11 Health management issues

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

An overview of health management and the health management performance measurement framework is provided in sections 11.1 and 11.2 respectively. Sections 11.3 and 11.4 report on the performance of breast cancer and mental health management respectively. Section 11.5 outlines the future directions for the chapter, while jurisdictions' comments relating to all the health chapters appear in section 11.6. Definitions are listed in section 11.7.

Improvements this year to the reporting of mental health management include presenting Indigenous suicide deaths data averaged over three year periods to smooth volatility in year-on-year movements, particularly for smaller jurisdictions.

Supporting tables

Supporting tables for chapter 11 are provided on the CD-ROM enclosed with the Report. The files are provided in Microsoft Excel format as \Publications\Reports\2005\Attach11A.xls and in Adobe PDF format as \Publications\Reports\2005\Attach11A.pdf.

Supporting tables are identified in references throughout this chapter by an 'A' suffix (for example, table 11A.3 is table 3 in the electronic files). These files can be found on the Review web page (www.pc.gov.au/gsp). Users without Internet access can contact the Secretariat to obtain these tables (see details on the inside front cover of the Report).

11.1 Overview of health management

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

Breast cancer and mental illness are significant causes of morbidity and mortality in Australia. Cancer control and mental health are identified by governments as national health priority areas, as are asthma, cardiovascular health, diabetes mellitus, injury prevention and control, arthritis and musculoskeletal conditions. These areas represent almost 80 per cent of the total burden of disease and injury in Australia, and their management offers considerable scope for reducing this burden (AIHW 2003b).

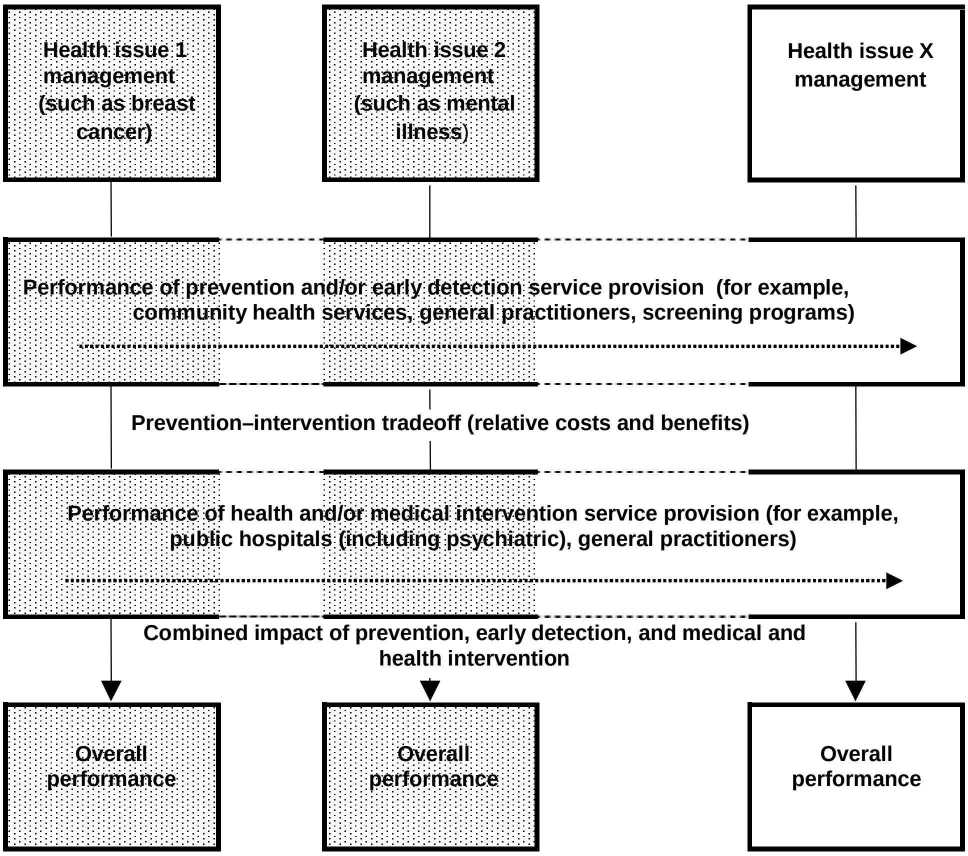
Appropriate management of breast cancer and mental health will have a large effect on the health and wellbeing of many Australians. Both are the subject of programs designed to improve public health. Public health programs require the participation of public hospitals, primary and community health services,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

11.2 Framework for measuring the performance of health management

The ‘Health preface’ of this Report outlines the complexities of reporting on the performance of the overall health system in meeting its objectives. Frameworks for public hospitals and primary and community health services report the performance of particular service delivery mechanisms. The appropriateness of the mix of services (prevention versus intervention) and the appropriateness of the mix of delivery mechanisms (hospital-based versus community-based) are the focus of reporting in this chapter. The measurement approach adopted is represented diagrammatically in figure 11.1.

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

Figure 11.1 **The Australian health system — measurement approach**



11.3 Breast cancer

Profile

Breast cancer is a disease whereby uncontrolled or malignant cell division leads to the formation of a tumour or tumours in a woman’s breast (box 11.1).[1] Tumours may expand locally by invading surrounding tissue, or they may spread via the

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

lymphatic or vascular systems to the rest of the body. If left untreated, most malignant tumours result in the death of the affected person (AIHW 2003a). The focus of this Report is on invasive cancers, although some data are reported on *ductal carcinoma in situ* (DCIS — noninvasive tumours residing in the ducts of the breast).

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

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

BreastScreen Australia: a national program that undertakes nationwide breast cancer screening. 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 pathway. 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.

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

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

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

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

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

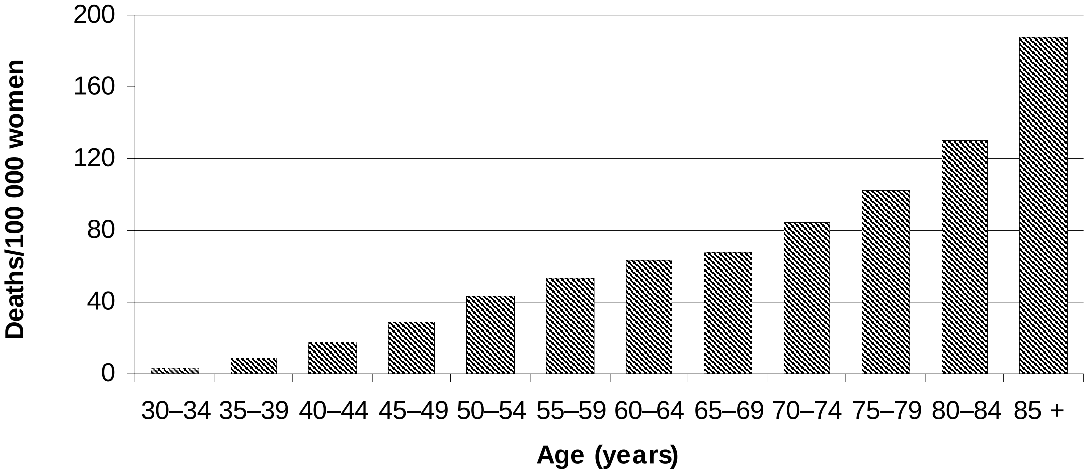
screening round (first): a woman’s first visit to a BreastScreen Australia service.

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

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

Breast cancer was responsible for 2698 female deaths in 2002, making it the most frequent cause of death from cancer for females (ABS 2003). The strong relationship between age and the mortality rate from breast cancer is shown for the period 1998–2002 in figure 11.2. Women aged 40–44 years had an annual average mortality rate over this period of 17.2 per 100 000, whereas women aged 75–79 years had an annual average mortality rate of 102.2 per 100 000.

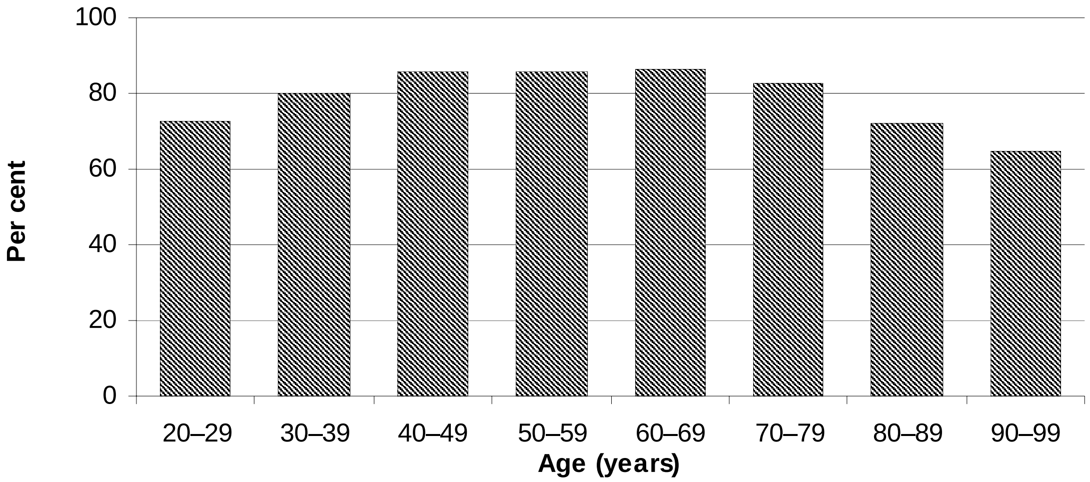
Figure 11.2 **Annual average mortality rates from breast cancer, by age group, 1998–2002**



Source: AIHW (unpublished); table 11A.19.

Relative survival after diagnosis of breast cancer in females is good compared with other cancers. Over the period 1992–97, for women of all ages in Australia, relative survival was 96.4 per cent one year after diagnosis, and 84.0 per cent five years after diagnosis. Relative survival 10 years after diagnosis was 68.3 per cent in the period 1987–91 (AIHW and AACR 2001). Five year relative survival for breast cancer in Australia at diagnosis over the period 1992–97 increased with age from the age group 20–29 years (72.4 per cent) to a peak for the age groups 40–49 years (85.8 per cent), 50–59 years (85.7 per cent) and 60–69 years (86.1 per cent). The five year relative survival rate declined with age for women over 70 years (figure 11.3).

Figure 11.3 **Breast cancer five year relative survival at diagnosis, by age group, 1992–97**[a]



[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 AACR (2001); table 11A.1.

Incidence and prevalence

Breast cancer is the most prevalent type of cancer affecting Australian women. For the period 1992–96, the risk of a woman in Australia developing breast cancer before the age of 75 years was one in 12 (AIHW *et al.* 1999). The number of new cases of breast cancer diagnosed in Australian women increased from an annual average of 9695 over the period 1993–97 to an annual average of 10 522 over the period 1996–2000 (table 11.1). The increase in the number of cases detected reflected both an increase in the underlying rate of breast cancer, as well as the early detection of cancers that previously would not have been discovered for some years, primarily through the introduction of BreastScreen Australia (AIHW 2003a).

Annual average age standardised incidence rates of breast cancer are presented in figure 11.4. 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 but relatively large variations in rates from year to year. The Australian incidence rate increased from an annual average of 108.5 per 100 000 women for the period 1992–96 to an annual average of 112.4 for the period 1996–2000. Over the latter period, the annual average incidence rate for women of all ages (standardised by age) was highest in the ACT (118.0 per 100 000 women) and lowest in the NT (93.1 per 100 000 women).

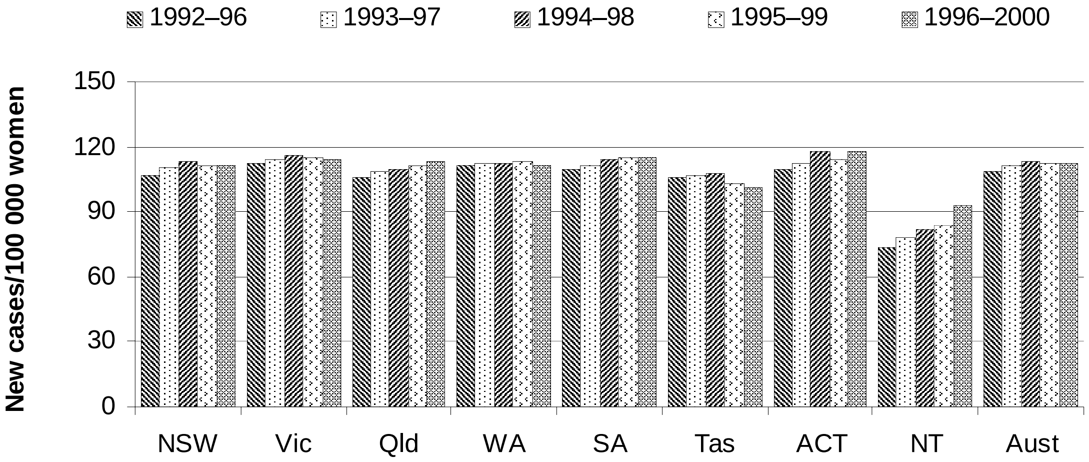
Table 11.1 Annual average new cases of breast cancer diagnosed (number)[a]

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
1993–97	3 356	2 561	1 629	872	850	249	136	41	9 695
1994–98	3 491	2 657	1 701	903	888	255	147	44	10 087
1995–99	3 520	2 685	1 781	937	910	247	148	44	10 271
1996–2000	3 585	2 731	1 873	949	929	248	157	50	10 522

[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 11A.2.

