np	494	2 617
Separation rate	per '000 people	np	np	9.9	9.1	13.0	np	np	7.7	9.5
Patient days	no.	np	np	30 381	11 153	5 795	np	np	4 037	51 366
Psychiatric care days	no.	np	np	30 228	11 091	5 795	np	np	3 999	51 113
Average length of stay[d]	no.	np	np	27.4	18.3	17.8	np	np	9.2	20.7
Non-Indigenous										
Separations	no.	np	np	26 141	11 121	9 848	np	np	680	47 790
Separation rate	per '000 people	np	np	7.0	5.8	6.5	np	np	4.7	6.5
Patient days	no.	np	np	537 377	215 611	199 829	np	np	7 065	959 882
Psychiatric care days	no.	np	np	533 950	213 241	199 829	np	np	7 038	954 058
Average length of stay[d]	no	np	np	23.9	20.4	23.0	np	np	10.9	22.6

[a] The completeness of data on Indigenous status varies, so these data need to be used with care. [b] Specialised psychiatric care refers to separations in which at least one day of specialised psychiatric care was received. [c] Data are for Queensland, WA, SA and the NT only. [d] Includes data for overnight separations only. **np** Not published.

Source: AIHW (2007c); table 12A.32.

Framework of performance indicators

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 framework of performance indicators for mental health services builds on government objectives for mental health service delivery (box 12.18) as encompassed in the NMHS and the Council of Australian Governments (COAG) National Action Plan on Mental Health. 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 Steering Committee.

Box 12.18 **Objectives for mental health services**

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
- provide services in an equitable (including improved access to mental health services, particularly in Indigenous and rural communities) and efficient manner.

Governments also aim to improve mental health and facilitate recovery from illness through more stable accommodation and support and meaningful participation in recreational, social, employment and other activities in the community.

The Australian, State and Territory governments endorsed the NMHS in 1992. The Strategy consists of the National Mental Health Policy and the National Mental Health Plan.

- The National Mental Health Policy describes the broad aims and objectives of the Strategy. The Policy has 38 objectives, including those that relate to the shift from institutional to community-based services, and the delivery of services in mainstream settings (AIHW 2007c).
- The National Mental Health Plan describes the approach to implementing the aims and objectives of the Policy. A Third Plan (2003–2008) was endorsed by all Australian Health Ministers in July 2003. This plan consolidates reforms begun under the first two plans (AIHW 2007c).

The National Strategic Framework for Aboriginal and Torres Strait Islander People’s Mental Health and Social and Emotional Well Being 2004–2009 (the Social and Emotional Well Being Framework) was endorsed by the Australian Health Ministers’ Advisory Council in December 2004. It aims to provide a framework for action by all governments and communities to improve the social and emotional wellbeing and mental health needs of Indigenous Australians over the next five years.

In 2006, COAG agreed to the National Action Plan on Mental Health 2006–2011 (COAG 2006). This plan involves a joint package of measures and new investments by all governments aimed at promoting better mental health and providing additional support to people with mental illness, their families and their carers. The Action Plan is directed at achieving four outcomes:

- reducing the prevalence and severity of mental illness in Australia
- reducing the prevalence of risk factors that contribute to the onset of mental illness and prevent longer term recovery
- increasing the proportion of people with an emerging or established mental illness who are able to access the right health care and other relevant community services at the right time, with a particular focus on early intervention
- increasing the ability of people with a mental illness to participate in the community, employment, education and training, including through an increase in access to stable accommodation.

A series of measures have been identified to monitor progress against these outcomes. Australian Health Ministers agreed to report annually to COAG on implementation of the Plan, and on progress against the agreed outcomes. Governments also agreed to an independent evaluation and review of the Plan after five years (COAG 2006).

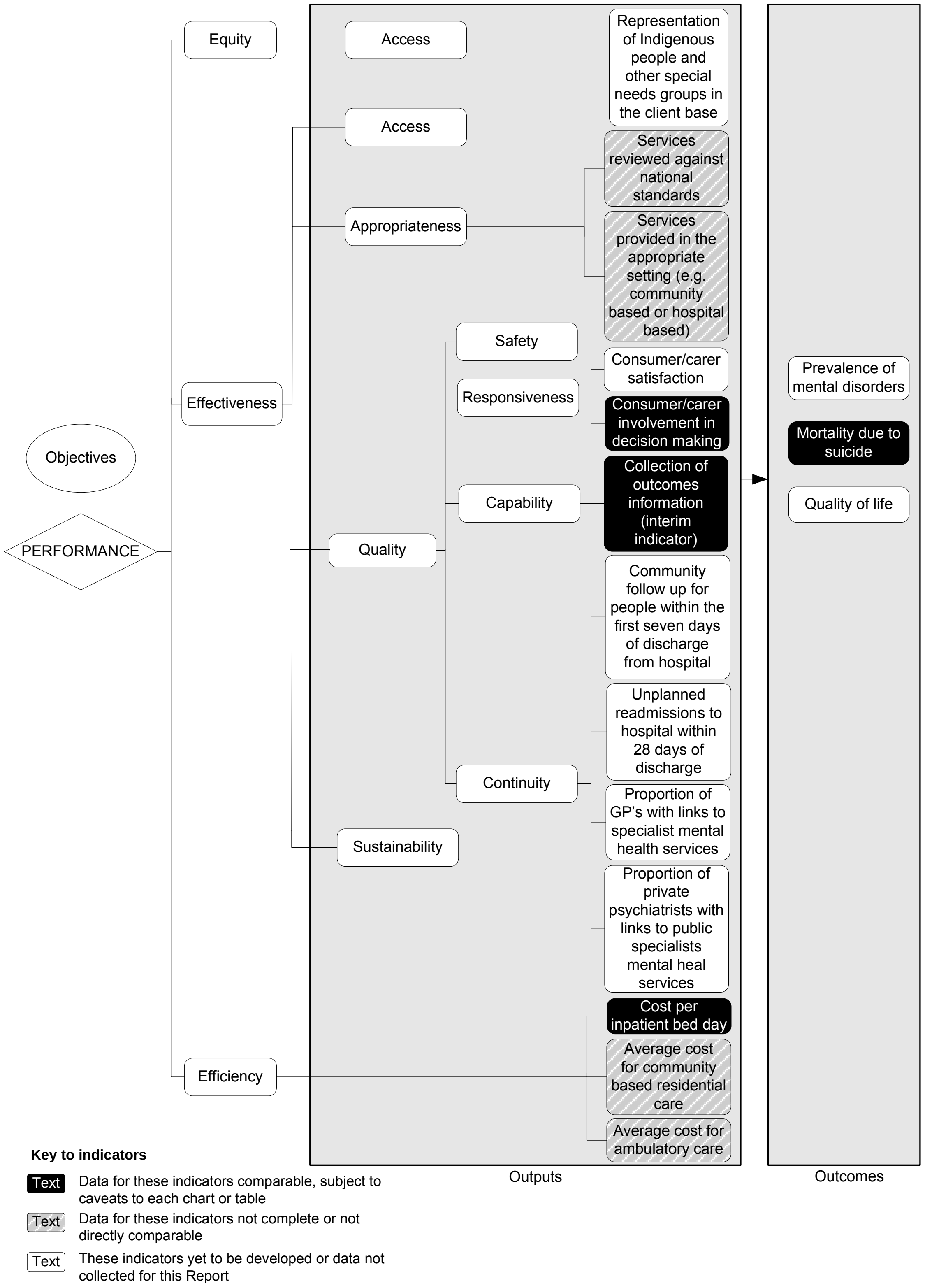
The performance indicator framework shows which data are comparable in the 2008 Report (figure 12.27). For data that are not considered directly comparable, the text includes relevant caveats and supporting commentary. Chapter 1 discusses data comparability from a Report-wide perspective (see section 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.

Some changes have been made to the mental health framework for the 2008 Report. The following ‘yet to be developed’ indicators have been included:

- ‘community follow-up for people within seven days of discharge from hospital’
- ‘unplanned readmissions to hospital within 28 days of discharge’.

These new indicators are agreed national key performance indicators and are progress measures under the COAG National Action Plan on Mental Health. National reporting against the indicators is yet to be published. Data for these indicators should be available for inclusion in the 2009 Report.

Figure 12.27 **Performance indicators for mental health management**



Key performance indicator results

Outputs

Outputs are the actual services delivered (while outcomes are the impact of these services on the status of an individual or group) (see chapter 1, section 1.5).