Figure 11.4 Annual average age standardised incidence rates of breast cancer for women of all ages[a, b]

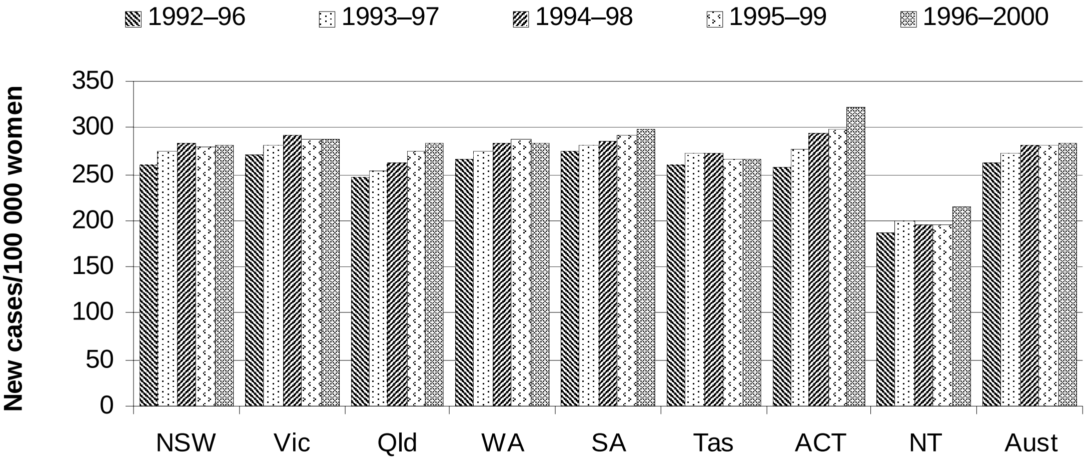


[a] Incidence refers to the number of new cases of breast cancer per 100 000 women. [b] Rates are age standardised to the Australian 2001 population standard.

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

Annual average age standardised incidence rates of breast cancer for women aged 50–69 years are shown in figure 11.5. For 1996–2000, annual average incidence rates were highest in the ACT (322.5 per 100 000 women) and lowest in the NT (214.7 per 100 000 women).

Figure 11.5 **Annual average age standardised incidence rates of breast cancer for women aged 50–69 years**[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 11A.3.

Size and scope of breast cancer detection and management services

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

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

A 2001 review of mammography screening research cast doubt on the evidence that screening for breast cancer reduces mortality, raising questions about the positive impact of screening on population health. It also suggested that screening may lead to aggressive treatment that may be unnecessary in some cases (Olsen and Gotzsche

2001). Further, some morbidity is associated with breast cancer screening, such as false positives, discomfort and anxiety. In addition, screening techniques have improved to the extent that very small growths can now be detected, but the risk of such growths posing a future danger is uncertain (Gorman 2002).

In response to these doubts, a working group convened by the International Agency for Research on Cancer of the World Health Organisation evaluated the available research on breast cancer screening in March 2002. The working group concluded that there is sufficient evidence of the efficacy of mammography screening for women aged 50–69 years. The reduction in mortality from breast cancer among women who choose to participate in organised screening programs was estimated to be around 35 per cent. For women aged 40–49 years, there is only limited evidence of a reduction in mortality. When considering population screening models, the working group concluded that the effectiveness of national screening programs varies as a result of differences in the coverage of the female population, the quality of mammography, the quality and appropriateness of treatment, and other factors. Organised screening programs are more effective in reducing deaths than is sporadic screening of selected groups of women. The working group also concluded that there is insufficient evidence that clinical breast examination or self-examination reduces mortality from breast cancer (WHO 2002).

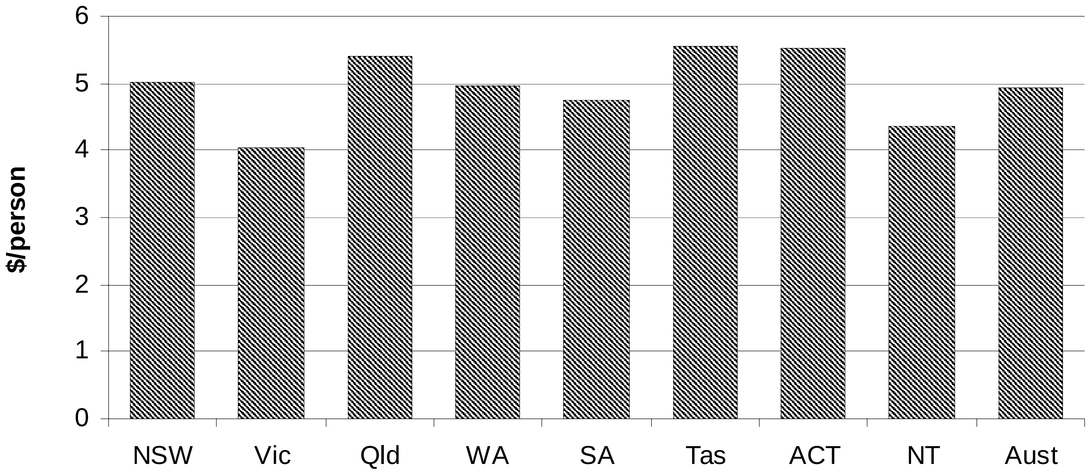
BreastScreen Australia, jointly funded by the Australian, State and Territory governments, undertakes nationwide breast cancer screening. It targets women aged 50–69 years for screening once every two years. The program aims to have 70 per cent or more women aged 50–69 years participating in screening 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 pathway. Each jurisdiction manages a central BreastScreen registry to ensure women with a screen detected abnormality receive follow-up treatment and to enable women to be invited for re-screening at the appropriate interval. Data collected from the registries allow for quality assurance, monitoring and evaluation of the program. All jurisdictions perform fine needle aspiration biopsy and core biopsies as part of their assessment services, but some jurisdictions do not include open biopsies in the funded program (table 11A.4).

Information on BreastScreen Australia program performance is published by the Australian Institute of Health and Welfare (AIHW) in the BreastScreen Australia monitoring reports, the most recent of which was published in 2003 (AIHW 2003a).

Governments spent around $97.8 million on breast cancer screening in 2001-02 (table 11A.5). Estimates of government expenditure on breast cancer screening per person are presented by jurisdiction in figure 11.6. 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 target women living in rural and remote areas. The data thus need to be viewed with care.

Figure 11.6 **Public health expenditure on breast cancer screening, 2001-02**[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 viewed with care as a result 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 (2004c); ABS, Cat. no. 3101.0 (unpublished); tables A.2 and 11A.5.

The number of women aged 40 years or over screened by BreastScreen Australia indicates the size of the BreastScreen Australia program. Around 842 000 women in this age group were screened in 2003, compared with 759 103 in 1999 (table 11.2).

Table 11.2 **Number of women screened by BreastScreen Australia**[a]

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
1999	273 995	171 389	153 870	59 999	64 195	19 333	12 255	4 067	759 103
2000	277 400	177 232	163 731	65 593	65 494	21 344	11 463	4 148	786 405
2001	297 372	188 677	171 337	71 432	69 774	20 702	12 160	4 416	835 870
2002	294 011	187 714	177 281	69 697	68 571	22 204	11 793	4 166	835 437
2003	289 912	188 782	180 396	76 059	69 182	22 424	10 651	4 548	841 954

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

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

A number of services assist in the management of breast cancer once diagnosed. GPs are critical as the initial point of referral to specialists for diagnosis and treatment services. Hospitals provide initial treatment for breast cancer and help manage ongoing care and follow-up. Relevant clinical disciplines include surgery, plastic and reconstructive surgery, pathology, radiation and medical oncology, nursing, diagnostic radiology, radiography, physiotherapy, allied health, and psychological and psychiatric services. Post-acute services include a range of further treatments, such as radiotherapy and chemotherapy (most of which take place on a same day or outpatient basis) and a range of follow-up and palliative care services (DHS 1999).

Inpatient separations in public hospitals for selected breast-cancer related Australian refined diagnosis related groups (AR-DRGs)[2] in 2002-03 are presented in table 11.3. Most of the data relating to breast cancer detection and management in this Report are provided by BreastScreen Australia. At present, data for services other than breast cancer screening are limited.

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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 versions 4.1 and 4.2 are based on the ICD-10-AM classification (see chapter 9 for more detail).

Table 11.3 **Separations for selected AR-DRGs related to breast cancer, public hospitals, 2002-03 (per 10 000 people)**[a, b]

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Major procedures for malignant breast conditions	0.9	0.7	0.5	0.3	0.2	0.1	–	–	2.7
Minor procedures for malignant breast conditions	0.4	0.3	0.2	0.1	0.1	–	–	–	1.3
Skin, subcutaneous tissue and plastic breast procedures	0.9	0.8	0.7	0.3	0.5	–	–	–	3.2
Other skin, subcutaneous tissue and breast procedures	4.5	5.6	4.6	2.0	2.6	0.3	0.1	0.1	19.8
Malignant breast disorders (age >69 years w CC)	0.1	0.1	–	–	–	–	–	–	0.3
Malignant breast disorders (age <70 years w CC) or (age >69 years w/o CC)	0.2	0.4	0.2	–	0.1	–	–	–	0.9
Malignant breast disorders (age <70 years w/o CC)	0.1	0.2	0.1	0.1	–	–	–	–	0.4
Total separations in public hospitals	1 871.8	2 273.3	1 802.1	1 855.8	2 337.7	1 658.0	1 937.1	3 394.5	2 003.1

w/o CC = without complications and co-morbidities. w CC = with complications and co-morbidities. [a] Care needs to be taken when comparing jurisdictions because admission practices vary. [b] AR-DRG version 4.2. – Nil or rounded to zero.

Source: AIHW (2004a, www.aihw.gov.au/publications/index.cfm/title/10015/ahs02-03-xd11.xls, accessed 11 November 2004); table 11A.7.

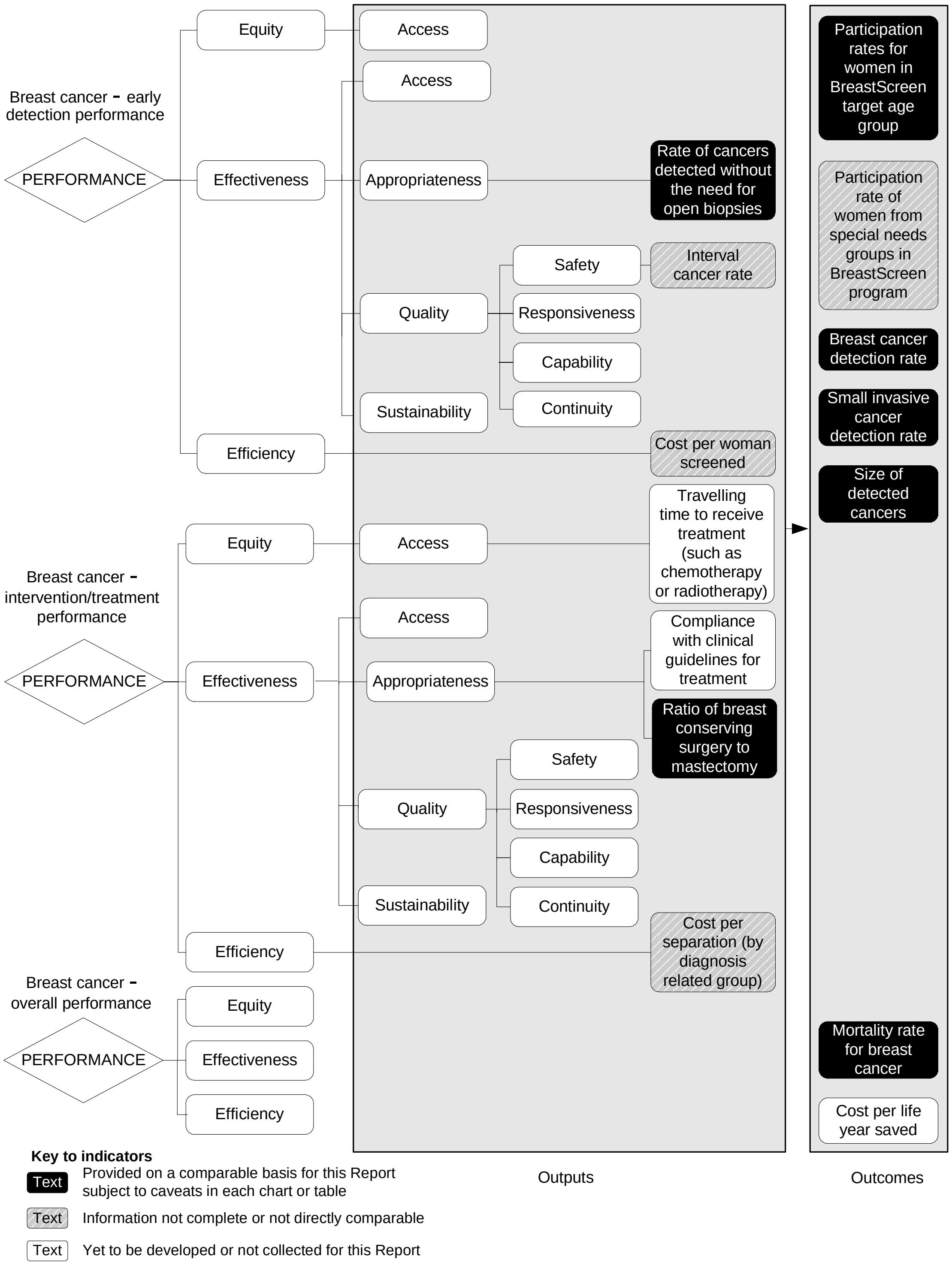
Framework of performance indicators

The indicators developed to report on the performance of breast cancer detection and management are based on the shared government objectives for managing the disease (box 11.2). The performance indicator framework shows which data are comparable in the 2005 Report (figure 11.7). 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).

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

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

Figure 11.7 **Performance indicators for breast cancer detection and management**



The framework for breast cancer detection and management focuses on achieving a balance between early detection of the disease and treatment. It has a tripartite structure — that is, performance indicators presented relate to early detection, intervention and overall performance. The 'Health preface' explains the performance indicator framework for health services as a whole, including the subdimensions for quality and sustainability that have been added to the standard Review framework for health services.

Key performance indicator results

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

Outputs

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 performance (box 11.3).

Box 11.3 **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 (July 2002) state that 75 per cent or more of invasive cancers or DCIS should be diagnosed without the need for a diagnostic open biopsy.

In 2003, for women attending their first screening round, the rate of cancers detected without the need for open biopsies was highest in the ACT (100 per cent) and lowest in Tasmania (65.0 per cent). In the subsequent round, the rate was highest in the ACT (96.1 per cent) and lowest in Queensland and the NT (80.0 per cent) (figure 11.8).

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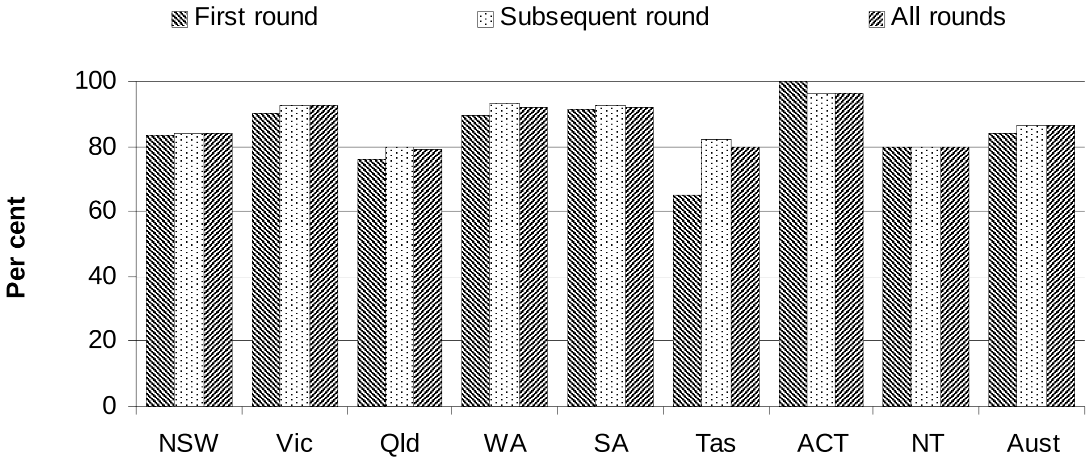
[3] A breast biopsy is a procedure for obtaining a breast tissue specimen for microscopic examination to establish a diagnosis.

Figure 11.8 **Rate of cancers detected without the need for open biopsies, all women, 2003**



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

Early detection — interval cancer rate

The ‘interval cancer rate’ is an indicator of the effectiveness of early detection performance (box 11.4).

Box 11.4 **Interval cancer rate**

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

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

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

There is a time lag in obtaining data for this indicator, because the detection period falls between the last screening visit in the reference screening year and the next scheduled screening appointment. Following that period, a further time lag is required for the reporting of those cancers to the cancer registry, before a process of data matching can occur between each jurisdiction’s screening program and its cancer registry. As a result, the most recent data available for this Report are for women screened during 2000. Stratification is by first and subsequent screening rounds to allow for expected variation in interval cancer rates between rounds.

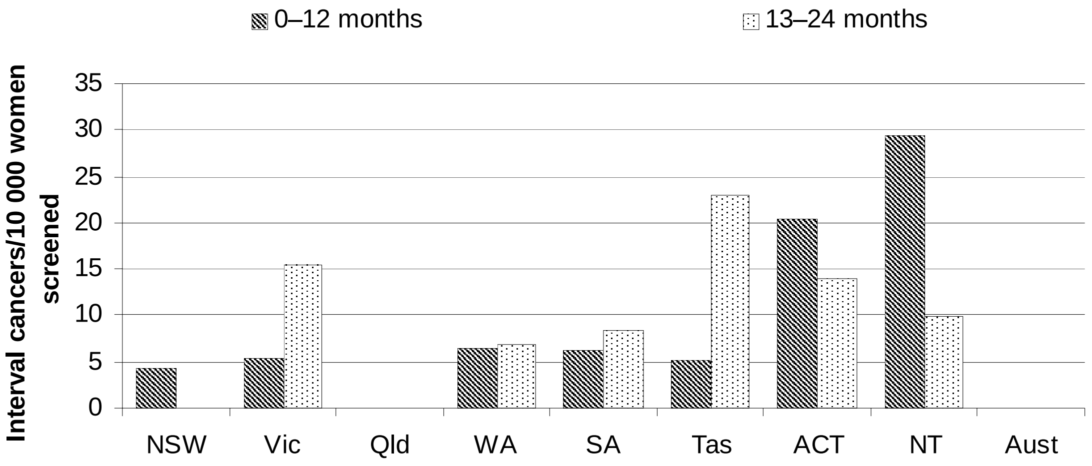
Figure 11.9 presents the age standardised interval cancer rate by screening round for women aged 50–69 years. Differences in the rates across jurisdictions may be caused by differences in the policies of the BreastScreen services in each jurisdiction. Some jurisdictions (such as SA and some services in NSW) do not further investigate an abnormality of the breast, even when a symptom is reported, if the mammogram appears normal. 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 thus need to be made with care.

In 2000, for women aged 50–69 years in the first round of screening, the interval cancer rate 0–12 months following screening was highest in the NT (29.4 per 10 000 women screened) and lowest in NSW (4.2 per 10 000 women screened). In the subsequent screening round, the interval cancer rate 0–12 months following screening was highest in Victoria (8.5 per 10 000 women screened) and lowest in Tasmania (5.8 per 10 000 women screened). Data for Queensland were not available for the first or subsequent round.

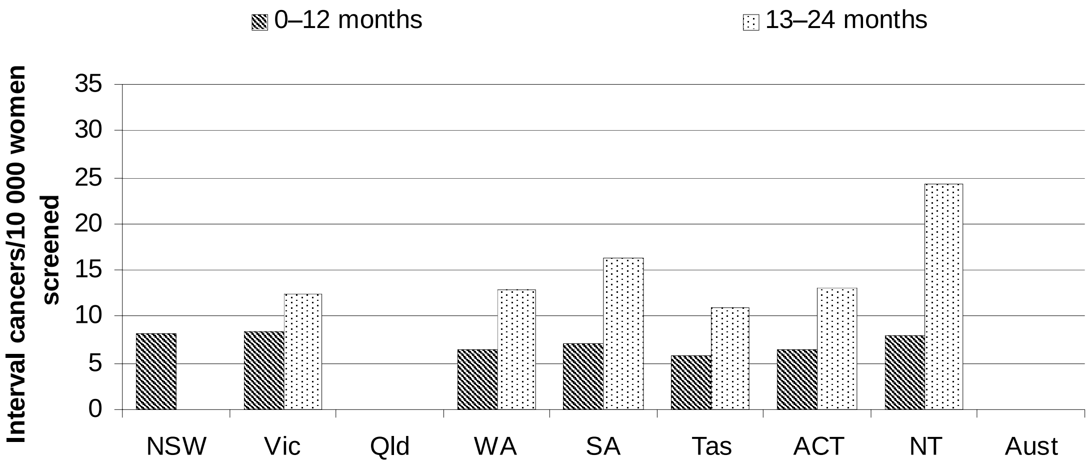
In the first round, the interval cancer rate 13–24 months following screening was highest in Tasmania (23.0 per 10 000 women screened) and lowest in WA (6.9 per 10 000 women screened). In the subsequent screening round, the interval cancer rate 13–24 months following screening was highest in the NT (24.3 per 10 000 women screened) and lowest in Tasmania (10.9 per 10 000 women screened). Data for NSW and Queensland were not available for the first or subsequent round.

Figure 11.9 **Age standardised interval cancer rate, women aged 50–69 years, 2000**[a, b, c, d, e]

First round



Subsequent round



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

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

Early detection — cost per woman screened

The ‘cost per woman screened’ indicator is an indicator of the efficiency of early detection performance (box 11.5).

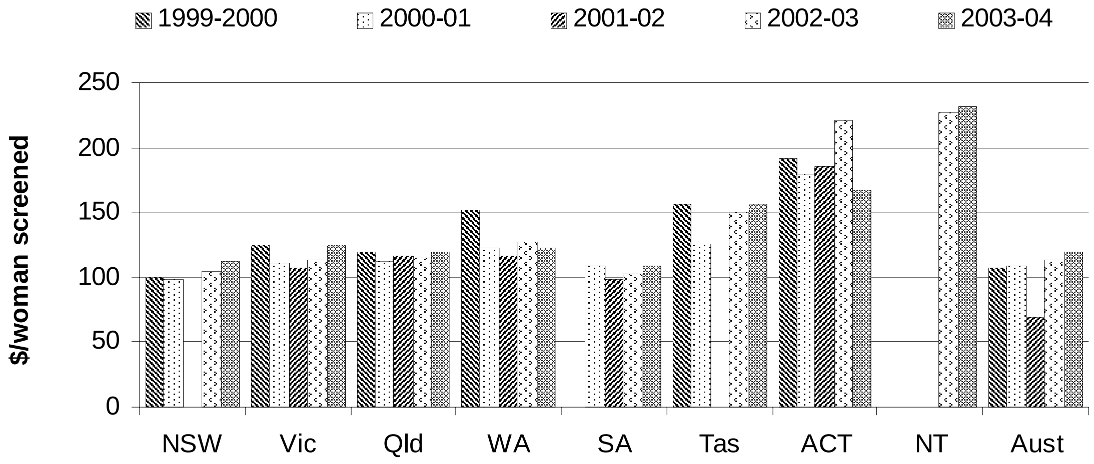
Box 11.5 **Cost per woman screened**

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

Care needs to be taken when making comparisons across jurisdictions. There are potential differences in the items included in the measures of cost (particularly in the treatment of depreciation and capital asset charges, and the inclusion of subsidies). There may also be differences across jurisdictions in the scope of activities being costed. The Review is working to identify these differences across jurisdictions to improve data comparability in future (table 11A.11). Preliminary estimates of costs in each jurisdiction are presented in figure 11.10. Real cost per woman screened in 2003-04 was highest in the NT ($232) and lowest in SA ($108).

Figure 11.10 **Real cost per woman screened, BreastScreen Australia services (2003-04 dollars)[a, b, c, d, e]**



[a] Constant price expenditure (in 2003-04 dollars) using the Gross Domestic Product price deflator (table A.26). The number of women screened used to calculate the cost per woman screened is calendar year data rather than financial year. [b] Data for NSW do not include subsidies. Data for NSW not available for 2001-02. [c] Data for Queensland include depreciation and user cost of capital for 2000-01, 2001-02 and 2002-03, but not for 1999-2000. [d] Data for SA are calculated on an accrual basis. Data are not available for 1999-2000. [e] Data for the NT are not available for 1999-2000 to 2001-02.

Source: State and Territory governments (unpublished); ABS, Cat. no. 5206.0 (unpublished); tables A.26 and 11A.10.