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 12.19).

Box 12.19 **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 indicator of the appropriateness of mental health services (box 12.20).

Box 12.20 **Services reviewed against the national standard**

‘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 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 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 12.21. The National Standards are currently undergoing a comprehensive review. The second phase of the review commenced in March 2007 and is scheduled to conclude in January 2008. The third and final phase of the review will commence in January 2008 and conclude in May 2008. The final phase will refine the Standards and the implementation process including assessment tools. During this phase, the monitoring and reporting processes will also be developed.

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 12.21 **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: DoHA (2002).

Table 12.8 shows 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 12.8 Specialised public mental health services reviewed against the National Standards for Mental Health Services, 30 June (per cent)

	NSW	*Vic*	*Qld*	*WA*[a]	*SA*	*Tas*	*ACT*	*NT*	*Aust*[b]
2002									
Level 1	na	na	85.6	na	na	na	81.3	–	67.9
Level 2	na	na	na	na	na	na	..	–	–
2003									
Level 1	na	na	31.1	na	11.7	na	81.3	–	22.8
Level 2	na	na	62.2	na	14.6	na	..	–	32.7
2004									
Level 1	na	100.0	84.2	na	49.5	na	81.3	50.0	67.3
Level 2	na	–	9.2	na	5.6	na	..	–	5.2
2005									
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
2006									
Level 1	78.0	100.0	77.0	54.8	62.9	36.4	100.0	50.0	75.4
Level 2	0.9	–	2.5	6.5	3.4	15.2	–	50.0	2.2

[a] WA has a number of services currently involved in re-accreditation as well as internal review against the National Standards that are not included in the table. [b] The Australian totals only apply to jurisdictions for which data are available. **na** Not available. .. Not applicable – Nil or rounded to zero.

Source: State and Territory governments (unpublished); table 12A.33.

Appropriateness — services provided in the appropriate setting

'Services provided in the appropriate setting' is an indicator of the extent to which mental health services are provided in an appropriate setting, that is in local and community settings (box 12.22).

Box 12.22 **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.

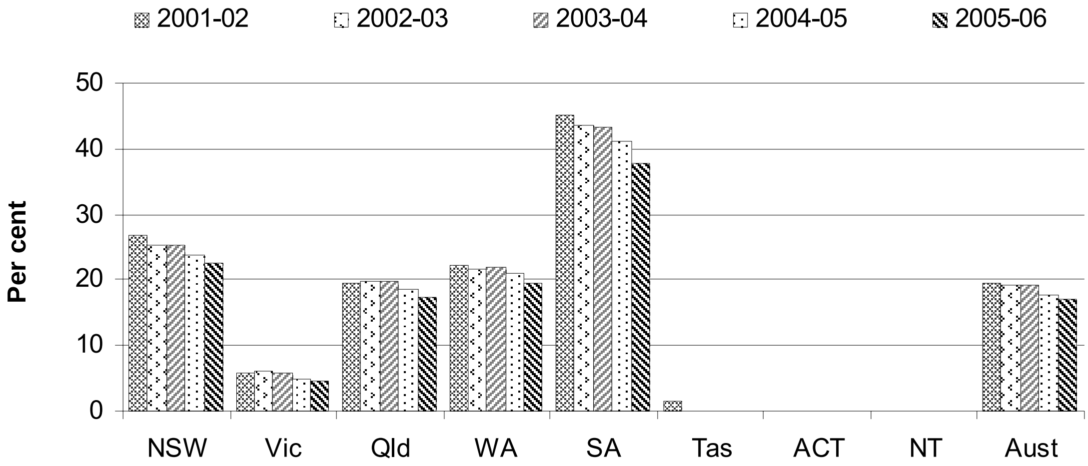
More appropriate treatment options can be provided by encouraging the treatment of patients in community settings and public (non-psychiatric) hospitals rather than in stand-alone psychiatric hospitals.

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 psychiatric 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 12.28 shows recurrent expenditure on stand-alone psychiatric hospitals as a proportion of total expenditure on mental health services.

Figure 12.28 **Recurrent expenditure on stand-alone psychiatric hospitals as a proportion of total expenditure on mental health services**[a, b, c]

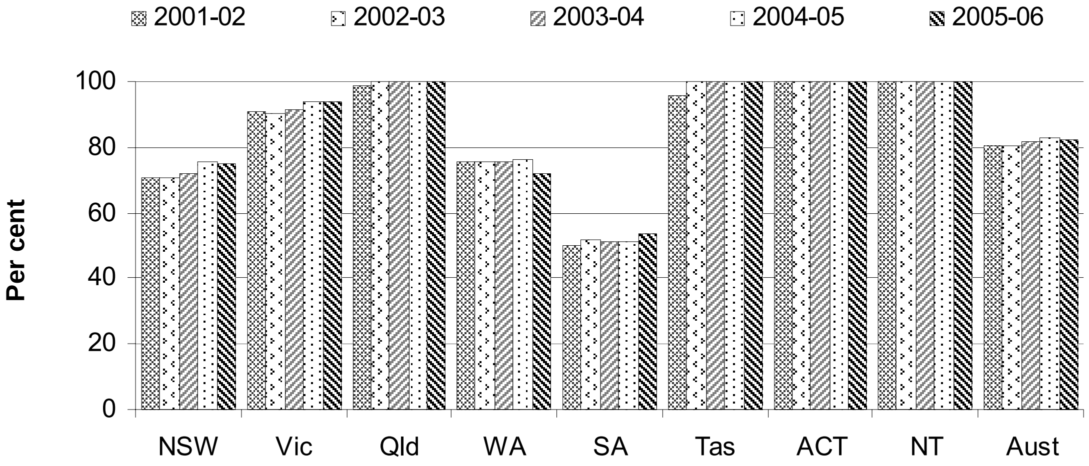


[a] Data for 2005-06 are preliminary; final validation is ongoing. [b] SA total recurrent expenditure data for 2003-04 and 2004-05 that were used to derive these results have been revised. [c] The ACT and the NT do not have public psychiatric hospitals. Tasmania has not had public psychiatric hospitals since 2001-02.

Source: State and Territory governments (unpublished); table 12A.34.

Figure 12.29 shows acute patient days in public acute hospitals as a proportion of the total acute inpatient bed days in public acute and psychiatric hospitals. Nationally, 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 2001-02 to 2005-06.

Figure 12.29 **Acute patient days in public acute hospitals as a proportion of total acute inpatient bed days in public acute and psychiatric hospitals**[a]



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[a] Data for 2005-06 are preliminary; final validation is ongoing.

Source: State and Territory governments (unpublished); table 12A.34.

Quality — consumer and carer satisfaction

The Steering Committee has identified 'consumer and carer satisfaction' as an area for development in future reports (box 12.23).

Box 12.23 **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 12.24).

Box 12.24 **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. This indicator has the following two measures:

- ‘Organisations with consumer participation in decision making’
- ‘Paid consumer and carer consultants per 10 000 clinicians’.

‘Organisations with consumer participation in decision making’ relates to the arrangements that allow consumers to contribute to local service planning and delivery in specialised mental health services. Arrangements are grouped into four categories:

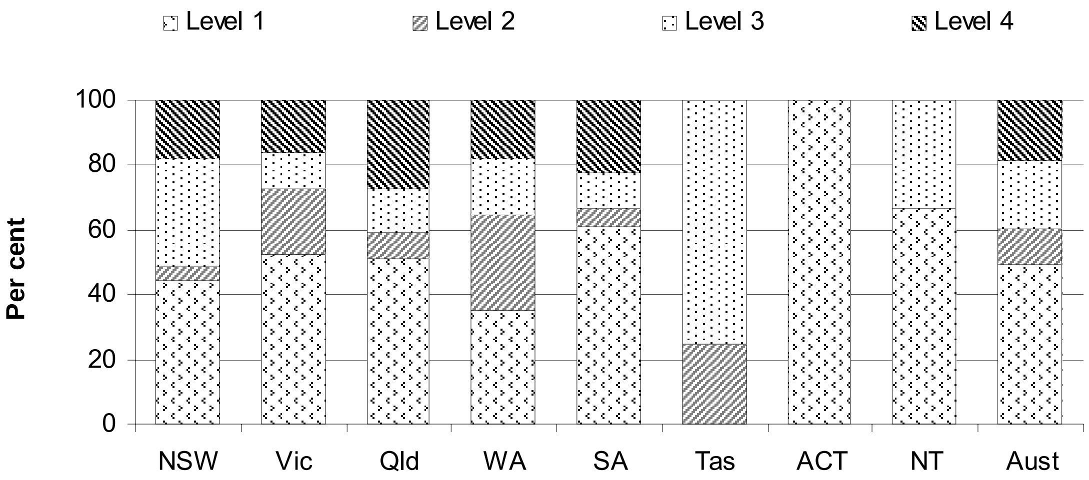
- level 1 — organisation has a formal position for mental health consumers on the management committee or a specific mental health consumer advisory group exists to advise on all aspects of service delivery
- level 2 — organisation has a specific mental health consumer advisory group to advise on some but not all aspects of service delivery
- level 3 — organisation includes mental health consumers on a broadly based advisory committee
- level 4 — organisation has minimal/no arrangements for mental health consumer participation in planning and evaluation of services.