Intervention/treatment — travelling time to receive treatment

The Steering Committee has identified a woman's 'travelling time to receive treatment' as an indicator of the equity of intervention and treatment performance (box 11.6). Data on this indicator, however, were not available for the 2005 Report.

Box 11.6 **Travelling time to receive treatment**

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

Intervention/treatment — compliance with clinical guidelines for treatment

The Steering Committee has identified 'compliance with clinical guidelines for treatment' as an indicator of the effectiveness of intervention and treatment performance (box 11.7). Data on this indicator, however, were not available for the 2005 Report.

Box 11.7 **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 effectiveness of intervention and treatment performance (box 11.8).

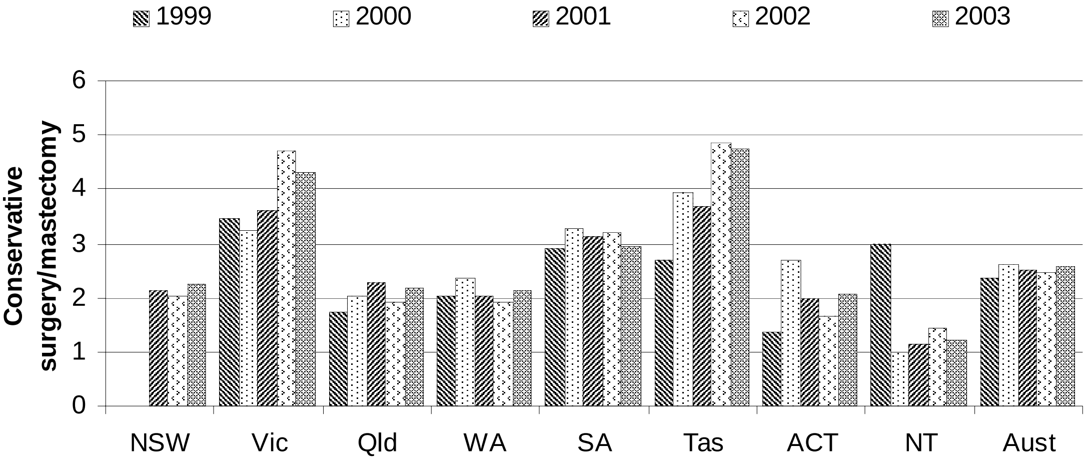
Box 11.8 **Ratio of conserving surgery to mastectomy**

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 no surgery or breast conserving 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. Based on BreastScreen Australia data in 2003, the ratio of conserving surgery to mastectomy was highest in Tasmania (4.7:1) and lowest in the NT (1.2:1) (figure 11.11).

Figure 11.11 **Ratio of conserving surgery to mastectomy**[a, b]



a Data for NSW are not available for 1999 and 2000. **b** Applies for women of all ages.

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

Intervention/treatment — cost per separation by diagnosis related group

The ‘cost per separation by diagnosis related group’ is an indicator of the efficiency of intervention and treatment performance (box 11.9).

Box 11.9 **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 4.2. The NHCDC is an annual collection of hospital cost and activity data covering the financial year before the collection period. Participation in the NHCDC is voluntary, so the samples are not necessarily representative of all hospitals in each jurisdiction (although this is improving over time). In addition, the purpose of the NHCDC is to calculate DRG cost weights, not to compare the efficiency of hospitals (DHA 2004).

Table 11.4 summarises costs per separation for selected breast cancer AR-DRGs. The average cost of major procedures for malignant breast conditions across Australia was $5244 per separation in 2002-03; minor procedures for malignant breast conditions cost $2514 per separation on average. Table 11A.13 also summarises the average length of stay (in public hospitals) associated with each AR-DRG.

Table 11.4 Average cost per separation, public hospitals by selected breast cancer AR-DRGs, 2002-03 (dollars)[a, b, c]

AR-DRG	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Major procedures for malignant breast conditions	4 677	6 009	5 014	5 295	4 832	5 452	6 882	6 756	5 244
Minor procedures for malignant breast conditions	2 334	2 417	2 805	2 545	2 583	2 679	3 373	3 464	2 514
Malignant breast disorders, age> 69 years w CC	4 054	3 108	3 465	7 326	3 991	1 958	np	–	3 497
Malignant breast disorders, age <70 years w CC or age>69 w/o CC	3 326	1 547	1 897	3 271	2 326	2 688	3 578	3 237	2 226
Malignant breast disorders, age <70 years w/o CC	1 491	1 140	1 373	407	1 367	1 701	1 923	np	1 101

w CC = with complications and co-morbidities. w/o CC = without complications and co-morbidities. **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, some of which are admission practices, sample size, remoteness and the types of hospital contributing to the collection. Direct comparison across jurisdictions is difficult because there are differences in hospital costing systems. **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. – Nil or rounded to zero.

Source: Australian Government Department of Health and Ageing, NHCDC, Round 7 (2002-03); table 11A.13.

Outcomes

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 outcome indicator of early detection performance (box 11.10).

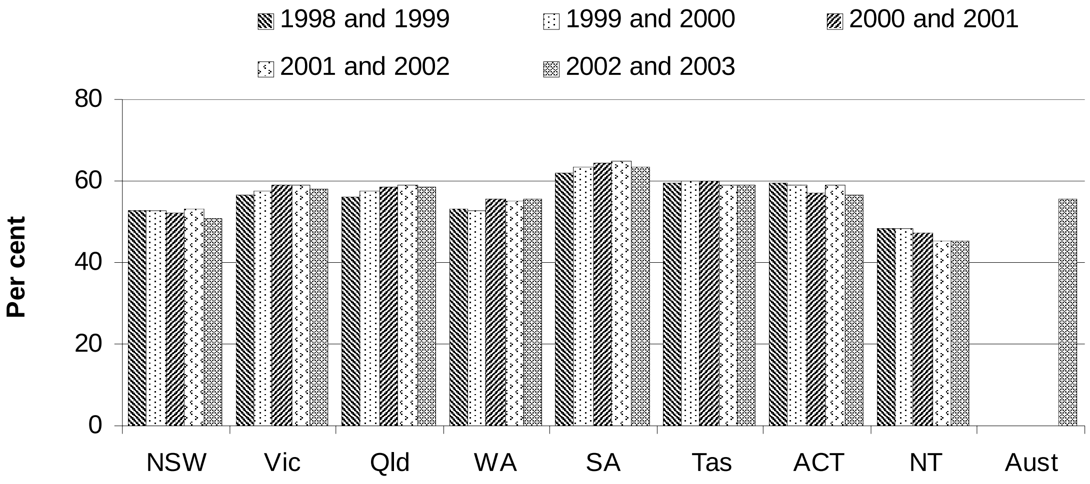
Box 11.10 Participation rate of women in the BreastScreen target age group

The ‘participation rate of women in the BreastScreen target age group’ of 50–69 years is included as an indicator to reflect 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 participation rates in screening are more desirable. The aim under the National Accreditation Standards (July 2002) 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 2002).

In the 24 month period 2002 and 2003, the participation of women aged 50–69 years in BreastScreen Australia screening programs was highest in SA (63.6 per cent) and lowest in the NT (45.6 per cent) (figure 11.12).

Figure 11.12 **Age standardised participation rates of women aged 50–69 years in BreastScreen Australia screening programs (24 month period)[a]**



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[a] The participation rate is the number of women resident in the catchment area of the jurisdiction who were screened during the reference period, divided by the number of women resident in the catchment area, using the ABS estimated resident population. This value represents the estimated population at the midpoint of the reference period. It is an average of the two estimated resident populations for the two calendar years (by adding both years and dividing by two). The catchment area is a geographic region based on service size in relation to the population, accessibility and the location of other services. It is uniquely defined for each service based on postcode or statistical local area.

Source: State and Territory governments (unpublished); table 11A.14.

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 outcome indicator of early detection performance (box 11.11).

Box 11.11 Participation rate of women from selected community groups in BreastScreen programs

The ‘participation rate of women from selected community groups’ — that is, Indigenous women, women from non-English speaking backgrounds (NESB) and women living in rural and remote areas — in breast cancer screening is an indicator because screening is important in the early detection of breast cancers. Early detection is associated with better outcomes for women with breast cancer, in terms of morbidity and mortality. Women from selected community 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.

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.

For the 24 month period 2002 and 2003, the age standardised participation rate for Indigenous women aged 50–69 years was markedly lower than the rate for all females in that age group, although this may be influenced by problems with the identification of Indigenous status. The largest gap between the participation rates of Indigenous women and all women was in Tasmania (29.0 percentage points); the smallest gap was in the ACT (1.1 percentage points) (table 11.5).

For the same 24 month period and age group, the participation rate for NSEB women was lower than that for the total female population except in Queensland, WA and the ACT (table 11.5). The largest gap between the participation rate for women from a NESB and that for all women was in the NT (19.7 percentage points). The participation rate for women in rural and remote areas was below that for all women in NSW, Queensland and the NT, with the largest gap being in the NT (28.1 percentage points) (table 11.5).

Care needs to be taken when comparing data across jurisdictions, given differences in the collection of data by Indigenous, NESB, and rural and remote status across jurisdictions.

Table 11.5 Age standardised participation rates of women aged 50–69 years from selected communities in BreastScreen Australia programs, 2002 and 2003 (24 month period) (per cent)[a]

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Indigenous[b]	39.4	50.9	53.6	39.7	41.2	29.9	55.5	17.7	40.6
Non-English Speaking Background[c]	43.5	40.4	64.7	59.3	59.7	46.5	59.7	25.9	46.6
Metropolitan or capital city[d]	61.0	57.0	76.8	55.1	63.3	56.1	56.7	49.4	61.2
Rural and remote, or rest of State[e]	35.9	60.2	44.5	56.9	64.4	59.3	–	17.5	46.8
All women aged 50–69 years	50.8	57.9	58.5	55.7	63.6	58.9	56.7	45.6	55.8

[a] First and subsequent rounds. [b] Those women who self-identify as being of Aboriginal or Torres Strait Islander descent. [c] Women who speak a language other than English at home. [d] Includes 'capital city' (State and Territory capital city statistical divisions) and 'other metropolitan centre' (one or more statistical subdivisions that have an urban centre with a population of 100 000 or more). [e] Includes 'large rural centre' statistical local areas where most of the population resides in urban centres with a population of 25 000 or more); 'small rural centre' (statistical local areas in rural zones containing urban centres with populations between 10 000 and 24 999); 'other rural area' (all remaining statistical local areas in the rural zone); 'remote centre' (statistical local areas in the remote zone containing populations of 5000 or more) and 'other remote area' (all remaining statistical local areas in the remote zone). – Nil or rounded to zero.

Source: State and Territory governments (unpublished); tables 11A.14 and 11A.15.

Early detection — breast cancer detection rate

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

Box 11.12 **Breast cancer detection rate**

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

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

The following are the relevant BreastScreen Australia National Accreditation Standards for detection rates (BreastScreen Australia 2002):