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 such staff imply a greater chance that paid consumers and carers can be involved in decision making.

Figure 12.30 illustrates the degree of consumer participation in decision making. As notes to figure 12.30 indicate, current categories do not match all jurisdictions arrangements for consumer participation in decision making. Work to improve reporting in this area is needed.

Figure 12.30 Organisations with consumer participation in decision making, 2005-06[a, b, c, d]



[a] Data for 2005-06 are preliminary; final validation is ongoing. Non-government organisations are included only where they provide staffed residential services. [b] NSW advised that the government has no authority to require consumer participation in services delivered through the primary care program. [c] WA advised that these data do 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 and, collectively, these groups provide advice and representation on consumer and carer issues. [d] An expanded range of indicators of consumer and carer participation for 2002-03 are reported in the *National Mental Health Report 2005*.

Source: State and Territory governments (unpublished); table 12A.35.

Table 12.9 illustrates the number of paid FTE consumer and carer consultants per 10 000 FTE clinicians.

Table 12.9 Paid FTE consumer and carer consultants per 10 000 FTE clinical staff[a]

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Paid consumer consultants per 10 000 clinicians									
2002-03	na	na	19.5	na	12.7	na	na	–	na
2003-04	25.9	na	21.6	na	16.6	na	na	–	na
2004-05	26.7	na	24.4	na	23.8	na	na	–	na
2005-06	40.2	38.7	29.1	2.2	16.7	–	41.1	–	30.3
Paid carer consultants per 10 000 clinicians									
2002-03	na	na	3.2	na	–	na	na	–	na
2003-04	na	na	3.1	na	–	na	na	–	na
2004-05	3.3	na	3.1	na	–	na	na	–	na
2005-06	4.1	23.1	2.9	–	–	–	–	–	0.8

[a] Data for 2005-06 are preliminary; final validation is ongoing. **na** Not available. – Nil or rounded to zero.

Source: State and Territory governments (unpublished); table 12A.35.

Quality — collection of outcomes information (interim indicator)

The 'collection of outcomes information' is an interim effectiveness indicator of mental health management (box 12.25).

Box 12.25 **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.

States and territories have taken the following approach to introducing consumer outcomes 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 (DoHA 2002).

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

The percentages of specialised mental health services that have introduced routine consumer outcomes measurement are shown in table 12.10.

Table 12.10 **Specialised mental health services that introduced the routine collection of consumer outcomes measurement (per cent)[a]**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
June 2002	55.8	11.3	–	–	–	17.6	–	–	33.2
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
June 2006	100.0	96.9	100.0	100.0	77.6	97.0	100.0	100.0	93.0

[a] 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 12A.36.

Quality — community follow up for people within the first seven days of discharge from hospital

The Steering Committee has identified ‘community follow up for people within the first seven days of discharge from hospital’ as an indicator of the effectiveness of mental health management (box 12.26). This indicator is a progress measure under the COAG National Action Plan. Data for this indicator should be available for the 2009 Report.

Box 12.26 **Community follow up for people within the first seven days of discharge from hospital**

‘Rates of community follow up for people within the first seven days of discharge from hospital’ is an indicator of the objective of mental health service delivery to provide continuity of care. A responsive community support system for people who have experienced an acute psychiatric episode requiring hospitalisation is essential to maintain clinical and functional stability and to minimise the need for readmission to hospital.

Quality — unplanned readmissions to hospital within 28 days of discharge

The Steering Committee has identified ‘readmissions to hospital within 28 days of discharge’ as an indicator of the effectiveness of mental health management (box 12.27). This indicator is a progress measure under the COAG National Action Plan. Data for this indicator should be available for the 2009 Report.

Box 12.27 **Readmissions to hospital within 28 days of discharge**

‘Readmissions to hospital within 28 days of discharge’ is an indicator of the objective of mental health service delivery to provide continuity of care. While inpatient services aim to provide treatment that enables individuals to return to the community as soon as possible, unplanned admissions following a recent discharge may indicate that inpatient treatment was either incomplete or ineffective, or that follow-up care was inadequate to maintain the person out of hospital. Therefore, readmission rates can identify deficiencies in the functioning of the overall care system.

Quality — proportion of GPs 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 12.28). Data for this indicator were not available for the 2008 Report.

Box 12.28 **Proportion of GPs 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 12.29). Data for this indicator were not available for the 2008 Report.

Box 12.29 **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 2005-06 are preliminary and will be further validated as part of the production of a future 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 12.30).

Box 12.30 **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.

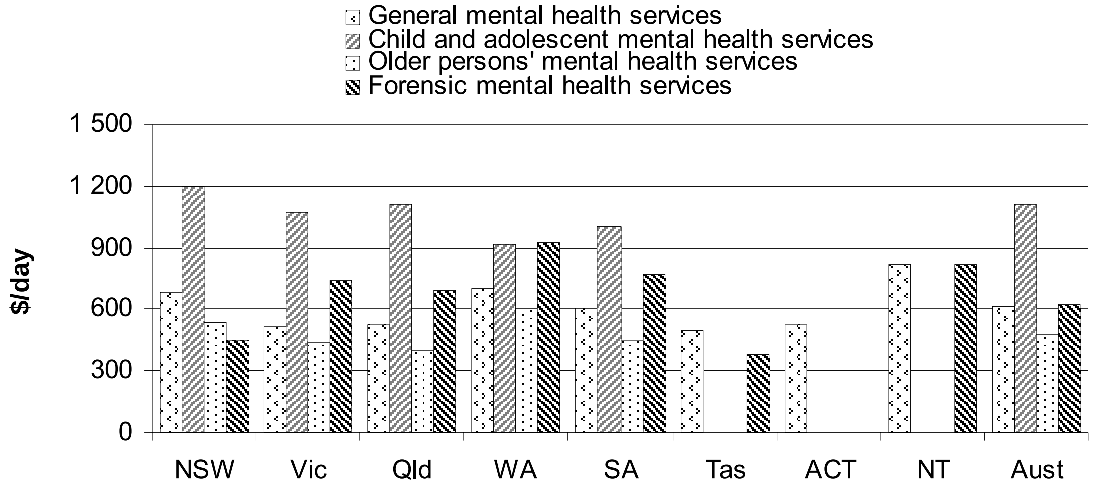
Reported real inpatient costs per day are disaggregated by inpatient program type (general mental health services, child and adolescent mental health services, older persons’ mental health services and forensic mental health services) and hospital type (psychiatric hospitals (acute units), psychiatric hospitals (non-acute units) and general hospitals). Disaggregating these data improves comparability across jurisdictions.

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.

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 10), but casemix data for specialised mental health services are not available.

Inpatient costs per day are presented in figures 12.31 (by inpatient program type) and 12.32 (by hospital type). Changes over time partly reflect institutional change in accordance with the NMHS (for example, a shift to the delivery of services in mainstream settings).

Figure 12.31 **Average recurrent cost per inpatient bed day, public hospitals, by inpatient program type, 2005-06**[a, b, c, d, e, f]



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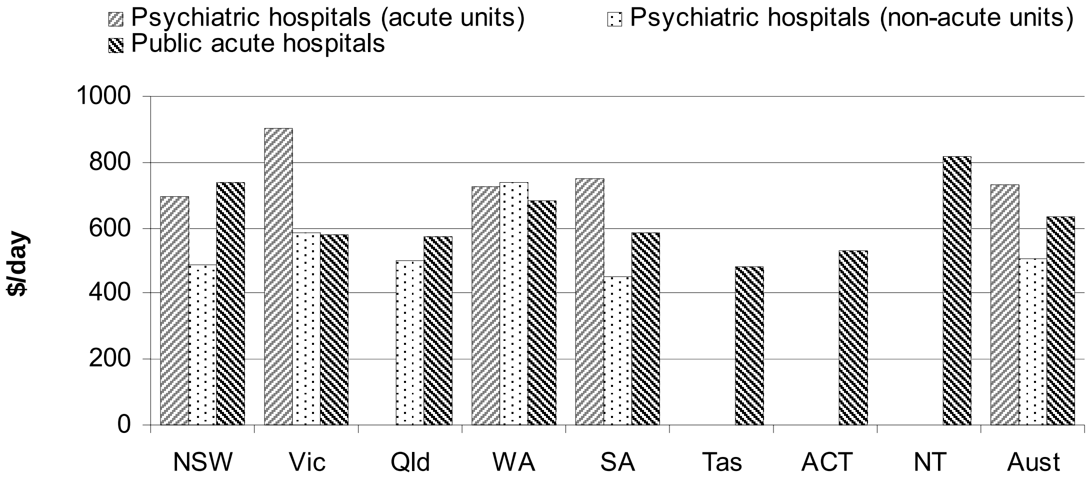
[a] Data for 2005-06 are preliminary; final validation is ongoing. [b] Depreciation is excluded. [c] Costs are not adjusted for differences in the complexity of cases across jurisdictions and may reflect differences in the rate of institutional change (that is, the mainstreaming of mental health services). [d] 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. [e] Tasmania and the NT do not provide, or cannot separately identify, child and adolescent mental health services or older persons' mental health services. [f] The ACT does not have separate forensic, child and adolescent and older persons' mental health inpatient services.

Source: State and Territory governments (unpublished); table 12A.37.

Figure 12.32 **Average recurrent cost per inpatient bed day, public hospitals, by hospital type, 2005-06[a, b, c, d, e, f]**



[a] Data for 2005-06 are preliminary; final validation is ongoing. [b] Depreciation is excluded. [c] 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). [d] 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. [e] Queensland data for general hospitals include costs associated with two extended treatment units that report through general acute hospitals. Queensland does not provide acute services in psychiatric hospitals. [f] Tasmania, the ACT and the NT do not have psychiatric hospitals.

Source: State and Territory governments (unpublished); table 12A.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 12.31).

The average recurrent cost to government per patient day for community residential services is presented in table 12.11. For general adult units in 2005-06, the average cost to government per patient day for 24 hour staffed community residential services was an estimated $341 nationally. For non-24 hour staffed community residential units, the average cost to government per patient day was $123 nationally.

Box 12.31 Average cost for community-based residential care title

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 (for example, a shift to the delivery of services in mainstream settings). 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.

For jurisdictions that had community-based older persons' care units in 2005-06, the average recurrent cost to government per patient day for 24 hour staffed community residential services was $272 nationally (table 12.11).

Table 12.11 Average recurrent cost to government per patient day for community residential services, 2005-06[a, b, c]

	NSW	*Vic*	*Qld*[d]	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
General adult units									
24 hour staffed units	255	381	..	396	215	310	375	..	341
Non-24 hour staffed units	81	165	..	129	251	..	58	105	123
Older persons' care units									
24 hour staffed units	274	270	..	..	..	354	61	..	272
Non-24 hour staffed units	105	..	..	..	..	..	..	..	105

[a] Data for 2005-06 are preliminary; final validation is ongoing. [b] Depreciation is excluded. [c] 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). [d] Queensland does not fund community residential services, although it funds a number of campus-based and non-campus-based extended treatment services. .. Not applicable.

Source: State and Territory governments (unpublished); table 12A.39.

Efficiency — average cost for ambulatory care

The 'average cost for ambulatory care' is an efficiency indicator of mental health management (box 12.32).

Box 12.32 **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 2005-06 are reported below for all states and territories. However, these data are unreliable and comparisons across jurisdictions are not possible for several reasons. First, information about service costs across jurisdictions is incomplete or inconsistent (for example, depreciation is not measured consistently across states and territories). Second, the 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.

- NSW reported ambulatory care unit costs of $1154 per treated patient in the community in 2005-06, with 7.7 per cent of services (accounting for 3.0 per cent of expenditure) not reporting (table 12A.40).
- Victoria reported ambulatory care unit costs of $3172, with 18.0 per cent of services (accounting for 2.5 per cent of expenditure) not reporting (table 12A.41).

- Queensland reported ambulatory care unit costs of $1755, with all services reporting (table 12A.42).
- WA reported ambulatory care unit costs of $3151, with all services reporting (table 12A.43).
- SA reported ambulatory care unit costs of $1641, with 5.4 per cent of services (accounting for 4.5 per cent of expenditure) not reporting (table 12A.44).
- Tasmania reported ambulatory care unit costs of $2328 with 4.3 per cent of services (accounting for 3.0 per cent of expenditure) not reporting (table 12A.45).
- The ACT reported ambulatory care unit costs of $1978, with 16.7 per cent of services (accounting for 0.9 per cent of expenditure) not reporting (table 12A.46).
- The NT reported ambulatory care unit costs of $1607, with all services reporting (table 12A.47).
- Across Australia, average ambulatory care unit costs per treated patient in the community were $1781, with 8.8 per cent of services (accounting for 2.0 per cent of expenditure) not reporting (table 12A.48).

Outcomes

Outcomes are the impact of services on the status of an individual or group (while outputs are the actual services delivered) (see chapter 1, section 1.5).

Prevalence of mental disorders

The Steering Committee has identified the ‘prevalence of mental disorders’ as an indicator for development in future reports (box 12.33).

Box 12.33 **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. Data on levels of psychological distress (K10) are included in section 12.4. While there is an association between high levels of physiological distress and mental disorders (Andrews and Slade 2001), these data are not included under this indicator as they may not provide a sufficiently robust measure.

Mortality due to suicide

‘Mortality due to suicide’ is an outcome indicator of mental health management (box 12.34).

Box 12.34 **Mortality due to suicide**

Mortality due to suicide’ is a mental health management 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.

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.

A number of factors impact on the quality of suicide data.

- Coroners may take different approaches to the determination of intent. Determination of intent of a death relates to whether the death results from intentional self harm, accident, homicide or undetermined intent.
  - In general, coroners may be reluctant to determine suicidal intent (particularly in children and young people). In some cases, no statement of intent will be made by a coroner.
  - For deaths where it is difficult to determine suicidal intent (for example, single vehicle accidents or drownings), the burden of proof needed for the

coroner to establish that the death was suicide may make a finding of suicide less likely (ABS 2007b).

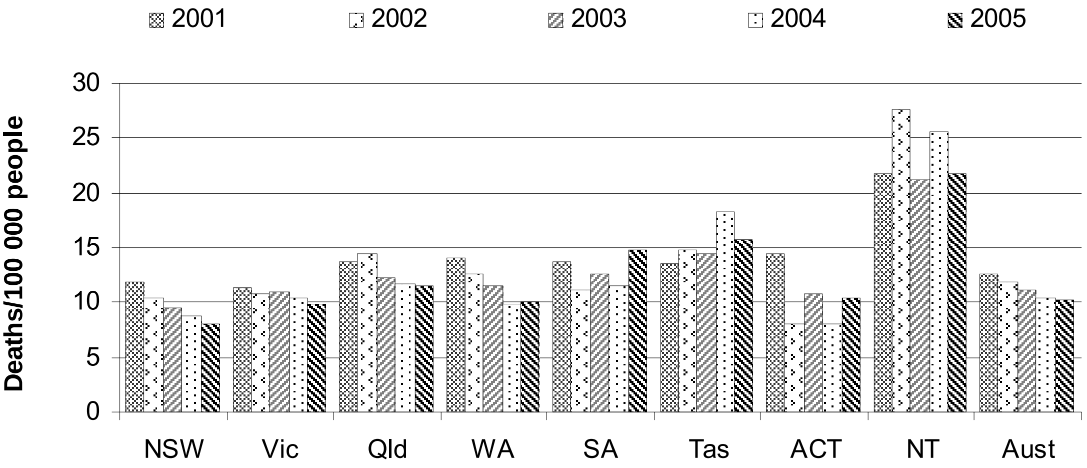
- Incomplete information is available on the National Coronial Information System when the ABS compiles the *Causes of Deaths* data (ABS 2007b).
  - Not all coronial cases are finalised (that is, closed) when *Causes of Deaths* data are compiled. In order to classify a death as suicide (intentional self-harm) specific documentation from a medical or legal authority need to be available regarding the self-inflicted nature and suicidal intent of the incident. If this is not available, then the death must be classified as accidental. The case generally needs to be closed to code a suicide as such, unless there is conclusive information in the police report or the autopsy report to show that the death was intentional (ABS 2007b). Any reported decline in the number of deaths due to suicide, therefore, may reflect an increase in open coroners' cases when the statistics were finalised.