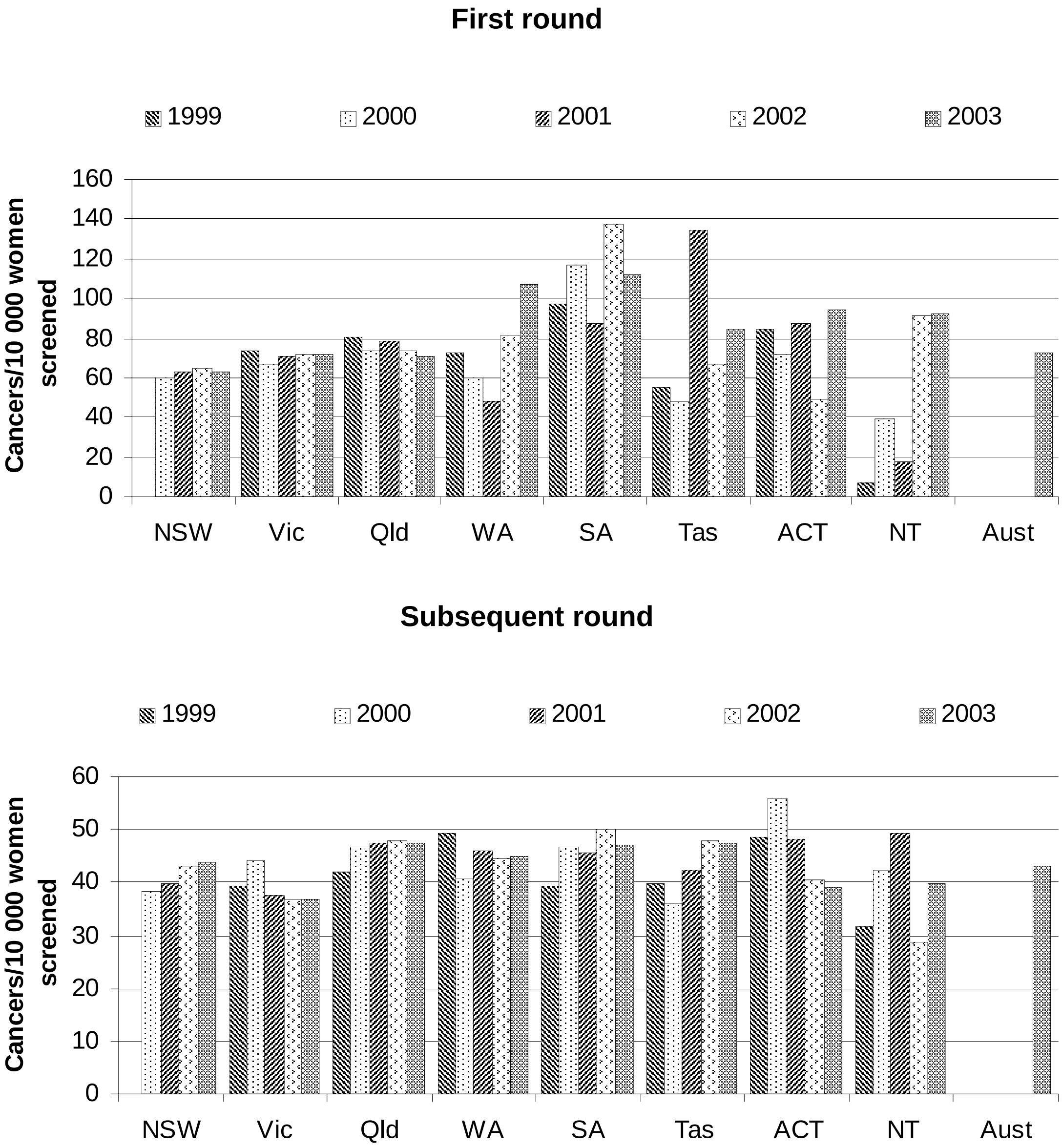
- Greater than or equal to 50 per 10 000 women aged 50–69 years who attend for their first screen are diagnosed with invasive breast cancer.
- Greater than or equal to 35 per 10 000 women aged 50–69 years who attend for their second or subsequent screen are diagnosed with invasive breast cancer.
- Greater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

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

Figure 11.13 reports the age standardised number of invasive cancers detected per 10 000 women screened aged 50–69 years, by screening round. DCIS detected per 10 000 women screened is reported in table 11A.16. (Definitions can be found in box 11.1 and section 11.7.)

For women aged 50–69 years, in the first round in 2003, SA had the highest detection rate (111.6 cancers per 10 000 women) and NSW had the lowest (62.6 cancers per 10 000 women). In the subsequent round in 2003, Tasmania had the highest detection rate (47.4 cancers per 10 000 women) and Victoria had the lowest (36.8 cancers per 10 000 women) (figure 11.13).

Figure 11.13 **Age standardised breast cancer detection rate for women aged 50–69 years, invasive cancers**[a]



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[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 11A.16.

Early detection — small invasive cancer detection rate

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

Box 11.13 **Small invasive cancer detection rate**

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

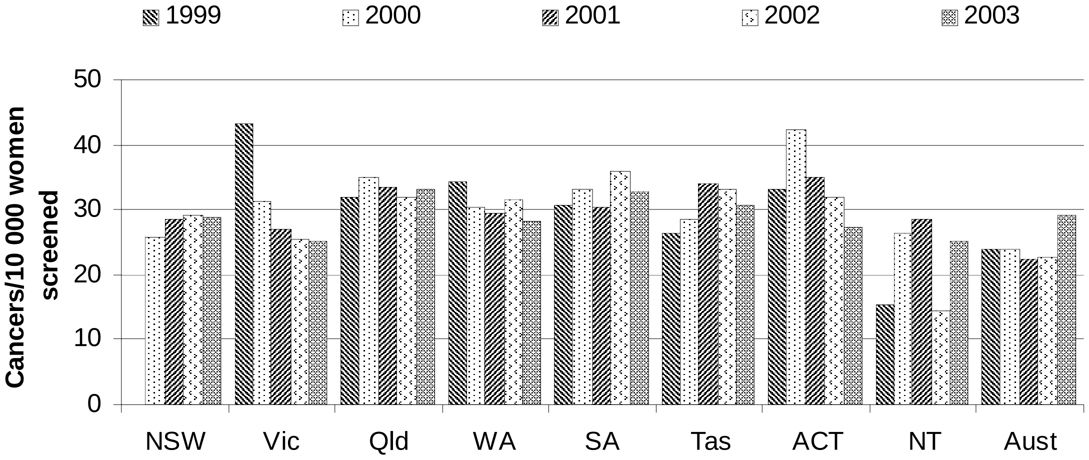
The ‘small invasive cancer detection rate’ is defined as the number of invasive cancers detected with a diameter of 15 millimetres or less, per 10 000 women screened. It is desirable that a high proportion of cancers detected are small cancers: detection of small cancers is generally associated with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

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

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

Age standardised rates for small invasive cancer detection are reported in figure 11.14. For women aged 50–69 years screened by BreastScreen Australia in 2003, the highest rate of detection of small invasive cancers was in Queensland (33.0 cancers per 10 000 women screened) while the lowest was in the NT (25.0 cancers per 10 000 women screened).

Figure 11.14 **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 11A.17.

Early detection — size of detected cancers

The 'size of detected cancers' is an outcome indicator of early detection performance (box 11.14).

Box 11.14 **Size of detected cancers**

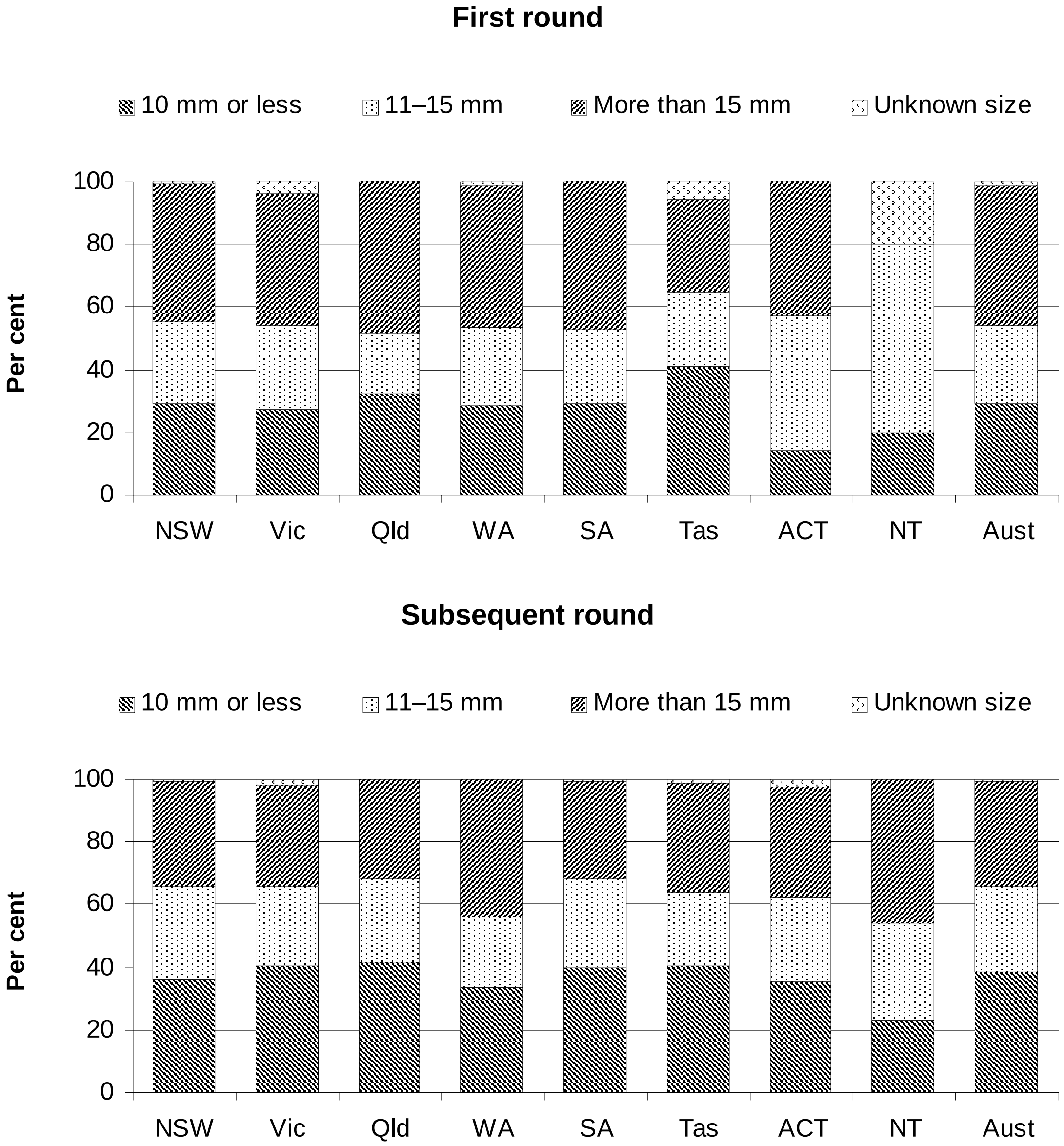
The 'size of detected cancers' is an indicator of the early detection of breast cancers. Detection of small cancers (those with a diameter of 15 millimetres or less) is generally associated with increased survival rates and reduced morbidity and mortality, leading to some cost savings to the health care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

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

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

Figure 11.15 presents the proportion of cancers by size by screening round for 2003. The data are from BreastScreen Australia and cover only its clients. The data for 2003 reflect that larger cancers tend to be discovered in the first round and that smaller cancers tend to be detected in subsequent rounds.

Figure 11.15 **Detected invasive cancers, women aged over 40 years, by screening round and size of cancer 2003**[a, b]



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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 11A.18.

Overall performance — mortality rate for breast cancer

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

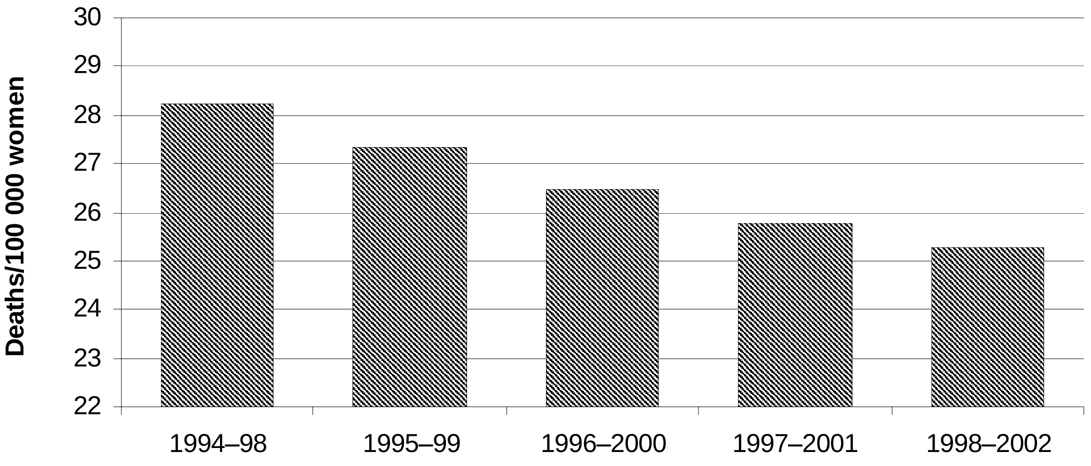
Box 11.15 **Mortality rate for breast cancer**

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

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

Age standardised mortality rates are the most appropriate measure for looking at changes in mortality rates. The average annual age standardised mortality rate declined from a peak of 28.2 per 100 000 women over the period 1994–98 to an average of 25.3 per 100 000 women over the period 1998–2002 (figure 11.16).

Figure 11.16 **Annual average age standardised mortality rate from breast cancer, all ages**[a]

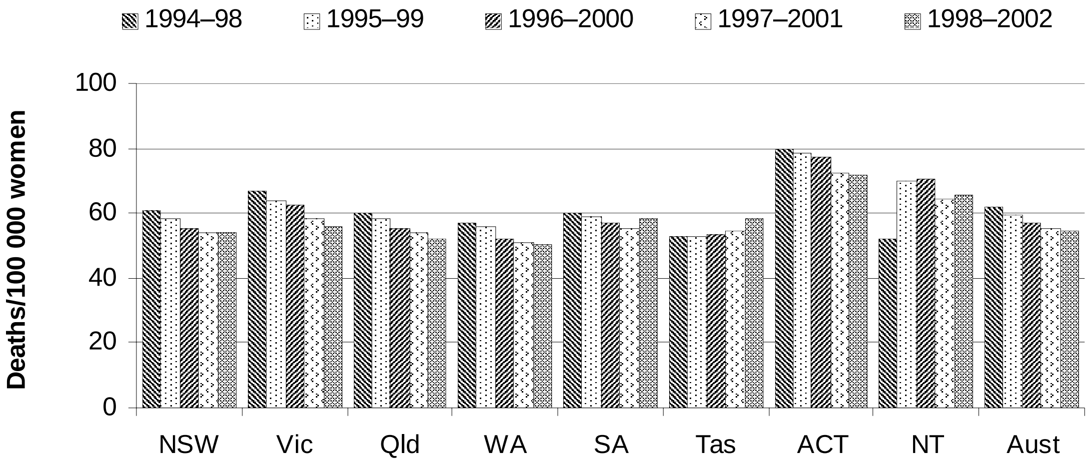


[a] Age standardised to the Australian population at 30 June 2001.