In 2005, 2101 deaths by suicide were recorded in Australia (table 12A.49) — equivalent to 10.3 deaths per 100 000 people (figure 12.33). The national rate fell each year from 1997 to 2000, followed by a slight increase in 2001 and has continued to fall each year to 2005 (table 12A.50). The rate for males (16.4 per 100 000 males) was almost four times that for females (4.3 per 100 000 females) in 2005 — a ratio that was relatively constant over the 10 years to 2005 (figure 12.34).

In 2005, suicide was the second leading cause of death (after transport accidents) for people aged 15–24 years, accounting for 22.2 per cent of deaths in this age group. Suicide was the leading cause of death for 25–34 year olds in 2005, with 22.0 per cent of deaths in this age group resulting from suicide (ABS 2007a). Table 12A.51 shows suicide death rates per 100 000 people aged 15–24 years old for all states and territories.

Nationally the suicide rate in 2005 was higher in rural areas. There were 9.5 suicides per 100 000 people in capital cities and 11.2 suicides per 100 000 people in other urban areas, compared with 12.5 suicides per 100 000 people in rural areas in Australia in 2005 (figure 12.35).

Figure 12.33 **Suicide rates**[a, b, c]



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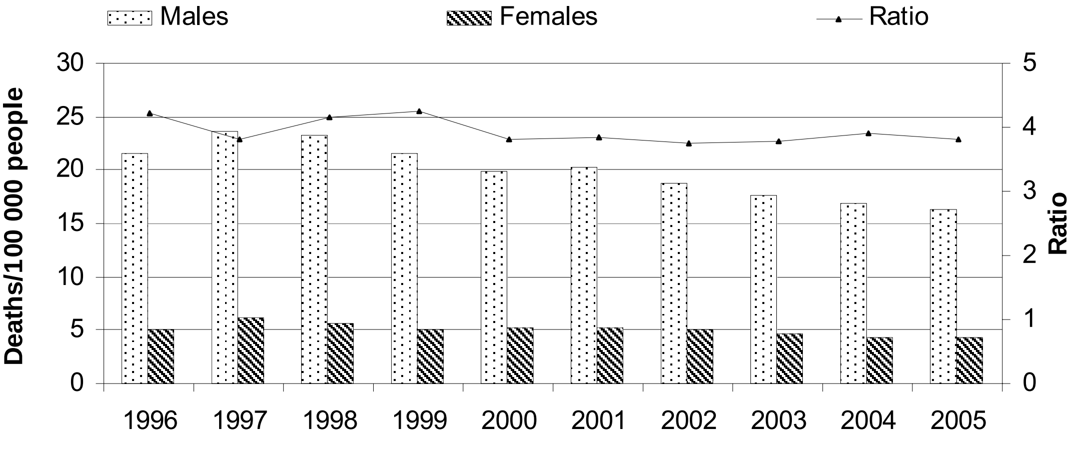
[a] By year of registration of death. Year-to-year variation can be influenced by coronial workloads. [b] The death rate is age standardised to the mid-year 2001 population. [c] Low populations can result in small variations in the number of suicides appearing as large changes in rates.

Source: ABS (unpublished) *Causes of Deaths, Australia*; table 12A.50.

Figure 12.34 **Suicide rates, by gender**[a, b]



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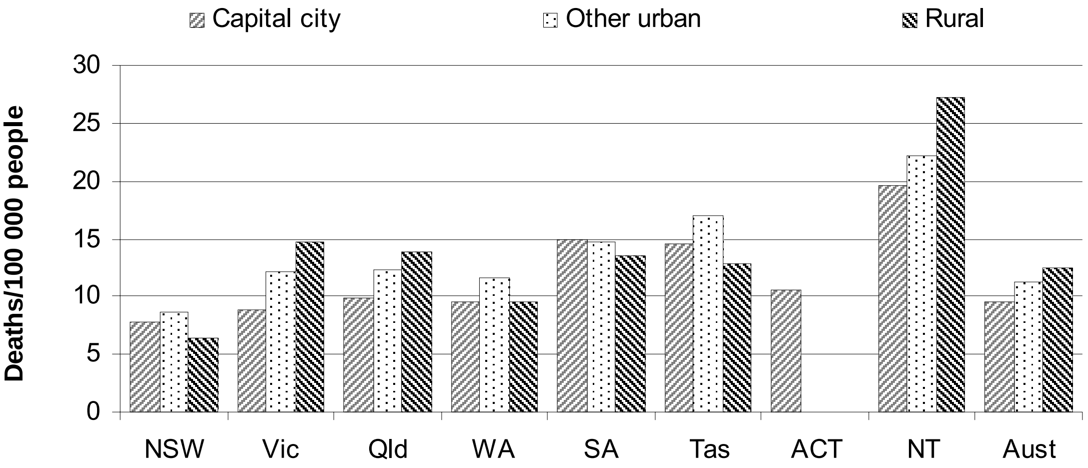
[a] By year of registration of death. Year-to-year variation can be influenced by coronial workloads. [b] The death rate is age standardised to the mid-year 2001 population.

Source: ABS (2007c); table 12A.49.

Figure 12.35 **Suicide rates, by area, 2005**[a, b, c, d]



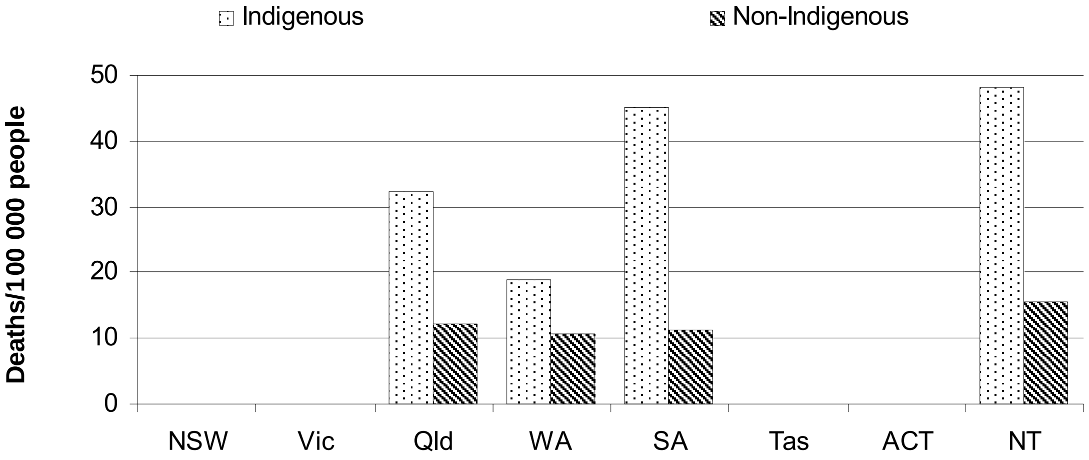
[a] ‘Other urban’ comprises centres with more than 20 000 people. ‘Rural’ comprises all areas except capital cities and other urban. [b] Death rate is age standardised to the mid-year 2001 population. [c] By year of registration of death. Year-to-year variation can be influenced by coronial workloads. [d] The ACT does not have any ‘other urban’ or ‘rural’ areas.

Source: ABS (unpublished) *Causes of Deaths, Australia*; table 12A.52.

The Indigenous suicide rate is presented for the period 2001–2005 for four jurisdictions: Queensland, WA, SA and the NT (figure 12.36). After adjusting for age differences between populations, the suicide rates for Indigenous people for the period 2001–2005 in the jurisdictions for which data are presented are considerably higher than the corresponding rates for non-Indigenous people.

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 rate calculations have not been adjusted for differences in the completeness of identification of Indigenous deaths across jurisdictions. The ‘Health preface’ discusses the quality of Indigenous mortality and other data.

Figure 12.36 **Suicide rates, by Indigenous status, 2001–2005**[a]



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[a] Indigenous population figures are based on ABS Experimental Projections, Aboriginal and Torres Strait Islander Australians (low series, 2001 base). There are no comparable population data for the non-Indigenous population. The non-Indigenous population figures are based on data derived by subtracting Indigenous population projections from total population estimates and should be used with care. Rates are calculated on an age standardised basis.