Source: AIHW (unpublished); table 11A.19.

The annual average age standardised mortality rate from breast cancer for women aged 50–69 years over the period 1998–2002 was highest in the ACT (71.8 per 100 000 women) and lowest in WA (50.4 per 100 000 women) (figure 11.17).

Figure 11.17 **Annual average age standardised mortality rate from breast cancer, women aged 50–69 years[a, b]**



[a] Age standardised to the Australian population at 30 June 2001. [b] ACT Health reviewed the ACT's high reported age standardised mortality rate from breast cancer in detail. The review found that the higher rate of mortality in the ACT was unlikely to be due to the major modifiable determinants of mortality — namely, participation in screening, or treatment by experienced surgeons according to established guidelines (ACT Health 2003). In addition, data are by place of registration. This may result in an exaggerated mortality rate for the ACT because a substantial number of cross-border residents use ACT health services. The extent to which this is happening is unclear.

Source: AIHW (unpublished); table 11A.19.

Overall performance — cost per life year saved

The Steering Committee has identified 'cost per life year saved' as an outcome indicator of the equity of overall performance (box 11.16). Data for this indicator, however, were not available for the 2005 Report.

Box 11.16 **Cost per life year saved**

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

11.4 Mental health

Profile

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

Mental health relates to an individual's ability to negotiate the daily challenges and social interactions of life without experiencing undue emotional or behavioural incapacity (DHAC and AIHW 1999). Problems and disorders that interfere with this ability and diminish quality of life and productivity include cognitive, emotional and behavioural disorders. Some of the major mental disorders perceived to be public health problems are schizophrenia, depression, anxiety disorders, dementia and substance use disorders (DHAC and AIHW 1999). Each of these disorders is unique in terms of its incidence across the lifespan, causal factors and treatments.

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

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

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

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

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

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

mental disorder: a diagnosable illness that significantly interferes with an individual’s cognitive, emotional and/or social abilities.

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

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

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

(Continued on next page)

Box 11.17 **(Continued)**

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

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

non-government organisations: private not-for-profit community managed organisations that receive State and Territory government funding specifically to provide community support services for people affected by a mental 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.

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

Source: DHA (2002).

Prevalence

As part of the National Health Survey in 2001, the ABS surveyed adults on the level of psychological distress that they had experienced in the four weeks before the survey. This survey used the Kessler-10 (K10) scale, which measures non-specific psychological distress. The scale consists of 10 questions about non-specific psychological distress and seeks to measure the level of current anxiety and depressive symptoms that a person might have experienced in the four weeks before the interview (ABS 2002b).[4] The 2001 data showed that almost all adults aged 18 to 64 years had experienced some form of psychological distress. Nationally, 61.4 per cent of those aged 18–64 years had experienced a low level of distress, 23.5 per cent had experienced moderate distress and 13.0 per cent had experienced a high or very high level of distress. Generally, people aged 65 years or over were less likely to experience moderate and high to very high levels of distress, compared with the younger age group (table 11.6). Overall, in percentage terms, more males than females had experienced lower levels of distress, and more females than males had experienced moderate and high to very high levels of distress (table 11A.20).

In the 2003 ABS Survey of Disability, Ageing and Carers (ABS 2004), 8.4 per cent of all people with a disability, (that is 636 900 out of 3.9 million people) reported a mental or behavioural disorder as the main health condition causing their disability. Among people who had a disability that caused a profound or severe core activity limitation (around 1.2 million people or 49.3 per cent of all people with a disability), however, 12.3 per cent reported a mental or behavioural disorder as their main health condition (ABS 2004). Data indicating the prevalence of mental disorders from earlier ABS and other surveys were presented in the 2004 Report.

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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 1 for ‘none of the time’, to 5 for ‘all of the time’. Scores of the 10 questions were then summed, yielding a minimum possible score of 10 and a maximum possible score of 50. Low scores indicated low levels of psychological distress and high scores indicated high levels of psychological distress (ABS 2002b).

Table 11.6 K10 level of psychological distress, 2001 (per cent of population)[a]

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*[b]	*Aust*
18–64 years									
Low	61.1	62.0	62.2	61.5	60.0	61.9	62.8	na	61.4
Moderate	24.1	23.6	22.4	24.7	23.2	22.8	23.8	na	23.5
High and very high	13.4	13.2	12.4	11.1	14.8	13.8	9.8	na	13.0
Total	98.6	98.8	97.0	97.2	97.9	98.4	96.4	na	97.9
65 years or over									
Low	65.8	68.8	71.1	68.9	65.2	65.0	74.7	na	67.7
Moderate	18.4	13.8	15.8	15.1	18.3	15.7	14.3	na	16.3
High and very high	8.9	9.9	6.2	9.4	8.4	12.9	4.4 [c]	na	8.7
Total	93.1	92.6	93.1	93.3	91.9	93.7	93.3	na	92.8
Total adults									
Low	61.9	63.1	63.6	62.6	61.0	62.5	64.2	na	62.4
Moderate	23.1	22.0	21.3	23.2	22.2	21.5	22.7	na	22.3
High and very high	12.6	12.7	11.5	10.8	13.6	13.6	9.2	na	12.3
Total	97.7	97.8	96.4	96.6	96.8	97.6	96.0	na	97.1

[a] Psychological distress as measured by the K10 scale. [b] Separate estimates for the NT are not available for this survey, but the NT contributed to national estimates. [c] Estimate has a relative standard error of 25–50 per cent and needs to be interpreted with caution. **na** Not available.

Source: ABS (unpublished); table 11A.20.

Roles and responsibilities

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

State and Territory governments are the primary sources of funding and service delivery for specialist public mental health services. The Australian Government also provides funding to states and territories via the Australian Health Care Agreements and the Medicare Benefits Schedule (private psychiatrists and GPs), the Pharmaceutical Benefits Schedule and the Department of Veteran's Affairs (DVA).

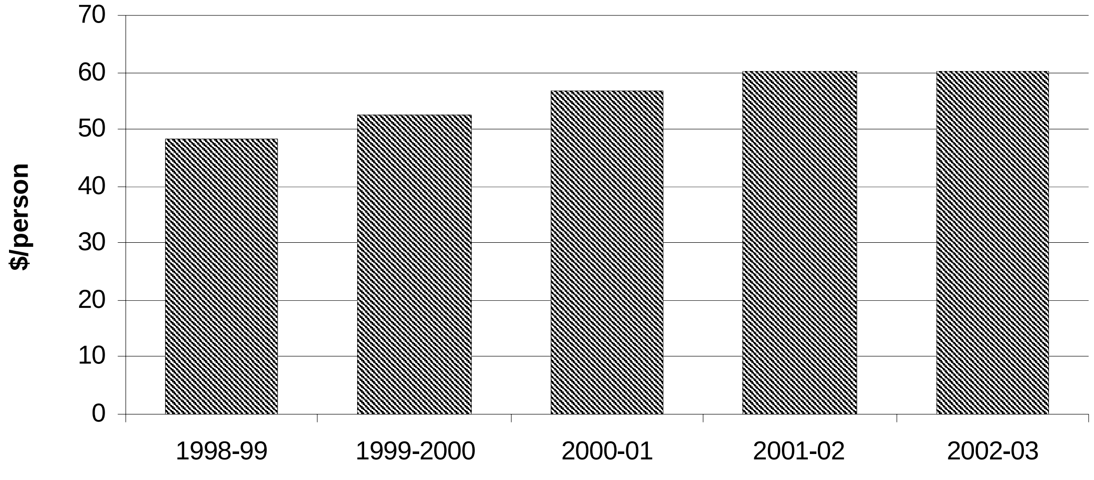
The Australian, State and Territory governments also fund other services that people with mental disorders can access, such as emergency relief, employment, accommodation, income support, rehabilitation, residential aged care and other services for people with a disability (see chapters 12 and 13).

Funding

Real Government recurrent expenditure of around $3.2 billion was allocated to mental health services in 2002-03 (tables 11A.21 and 11A.22).[5] State and Territory governments made the largest contribution ($2.0 billion, or 62.5 per cent), although this included some Australian Government funds under the Australian Health Care Agreements (table 11A.22). The Australian Government spent $1.2 billion. Real Australian Government expenditure per person in 2001-02 and 2002-03 remained steady at around $60 (figure 11.18).

Data in this Report relating to public mental health services come from State and Territory governments. These data for 2002-03 are preliminary (and will be further validated as part of the production of the annual National Mental Health Report), so need to be treated with care.

Figure 11.18 **Real Australian Government recurrent expenditure on mental health services per person (2002-03 dollars)[a, b]**



a 2002-03 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2005*. **b** Constant price expenditure for all years (2002-03 dollars), using the implicit price deflator for non-farm gross domestic product — see table 11A.56.

Source: Australian Government (unpublished); table 11A.23; DHA (unpublished); table 11A.56.

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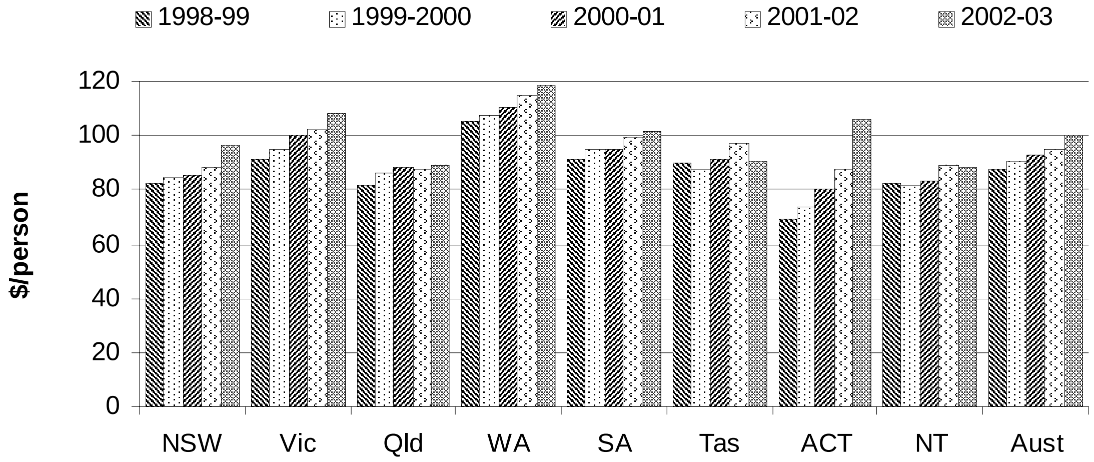
[5] The data include revenue from other sources (including patient fees and reimbursement by third party compensation insurers) and ‘other Australian Government funds’.

The largest component of Australian Government expenditure on mental health services in 2002-03 was expenditure under the Pharmaceutical Benefits Schedule for psychiatric medication (541.3 million). Expenditure on psychiatric medication increased at an annual average rate of 12.7 per cent between 1998-99 and 2002-03 and rose from 36.9 per cent of Australian Government expenditure on mental health services in 1998-99 to 45.5 per cent in 2002-03. While annual growth in psychiatric medication has averaged 12.7 per cent, the rate of growth has been declining steadily over the reporting period (from 36.9 per cent in 1998-99 to 5.7 per cent in 2002-03). In 2002-03, Medicare Benefits Schedule payments for consultant psychiatrists accounted for a further 16.6 per cent of Australian Government expenditure on mental health services, followed by expenditure for mental health care by GPs (14.2 per cent). The residual was provided by DVA (10.4 per cent), the National Mental Health Strategy (NMHS) (8.0 per cent), private hospital insurance premium rebates (4.1 per cent), research and other time limited program and project support (table 11A.21).

Real expenditure per person at State and Territory discretion has increased over time (figure 11.19). Data in figure 11.19 for State and Territory government expenditure include Australian Government funds provided as part of base grants under the Australian Health Care Agreements, but exclude special purpose grants provided for mental health reform and also funding provided to states and territories by the DVA. The data are thus referred to as expenditure ‘at State and Territory discretion’.