Source: ABS (unpublished) *Causes of Deaths, Australia*; table 12A.53.

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 12.35).

Box 12.35 **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.

12.5 Future directions in performance reporting

Breast cancer

Key challenges for improving reporting of breast cancer include:

- expanding reporting on intervention and treatment and overall performance

- 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 Steering Committee 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 Steering Committee will draw upon this evaluation when determining an appropriate indicator of early detection safety.

Mental health

Key challenges for improving the reporting of mental health management are similar to those of previous years:

- 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 and the COAG National Action Plan on Mental Health, 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. Some of these indicators are included as progress measures for reporting on the COAG National Action Plan on Mental Health. The Steering Committee will investigate including some or all of these indicators in future reports. Further work is required to develop indicators and data collections 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 National Mental Health Working Group Information Strategy Committee Performance Indicator Drafting Group (2005).

12.6 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).

Australian Government comments

“ The Australian Government will contribute $103.4 million over four years to the Council of Australian Governments (COAG) $200 million cost-shared initiative to address the growth in type 2 diabetes.

The Commonwealth will also fund the introduction of a new Medicare item for General Practitioners to undertake a diabetes risk review for people in the 40–49 year age group and funding to subsidise access to lifestyle modification programs for those at high risk of type 2 diabetes.

The Commonwealth is also contributing a total of $250 million over four years, (2006–2010) to the $500 million COAG Australian Better Health Initiative (ABHI), which aims to start to refocus the health system to promote good health and reduce the burden of chronic disease.

The Australian Government supports the inclusion of new measures of ‘hospitalisations with a procedure recorded’ by Indigenous status. These measures first published in the Aboriginal and Torres Strait Islander Health Performance Framework 2006 report, will inform policy analysis, planning and program development.

The Australian Government supports enhancement of performance indicators for workforce sustainability by inclusion of additional information about the age profile of the nursing and medical practitioner workforce.

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.

The Australian Government is committed to achieving sustainable gains in the health of Aboriginal and Torres Strait Islander Australians. In 2007-08 the Australian Government allocated more than $560 million for health programs specific to Aboriginal and Torres Strait Islander people, including new Indigenous-specific Medicare items, hearing services, aged care, population health and prevention programs. This includes funding to expand access to primary health care for Aboriginal and Torres Strait Islander people in regional and remote areas; to improve child and maternal health outcomes through home visits to children and families by health professionals; and to improve the quality of Indigenous health services through accreditation and additional support.

In addition, the Australian Government has also committed $83 million in 2007-08 to health initiatives under the Northern Territory Emergency Response. This funding will provide additional medical services such as health checks and follow up treatment for Indigenous children under the age of 16, as well as increased drug and alcohol services to remote Northern Territory Indigenous communities. ”

New South Wales Government comments

“ New South Wales continues to support the development and implementation of performance indicators for health. These provide a framework for understanding the delivery of services and monitoring and comparing performance.

The 2005-06 reporting period was a year in which the NSW health system continued its 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.

Throughout 2005-06, NSW developed and implemented a range of new strategies to cope with demand more effectively. These strategies included additional funding for increased bed capacity, and a range of community-based health services to enable people to receive health care closer to home.

These have been complemented by a number of clinical redesign strategies to enhance the patient journey and improve performance to meet increasing demand, including:

- 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. ”

Victorian Government comments

“One of the goals guiding Victoria’s future is to strengthen its performance in the provision of high quality, accessible health services. Progress measures that are monitored over time include improvements in the health of Victorians, and waiting times for emergency, elective and dental services.

To that end Victoria supports the ongoing development and monitoring of performance indicators in the Report on Government Services.

A constant challenge is managing the continuing and cumulative pressures that result in an increased demand for services. This increasing demand stems from many factors including a growing population, its relative ageing, and the increasing variety of treatment modalities made possible by new technology. Strategies to manage demand for tertiary services include the Hospital Admission Risk — Chronic Disease Management Program, hospital located GP services and the Multiple and Complex needs initiative. Victoria also aims to deliver more appropriate care and support in the community.

This is done through programs such as Hospital In the Home, Primary Care Partnerships and integrated ambulatory care.

The creation of a new ministerial portfolio for Mental Health and Drugs has reinforced the Government’s commitment to mental health reform. Directions for service reform include improved coordination between mental health and drug and alcohol services, and better connection between the component parts of the extended mental health system to enable consumers to access the right services for their specific needs. A cultural diversity strategy was released in 2006 that sets policies and directions to strengthen the responsiveness of mental health services to culturally and linguistically diverse communities.

Victoria’s vision for a high performing health service system is to reorient service delivery around strong community-based health and wellbeing support services. These services will be underpinned by the self-management of health and wellbeing needs, while ensuring that tertiary services are high quality, are accessible in a timely way, and are linked with community based services at the critical stages of entry to or exit from tertiary level care. Increasingly, the focus is turning to tackling cancer and the rising prevalence of chronic diseases such as diabetes.”

Queensland Government comments

Queensland Health delivers a comprehensive health service to Queensland's population of over 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 release of the Action Plan, coupled with the biggest funding injection in Queensland's history, started the reform and renewal of the public health system. The Government has built on this commitment, providing an extra $2 billion in funding to take the 2007-08 budget to $7.15 billion. Significant progress has already been made in implementing the Action Plan. For example, the targets for recruitment of clinical staff by the end of December 2006 have been exceeded:

- 548 doctors were appointed, 248 more than the target
- 2109 nurses were appointed 1609 more than the target
- 786 professional and allied health workers were appointed, 386 more than the target.

Another significant reform is the establishment of the Health Quality and Complaints Commission, a $7.7 million independent body to monitor the standards in health services and investigate complaints.

To further improve health services for all Queenslanders, the Queensland Statewide Health Services Plan 2007–2012 was released in March 2007. The Health Services Plan builds on those reforms implemented by the Action Plan by providing medium to longer term strategies to improve health services in Queensland.

A key focus of the reforms will be to improve linkages between the public sector, private sector, non-government organisations, other key agencies and departments and the broader community. The Plan details some of the unique challenges Queensland faces in delivering health care, including the ageing and diversity of the population, the increasing population, the uneven distribution of people throughout the State and the changing patterns of health needs.

To meet these challenges, the Health Services Plan focuses on two key reform areas: improving access to safe and sustainable health services, and better meeting people's needs across the health continuum. Within these areas, the Plan contains a range of reforms, including establishing links between services to create safe and sustainable service networks, improving the safety of health services, promoting good health and health lifestyle choices, preventing illness, and providing high quality, timely health services.

The Health Services Plan will, over the next five years, provide a new way forward for service planning and delivery of health services in order to better meet the ever-changing needs of people using the health system.

Western Australian Government comments

“The broad health reform program in WA continues and the commitment to ensure that high-quality, safe and accessible health care is available to all Western Australians remains firm. Significant progress was made in all the priority areas.

Healthy Workforce — Attracting and retaining sufficient workforce numbers to meet the needs of our current and future public health services is critical. Strategies implemented include the work life balance and family friendly policies, increased undergraduate and clinical training places and job redesign with 40 nurses now registered as Nurse Practitioners in WA.

Healthy Hospitals — Care closer to home and improved access to care is being realised with a range of initiatives and improvement programs. Two surgi-centres were established to increase the flow of high volume surgical cases and the Ambulatory Surgery Initiative was expanded to improve waiting times for elective surgery. Construction of the new Rockingham Kwinana District Hospital started and the new Geraldton Regional Resource Centre opened.

Healthy Partnerships — Strong relationships continue to be cultivated and formalised in the delivery of innovative, cost-effective and high-quality health care services. Close work with a number of non-government agencies, consumers, private providers, health professionals and other government agencies continued. Performance agreements that clarify the performance of the health system and its progress in reform were established.

Healthy Communities — Health promotion, illness prevention, early detection of disease and access to affordable community-based healthcare services are vital to the delivery of a sustainable health service. A number of strategies have been implemented to serve that end, including the Australian Better Health Initiative (ABHI), Indigenous Healthy Lifestyle Program, obesity prevention and health promotion programs, drug and alcohol campaigns and the Patient First initiative.