In 2002-03, WA spent the most on mental health services ($119 per person) and Queensland and the NT spent the least ($89 per person). The data in figure 11.19 exclude depreciation. Estimates of depreciation are presented in table 11A.25. State and Territory government expenditure estimates (excluding revenue from other sources and other Australian Government funds) are presented in table 11A.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 11.19 **Real recurrent expenditure at the discretion of State and Territory governments (2002-03 dollars)[a, b, c, d, e]**



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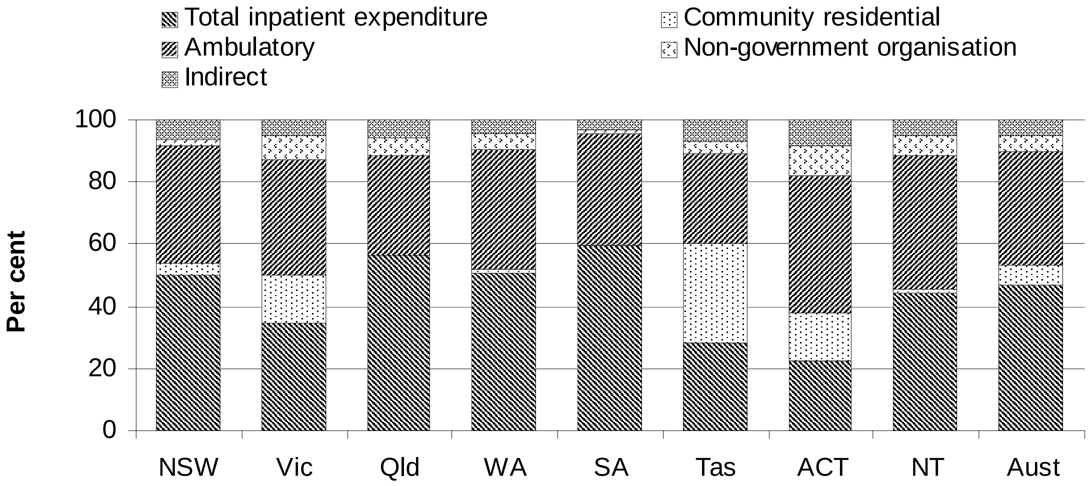
[a] 2002-03 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2005*. [b] Constant price expenditure (2002-03 dollars), using government final consumption expenditure on hospital and clinical services as the deflator — see table 11A.55. [c] 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 11A.25. [e] Funding is a mix of Australian Government funds provided under the base grants of the Australian Health Care Agreements, funds provided by State and Territory governments and revenue from other sources noted above (footnote c).

Source: State and Territory governments (unpublished); table 11A.22; DHA (unpublished); table 11A.55.

Figure 11.20 shows how expenditure at the discretion of State and Territory governments was distributed across the range of mental health services in 2002-03. It does not show the distribution of the Australian Government expenditure discussed under figure 11.18. Recurrent expenditure allocated to total inpatient expenditure (including both psychiatric hospitals and psychiatric units in public [non-psychiatric] hospitals) was highest in SA (59.5 per cent) and lowest in the ACT (22.7 per cent). (Tasmania, the ACT and the NT do not have public psychiatric hospitals.) Recurrent expenditure allocated to ambulatory services was highest in the ACT (44.5 per cent) and lowest in Tasmania (28.8 per cent).

Figure 11.20 **State and Territory recurrent expenditure, by service category, 2002-03[a, b, c, d, e, f]**



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[a] 2002-03 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2005*. [b] Includes all spending regardless of source of funds. [c] Depreciation is excluded. Depreciation estimates are reported in table 11A.25. [d] Community residential is defined as all staffed community-based units (external to the campus of a general hospital or psychiatric institution) regardless of the number of hours that staff are present. [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 organisations 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 11A.26.

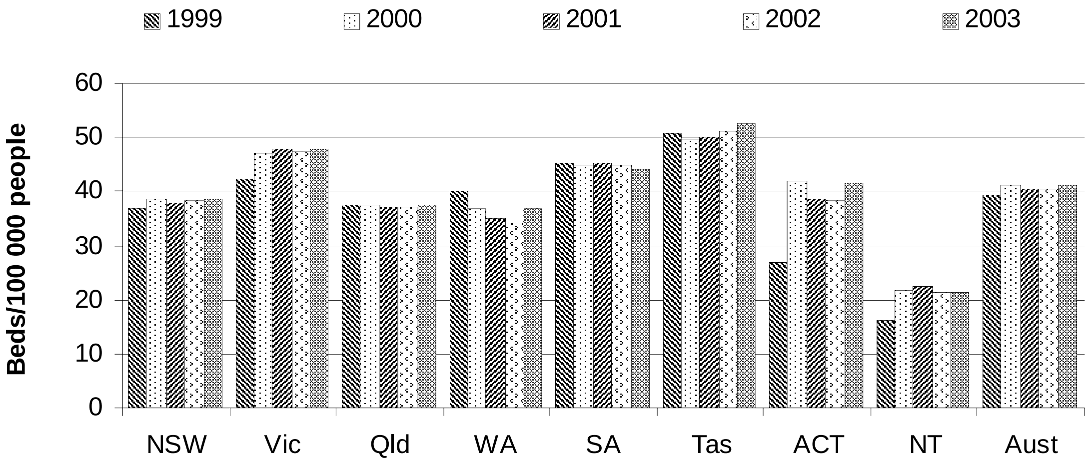
Size and scope of sector

The number of beds

Beds are counted as those immediately available for use at 30 June by admitted patients if required. They are available immediately — or within a reasonable period of time — for use if located in a suitable place for care with nursing or other auxiliary staff available. Also included are beds in wards that are temporarily closed for reasons such as renovation or strike, but that would normally be open.

Figure 11.21 presents the number of beds per 100 000 people for public hospitals and community residential facilities combined. There was a definitional change for community residential facilities in 1999-2000, which caused a break in the series. Prior to 1999-2000, ‘community residential’ was defined as government funded 24 hour staffed residential units in community settings (external to the campus of a public hospital or psychiatric institution). From 1999-2000, the definition has been broadened to incorporate all staffed community-based units, regardless of the number of hours that staff are present. In 2003, Tasmania had the highest number of beds per 100 000 people (52.5) and the NT had the lowest (21.3).

Figure 11.21 **Beds in public hospitals and publicly funded community residential units, 30 June[a, b, c]**



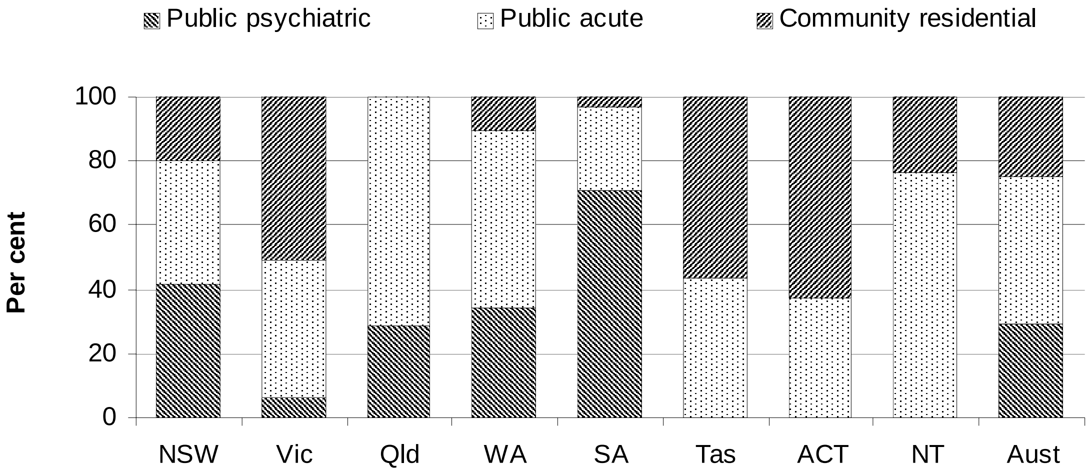
[a] 2003 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2005*. [b] Includes beds in public hospitals and publicly funded community residential units. [c] Prior to 1999-2000, 'community residential' was defined as government funded 24 hour staffed residential units in community settings (external to the campus of a public hospital or psychiatric institution). From 1999-2000, the definition has been broadened to incorporate all staffed community-based units, regardless of the number of hours that staff are present.

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

Figure 11.22 presents the number of beds by service category for 2003. These data show the differences in service mix across states and territories. In 2003, SA had the highest proportion of beds in public psychiatric hospitals (70.8 per cent) and Victoria had the lowest (6.1 per cent). Tasmania, the ACT and the NT did not have public psychiatric hospitals. The ACT had the highest proportion of beds in community residential services (62.7 per cent) and SA had the lowest (3.0 per cent).

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

Figure 11.22 **Beds, by service category, 30 June 2003**[a, b]



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[a] 2003 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2005*. [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.

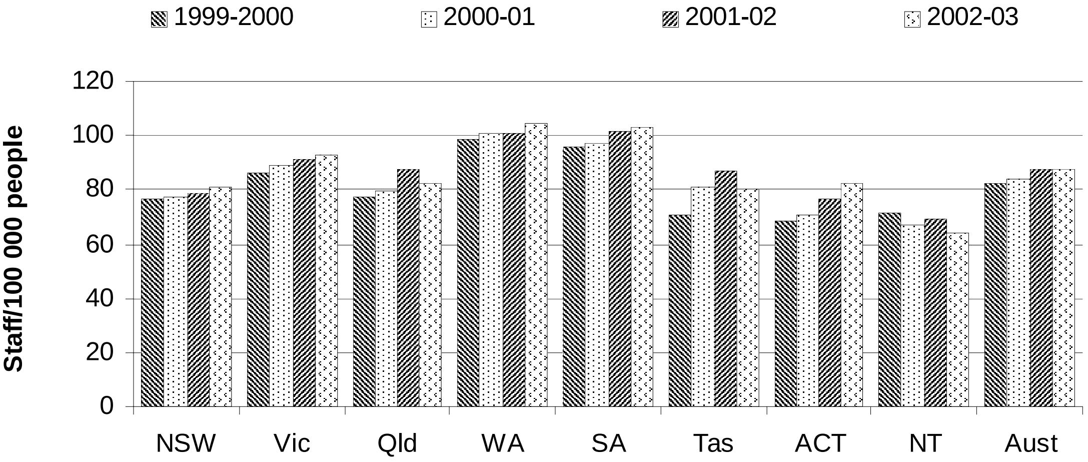
Source: State and Territory governments (unpublished); table 11A.27.

Staff

Figure 11.23 reports full time equivalent (FTE) direct care staff per 100 000 people and includes only staff within the health professional categories of ‘medical’, ‘nursing’ and ‘allied health’. ‘Other personal care’ direct care staff are excluded. Medical staff consist of consultant psychiatrists, psychiatry registrars, and other medical officers who are neither registered as psychiatrists within the State or Territory, nor are formal trainees of the Royal Australian and New Zealand College of Psychiatrists’ Postgraduate Training Program. Nursing consists of registered and non-registered nurses. Allied health consists of occupational therapists, social workers, psychologists and other allied health staff. Other personal care staff include attendants, assistants, home companions, family aides, ward helpers, orderlies, ward assistants and nursing assistants who are engaged primarily in the provision of personal care to patients or residents and who are not formally qualified or are still training in nursing or allied health professions. Definitions for staffing categories are provided in more detail in section 11.7.

In 2002-03, WA had the highest number of FTE direct care staff per 100 000 people in specialist mental health services (104.2) and the NT had the lowest (63.7).

Figure 11.23 **FTE health professional direct care staff per 100 000 people**[a, b, c, d]



[a] 2002-03 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2005*. [b] Includes health professional occupational categories only. [c] Community residential incorporates all staffed community-based units, regardless of the number of hours that staff are present. [d] The apparent drop in FTE staff for Queensland was 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 overall reduction in staffing.

Source: State and Territory governments (unpublished); table 11A.28.

Nursing staff comprise the largest FTE component of health care professionals employed in mental health services. Across Australia in 2002-03, 57.2 nurses per 100 000 people were working in specialised mental health services, compared with 21.0 allied health care staff and 9.7 medical staff (table 11A.28). FTE direct care staff employed in specialised mental health services, by service setting, are reported in table 11A.29.

Services provided

Estimating activity across the specialised mental health services sector is problematic. Data for patient days are provided in figure 11.24 by acute, non-acute and 24 hour staffed community residential care (as defined in box 11.17).[6] Hospital inpatient days and community residential patient days are included in figure 11.24, but other types of community service are not covered. Collection of data outlining community mental health care patient contacts commenced in July 2000 as part of the national minimum data set, although there are difficulties with data quality.