Healthy Resources — Strategies to ensure best value for the health care dollar are structured into the reform program with good outcomes achieved through streamlining and consolidating corporate services and governance structures, revised procurement strategies and system wide planning for infrastructure development and investment in medical, information and communication technology.

Healthy Leadership — Increasing leadership capacity and effectiveness continued with progress in identifying, nurturing and promoting strong leadership at all levels within health care services through a structured leadership development program. Progress was made in understanding, valuing and enhancing diverse leadership styles that help staff to perform more effectively for the benefit of the WA community.”

South Australian Government comments

The South Australian Government released its Health Care Plan in June 2007, announcing a major step toward providing this State with one of the most integrated health systems in Australia. The Plan outlines the most significant single investment in health care in South Australia's history. The Government will build the 800-bed Marjorie Jackson-Nelson Hospital, a state-of-the-art facility in Adelaide's city centre that will become Australia's most advanced hospital. The 10-year plan also proposes new investment in other major hospitals, promotes healthy lifestyles and illness prevention through new GP Plus Health Care Centres, and aims to make South Australia the best place for health professionals to work.

SA's Health Care Plan will reform our health system so that it meets the health challenges of an ageing population, the increasing incidence of chronic diseases, international health workforce shortages and ageing infrastructure. These changes will ensure South Australians have access to the best available health care in hospitals, health care centres and through GP and other health professionals.

SA's Health Care Plan will mean:

- better coordinated hospital services
- a responsive health workforce for the future
- GP Plus Health Care Centres, with more primary health care services
- more elective surgery
- less pressure on emergency departments
- improved management of chronic diseases.

South Australia's mental health system is currently undergoing major reform to modernise and improve mental health services across the State. Since February 2007, the State Government has committed $107.9 million toward reforming South Australia's mental health system. This reform includes the development of key mental health facilities and co-location of drug and alcohol services, and additional developments providing community, aesthetic and environmental benefits. The specialist health services will include a new hospital and supported accommodation units for people recovering from mental illness as well as a mental health intermediate care facility, which is a new model of care for people who are becoming unwell or are leaving hospital but still need extra support.

Major health governance and legislative reforms are underway in South Australia. To support the Health Care Plan, the Health Care Bill 2007 has been introduced into Parliament to update and improve existing governance structures, and facilitate the move toward an integrated health system. Draft legislation has been developed to replace the existing Mental Health Act 1993. The Mental Health Bill 2007 reflects national and international best practice in the treatment, support and protection of persons with mental illness.

Tasmanian Government comments

> The Department will continue to progress structural reform and culture change to develop a sustainable people-oriented health and human services system which delivers quality services as well as supporting individuals and communities to be active participants in their own health and wellbeing. A reform agenda is being implemented through Tasmania’s Health Plan. Similar reforms are being progressed in mental health services, alcohol and drug services, disability services and housing services.
>
> Tasmania’s Health Plan is an integrated strategy incorporating both acute health services (the Clinical Services Plan) and primary health services (the Primary Health Services Plan). The key focus and objective of Tasmania’s Health Plan is sustainability. This includes ensuring health services are safe, effective and accessible and make the best use of available resources.
>
> Tasmania’s Health Plan includes a greater focus on primary health, increasing health promotion and better management of chronic illnesses. It establishes a new tiered service structure for both primary and acute health, with a change of role for some facilities including reconfiguring under-used district hospital services.
>
> A new Service Capability Framework will determine the future roles of the major hospitals in providing local, regional and statewide services based on sound sustainability and safety principles. Clinical Networks are being established to formalise clinical governance arrangements across all health services.
>
> A new Royal Hobart Hospital is to be constructed in Hobart and this is a major long term project to meet the future needs of Tasmanians. A major redevelopment of the Department of Emergency Medicine at the Launceston General Hospital will commence during 2008. Other initiatives include additional nurse educators, implementing a universal newborn hearing screening program and establishing a state-wide refugee health service.
>
> Mental Health Services will continue the implementation of strategies outlined in the Mental Health Services Strategic Plan 2006–2011, including the implementation of a Clinical Group Program and assertive case management as part of the model of care, a review of the *Mental Health Act 1996*, the introduction of the Consumer and Carer participation framework and the implementation of core and statutory training for staff.
>
> Oral Health Services will continue the implementation of the Better Dental Care Package including the establishment of an education and service centre in Hobart; the development of a teaching curriculum; and the establishment of a new model of service delivery for clients to be treated at dental surgeries in the major hospitals.
>
> In relation to breast cancer screening, the ageing population and workforce shortages continue to place pressure on Tasmania's ability to meet targets for participation rates in the target age group. Despite this BreastScreen Tasmania has achieved increased attendance numbers for each biennial screening cohort.

Australian Capital Territory Government comments

The ACT Government provides health services to local residents through two major hospitals: The Canberra Hospital and Calvary Public Hospital (via a contractual agreement with the Little Company of Mary Health Care ACT). These public hospitals provide the full range of acute care, including inpatient, outpatient and emergency department services. Both hospitals are teaching hospitals in cooperation with the Australian National University's Medical School. The Canberra Hospital is the major trauma referral hospital for the ACT and surrounding region of NSW.

ACT Health works closely with other ACT Government agencies such as the Department of Disability, Housing and Community Services, Office of Children, Youth and Family Support and emergency service providers, and has partnerships in place with non-government organisations, aged care organisations, the private sector and NSW Health. The cross-border agreement with the latter agency is of particular significance due to the ACT's role as a service hub for the entire region.

NSW residents account for around one quarter of ACT public hospital inpatient episodes. In 2005-06, only around 5 per cent of ACT residents were treated in other jurisdictions' public hospitals, with many of these being referrals for specialised or complicated treatments. These include severe burns and organ transplantations, which require a higher volume of throughput than the current ACT demand to be clinically viable.

The ACT's data needs to be viewed in the context of the Territory's relatively small population size (estimated at 339 865 residents as of 30 June 2007), which can make indicators for selected services and target groups subject to large variations over time. Smaller jurisdictions such as the ACT are also more likely to be disadvantaged when it comes to economies of scale.

While 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, readers need to be aware that the much of the data in the Report is not strictly comparable across jurisdictions. For example, direct comparisons of costs are not advisable, because States and Territories may use different accounting methods for costing their health services.

Northern Territory Government comments

“ The Department of Health and Community Services is the major provider and funding source for hospital and community services as well as for a substantial portion of primary care in the Territory. Service integration is integral to providing coordinated care between public hospitals, a network of 106 government/non government community health centres and 132 GP practices. The NT population is 208 500 a third of whom are Indigenous persons.

There are five public hospitals located in each of the major population centres of Darwin, Nhulunbuy, Katherine, Tennant Creek and Alice Springs and inpatient mental health services in Darwin and Alice Springs. Public hospitals provide 626 inpatient beds and work closely with the one private hospital in the NT to meet demand for hospital beds. Hospitals form a network between the smaller hospitals and the larger Royal Darwin and Alice Springs Hospitals to ensure the full range of medical services are available to people living in remoter areas. Each hospital is able to retain their local identity but able to share resources within the network. Movement of people to access medical care is supported by specialist health access programs for travel to hospital, between hospitals and interstate when required.

Closing the Gap of Indigenous Disadvantage: A Generational Plan of Action is the NT Government’s plan of action to overcome Indigenous disadvantage. A key action to close the gap is training and employment of Indigenous health workers.

Prevention of illness and early intervention underpin community health services to reduce preventable diseases. These services include: programs for nutrition, physical activity, preventable chronic disease, women’s health, hearing, children/youth, home birth, breast screening, injury prevention, immunisation and community mental health.

The NT is faced with increasing demand on health services, a significant gap in life expectancy between Indigenous people and other Territorians and health systems requiring ongoing reforms to manage finite resources. Strategies that have emerged to meet these challenges include the Rapid Admission and Planning Unit at Royal Darwin Hospital to remove bottlenecks to hospital admissions, the Chronic Disease Strategy, the Mental Health Action Plan and the use of electronic health records. Work force issues related to recruitment and retention due to chronic shortages of health workers is a major ongoing challenge.

Legislative reform can support better provision of health services. In 2005 government enacted the Volatile Substance Abuse Prevention Act providing police and other authorised persons the power to seize inhalants and to take people into protective custody in response to a serious health issue in the NT. The Act has been supported by measures for prevention and treatment of volatile substance abuse. ”

12.7 Definitions of key terms and indicators

AR-DRG v5.0 (Australian refined diagnosis related group, version 5.0)	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.
Casemix adjustment	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.
General practice	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 or Indigenous health.
Health management	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.
Incidence rate	Proportion of the population experiencing a disorder or illness for the first time during a given period (often expressed per 100 000 people).
Separation	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.

Breast cancer

Breast conserving surgery	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).
Cost per woman screened	The total cost of the provision of breast screening services, divided by the number of women screened. The total cost includes the cost of providing the BreastScreen Australia program in each jurisdiction, in addition to the cost of providing the program to women.
Detection rate for small cancers	The rate of small (less than or equal to 15 millimetres) invasive breast cancers detected per 10 000 women screened.
Ductal carcinoma in situ	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.
Invasive cancer	A tumour whose cells invade healthy or normal tissue.
Modified radical mastectomy	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.
Mortality rate from breast cancer	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.
Participation	The number of women resident in the catchment area screened,

	divided by the number of women resident in the catchment area, expressed as a percentage. 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.
Radiation therapy	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.
Screening	The performance of tests on apparently well people to detect a medical condition at an earlier stage than otherwise would be the case.
Screening round (first)	A woman's first visit to a BreastScreen Australia mammography screening service.
Screening round (subsequent)	A woman's visit to a BreastScreen Australia mammography screening service when she has previously attended such a service.
Size of detected cancers	Invasive cancers detected, classified according to tumour size.
Total mastectomy	Removal of the breast — also known as simple mastectomy.

Mental health

Acute services	Services that primarily provide specialist psychiatric care for people with acute episodes of mental disorder. These episodes are characterised by recent onset of severe clinical symptoms of mental disorder 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: • 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 • 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.
Affective disorders	A mood disturbance, including mania, hypomania, bipolar affective disorder, depression and dysthymia.
Ambulatory care services	Mental health services dedicated to the assessment, treatment, rehabilitation 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.

Anxiety disorders	Feelings of tension, distress or nervousness. Includes agoraphobia, social phobia, panic disorder, generalised anxiety disorder, obsessive–compulsive disorder and post-traumatic stress disorder.
Available beds	The number of immediately available beds for use by admitted patients if required. 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. 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.
Child and adolescent mental health services	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. These services may include a forensic component.
Co-located services	Psychiatric inpatient services established physically and organisationally as part of a general hospital.
Community-based residential services	Staffed residential units established in community settings that provide specialised treatment, rehabilitation or care for people affected by a mental disorder or psychiatric disability. To be defined as community-based residences, the services must: provide residential care to people with mental disorders or psychiatric 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.
Co-morbidity	The simultaneous occurrence of two or more disorders such as depressive disorder with anxiety disorder, or depressive disorder with anorexia.
Consumer involvement in decision making	Consumer 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.
Cost per inpatient bed day	The average patient day cost according to the inpatient type.
Depression	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.
Forensic mental health services	Services principally providing assessment, treatment and care of mentally disordered individuals whose behaviour has led them to commit criminal offences or makes it likely that they will offend in the future if not adequately treated and contained. This includes prison-based services, but excludes services that are primarily for children and adolescents and for older people even where they include a forensic component.
General mental health services	Services that principally target the general adult population (18–65 years old) but that may provide services to children, adolescents or older people. Includes, therefore, those services that cannot be described as specialist child and adolescent, older persons' or forensic services. General mental health services include hospital units whose principal function is to provide 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).
Mental disorder	A diagnosable illness that significantly interferes with an individual's cognitive, emotional and/or social abilities.
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 problems	Diminished cognitive, emotional or social abilities, but not to the extent of meeting the criteria for a mental disorder.
Mental health promotion	Actions taken to maximise mental health and wellbeing among populations and individuals. It is aimed at changing environments (social, physical, economic, educational, cultural) and enhancing the 'coping' capacity of communities, families and individuals by giving power, knowledge, skills and necessary resources.
Mental illness prevention	Interventions that occur before the initial onset of a disorder to prevent its development. The goal of prevention interventions is to reduce the incidence and prevalence of mental health problems and mental disorders.
Mortality rate from suicide	The percentage of the population who die as a result of suicide.
Non-acute services	Non-acute services are defined in two categories: • Rehabilitation services that have a primary focus on intervention to reduce functional impairments that limit the independence of patients. Rehabilitation services are focused on disability and the promotion of personal recovery. They are characterised by an expectation of substantial improvement over the short to mid term. Patients treated by rehabilitation services usually have a relatively stable pattern of clinical symptoms. • Extended care services that primarily provide care over an indefinite period for patients who have a stable but severe level of functional impairment and an inability to function independently, thus requiring extensive care and support. Patients of extended care services present a stable pattern of clinical symptoms, which may include high levels of severe unremitting symptoms of mental disorder. Treatment is focused on preventing deterioration and reducing impairment; improvement is expected to occur slowly.
Non-government organisations	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 support services for families and primary carers.
Older persons' mental health services	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. These services may include a forensic component. Excludes general mental health services that may treat older people as part of a more general service.
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. They may 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. They may include outreach or domiciliary care as an adjunct to services provided from the clinic base.
Patient days (occupied bed days)	All days or part days for which patient was in hospital during the reporting year (1 July to 30 June), regardless of the original date of admission or discharge. Key definitional rules include the following: • For a patient admitted and discharged on different days, only the day of admission is counted as a patient day. • Admission and discharge on the same day are equal to one patient day. • Leave days are not included when they involve an overnight absence. • A patient day is recorded on the day of return from leave.
Percentage of facilities accredited	The percentage of facilities providing mental health services that are accredited according to the National Standards for Mental Health Services.
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).
Preventive interventions	Programs designed to decrease the incidence, prevalence and negative outcomes of disorders.
Psychiatrist	A medical practitioner with specialist training in psychiatry.
Public health	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.
Public (non-psychiatric) hospital	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.
Schizophrenia	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.
Specialised mental health inpatient services	Services provided to admitted patients in stand-alone psychiatric hospitals or specialist psychiatric units located within general hospitals.
Specialised mental health services	Services whose primary function is specifically to provide treatment, rehabilitation or community support targeted towards people affected by a mental disorder or psychiatric disability. Further, such activities are delivered from a service or facility that is readily identifiable as both specialised and serving a mental health function. This criterion applies regardless of the source of funds.

Specialised residential services	Services provided in the community that are staffed by mental health professionals on a 24 hour basis.
Staffing categories (mental health)	*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. *Psychiatrists and consultant psychiatrists*: medical officers who are registered to practice psychiatry under the relevant state or territory medical registration board; or who are fellows of the Royal Australian and New Zealand College of Psychiatrists or registered with Health Insurance Commission as a specialist in Psychiatry. *Psychiatry registrars and trainees:* medical officers who are formal trainees within the Royal Australian and New Zealand College of Psychiatrists' Postgraduate Training Program. *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. *Nursing staff:* all categories of registered nurses and enrolled 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. *Enrolled nurses:* Refers to persons who are second level nurses who are enrolled in all states except Victoria where they are registered by the state registration board to practise in this capacity. Includes general enrolled nurse and specialist enrolled nurse (e.g. mothercraft nurses in some states). *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, and other diagnostic and health professionals. *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, warders, 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 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. Civil engineers and computing

	staff are included in this category. *Domestic and other staff:* staff involved in the provision of food and cleaning services including domestic staff primarily engaged in administrative duties such as food services manager. Dieticians are excluded.
Stand-alone psychiatric hospitals	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. A health establishment that operates in a separate building but is located on, or immediately adjoining, the acute care hospital campus may also be a stand-alone hospitals if the following criteria are **not** met: • a single organisational or management structure covers the acute care hospital and the psychiatric hospital • a single employer covers the staff of the acute care hospital and the psychiatric hospital • the location of the acute care hospital and psychiatric hospital can be regarded as part of a single overall hospital campus • the patients of the psychiatric hospital are regarded as patients of the single integrated health service.
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).

12.8 Attachment tables

Attachment tables are identified in references throughout this chapter by an 'A' suffix (for example, table 12A.3 is table 3 in the attachment). Attachment tables are provided on the CD-ROM enclosed with the Report and on the Review website (www.pc.gov.au/gsp). On the CD-ROM, the files containing the attachment tables are provided in Microsoft Excel format as \Publications\Reports\2008\Attach12A.xls and in Adobe PDF format as \Publications\Reports\2008\Attach12A.pdf. Users without access to the CD ROM or the website can contact the Secretariat to obtain the attachment tables (see contact details on the inside front cover of the Report).

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