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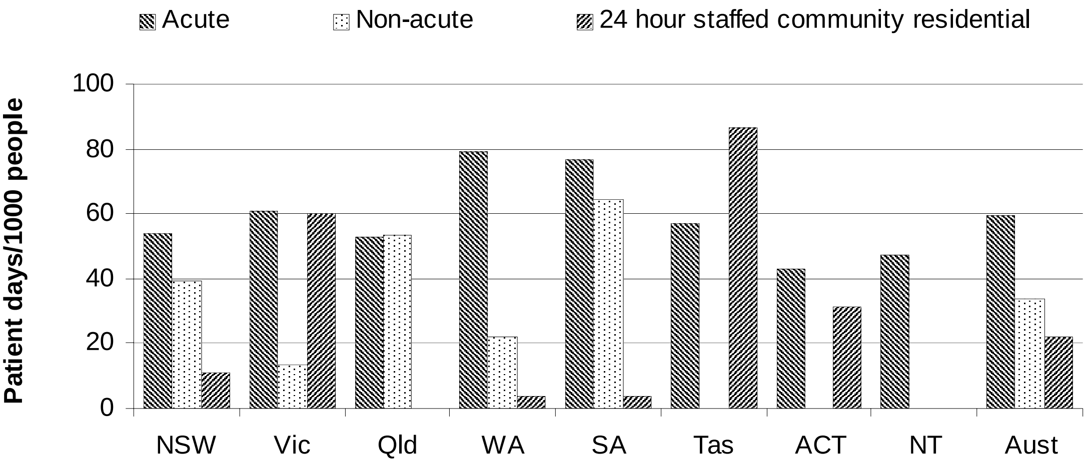
[6] Under the NSMHS, patient days are all days or part days for which the patient was in hospital during the survey period, regardless of the original date of admission or discharge.

In 2002-03, patient days per 1000 people in acute units were highest in WA (79.0) and lowest in the ACT (43.2). In non-acute units, patient days per 1000 people were highest in SA (64.5) and lowest in Victoria (13.4). Tasmania, the ACT and the NT did not provide mental health care in non-acute units in 2002-03. Tasmania had the most patient days per 1000 people in 24 hour staffed community residential facilities (86.3) and SA had the least (3.4) (figure 11.24). The NT did not provide mental health care in 24 hour staffed community residential facilities in 2002-03. The earlier caveat for the apparent absence of community residential beds in Queensland also applies to the data in figure 11.24.

Figure 11.24 **Mental health patient days, 2002-03**[a, b, c, d]



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[a] 2002-03 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2005*. [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] 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 11A.30.

In public psychiatric hospitals in 2001-02, there were 13 246 overnight separations with specialised psychiatric care and 631 same day separations (AIHW 2004b). In public acute hospitals there were 66 937 overnight separations with specialised psychiatric care and 4954 same day separations. Schizophrenia accounted for a large proportion of overnight separations related to mental disorders in public hospitals (23.2 per cent in public acute hospitals and 25.9 per cent in public psychiatric hospitals) (table 11A.31).

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

Services by general practitioners

Limited data are available on GP care of mental health patients. The following data are collected from a sample of 1000 GPs. In 2002-03, the reason most frequently reported by mental health related patients for an encounter with a GP was depression (1.9 per 100 encounters).[7] Sleep disturbance was the next most common reason (1.2 per 100 encounters), followed by anxiety (0.9 per 100 encounters). In total, 7.3 per 100 encounters involved mental health problems reported by patients as a reason for an encounter with a GP (AIHW 2004b).

In 2002-03, 10.3 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 (3.5 per 100 GP encounters). Sleep disturbance and anxiety were the next most common problems managed (1.6 and 1.5 per 100 encounters respectively), followed by acute stress reaction and drug abuse (both 0.5 per 100 encounters) (AIHW 2004b). In 2003-04, depression was the fourth most frequently managed problem by a GP (Britt *et al.* 2004).[8]

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. Indigenous Australians were nearly twice as likely as the rest of the population to be admitted for overnight psychiatric care. The

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[7] In the Bettering the Evaluation and Care of Health study, participating GPs were asked to record at least one, and up to three, patient reasons for the encounter (Britt *et al.* 2004). Reasons for the encounter reflected the patient’s demand for care and could indicate service use patterns.

[8] 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.

average length of stay for Indigenous people was slightly less, however, than that for the rest of the population (table 11.7).

Table 11.7 **Specialised psychiatric care, by Indigenous status, 2001-02[a, b]**

	Same day separations	*Overnight separations*	*Total separations*	*Total patient days*	*Total psychiatric care days*	*Average length of stay (overnight)*	*Psychiatric care days per overnight separation*
No.							
Indigenous	130	3 567	3 697	72 386	71 723	20.3	20.1
Total population	8 536	102 433	110 969	2 458 483	2 421 286	23.9	23.6
Per 1000 population[c]							
Indigenous	0.4	9.1	9.6	199.3	198.0	..	..
Total population	0.4	5.2	5.6	124.1	122.2	..	..

[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] Separations per 1000 population are indirectly age standardised rates based on the projected Aboriginal and Torres Strait Islander population for 30 June 2001 and the estimated resident population for 30 June 2001. **..** Not applicable.

Source: AIHW (2004b); table 11A.32.

Schizophrenia disorders accounted for a large proportion of overnight specialised psychiatric care separations reported for Indigenous patients in Australia in 2001-02 (26.1 per cent). They also accounted for around 47.3 per cent of patient days for Indigenous patients and a similar percentage of psychiatric care days (47.6 per cent) (table 11A.33).

Framework of performance indicators

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

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

Box 11.18 **Objectives for mental health service delivery**

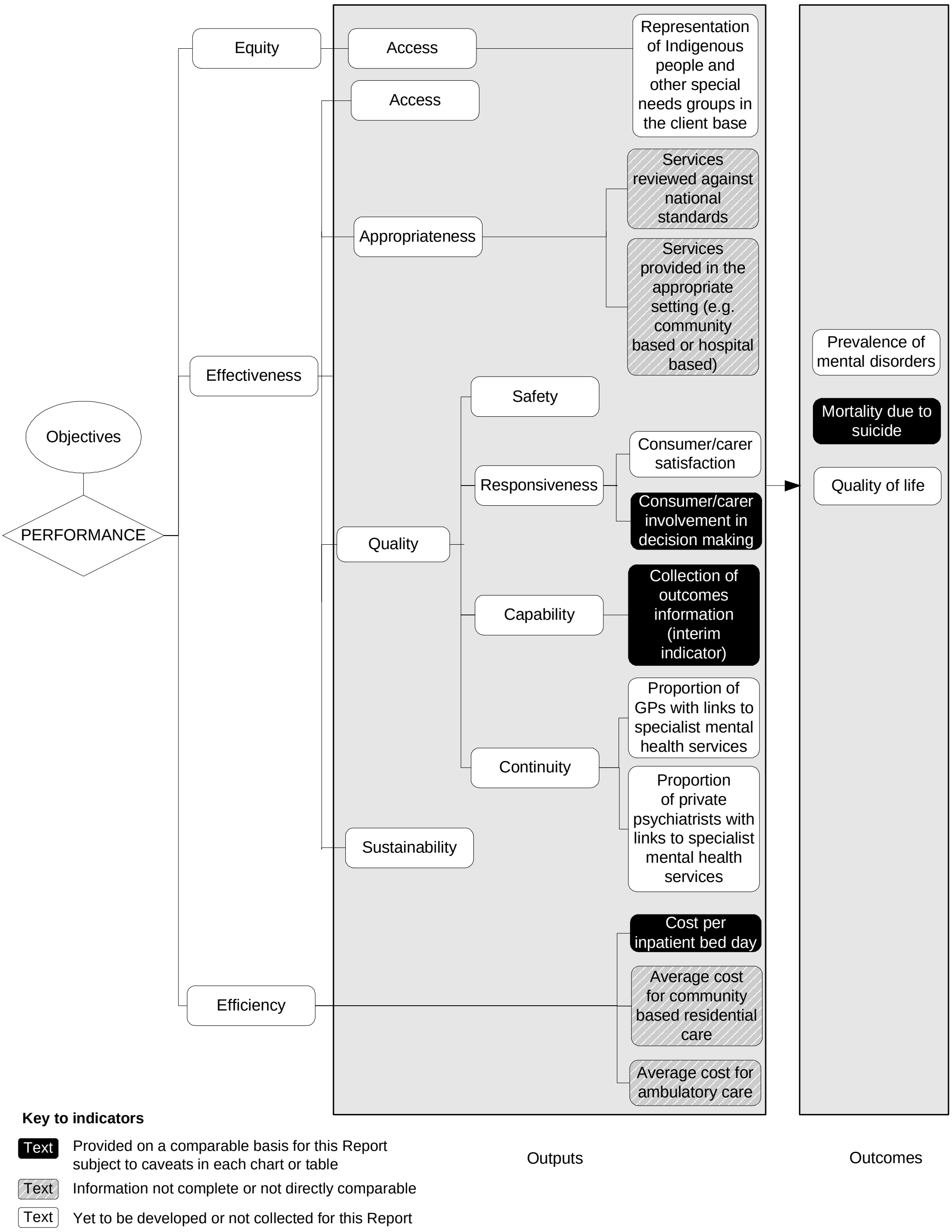
Key objectives include to:

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

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

The performance indicator framework shows which data are comparable in the 2005 Report (figure 11.25). For data that are not considered directly comparable, the text includes relevant caveats and supporting commentary. Chapter 1 discusses data comparability from a Report-wide perspective (see section 1.6). The 'Health preface' explains the performance indicator framework for health services as a whole, including the sub-dimensions for quality and sustainability that have been added to the standard Review framework for health services.

Figure 11.25 **Performance indicators for mental health management**



Key performance indicator results

Outputs

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

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

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

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

Access

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

Appropriateness — services reviewed against the national standards

‘Services reviewed against the national standards’ is an effectiveness indicator of mental health management (box 11.20).

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

‘Services reviewed against the national standards’ is a process indicator of appropriateness, reflecting progress towards accreditation against the national standards for mental health care. The national standards are outlined in box 11.21.

This indicator is defined as the proportion of commenced and completed reviews of specialised public mental health services that are undertaken by an external accreditation agency against the National Standards for Mental Health Services. A high proportion of reviews completed by an external accreditation agency is desirable.

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. Accreditation *per se* does not assess or provide information on the implementation of the National Standards for Mental Health Services; rather, assessment against the national standards must be specifically requested and involves a separate review process.

Data in table 11.8 show the percentage of specialised public mental health services that have participated in, or are currently participating in, an in-depth review by an external accreditation agency against the National Standards for Mental Health Services. Such reviews may take place in conjunction with, or separate to, overall accreditation of a parent organisation. Review against the national standards will, in some cases and in some jurisdictions, be delayed until an appropriate point is reached within the overarching accreditation cycle (for example, a mid-term review).

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

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

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

Source: DHA (2002).

The extent to which reviews were completed varied across jurisdictions at June 2003: they were completed in all of the ACT specialist mental health organisations, whereas no reviews had been completed in the NT. At the end of June 2003, 80.9 per cent of services had commenced a review and 41.3 per cent had completed a review. It cannot be concluded at this time whether services yet to complete a review were necessarily of poorer quality (table 11.8).

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

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
June 2001									
Review commenced	36.6	28.0	100.0	12.5	47.5	–	100.0	–	41.8
Review completed	9.4	28.0	36.8	–	26.3	–	100.0	–	17.6
June 2002									
Review commenced	64.2	42.9	100.0	65.6	47.5	16.7	100.0	–	61.4
Review completed	16.2	38.5	85.6	15.6	26.3	–	100.0	–	29.4
June 2003									
Review commenced	70.4	100.0	100.0	100.0	64.6	100.0	100.0	100.0	80.9
Review completed	26.6	49.7	90.2	53.1	46.5	22.2	100.0	–	41.3

[a] 'Review commenced' means the percentage of specialised public mental health services that had formally registered for review by an external accreditation agency against the National Standards for Mental Health Services; 'review completed' means the percentage of specialised public mental health services that had formally completed a review by an external accreditation agency against the National Standards for Mental Health Services. **–** Nil or rounded to zero.

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

Appropriateness — services provided in the appropriate setting

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

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

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

- a reduced reliance on stand-alone psychiatric hospitals

(Continued on next page)

Box 11.22 **(Continued)**

- the expanded delivery of community-based care integrated with inpatient care
- mental health services being mainstreamed with other components of health care.

By encouraging the treatment of patients in community settings and public (non-psychiatric) hospitals rather than in stand-alone psychiatric hospitals — that is, to substitute the service settings — more appropriate treatment options can be provided.

Two measures of ‘services provided in the appropriate setting’ are used:

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

Figure 11.26 shows recurrent expenditure on stand-alone psychiatric hospitals as a proportion of total expenditure on mental health services. In 2002-03, the proportion was highest in SA (43.8 per cent) and lowest in Victoria (6.1 per cent). (As noted, Tasmania, the ACT and the NT had no public psychiatric hospitals in 2002-03.)

Figure 11.26 **Recurrent expenditure on stand-alone psychiatric hospitals as a proportion of total expenditure on mental health services**[a, b]

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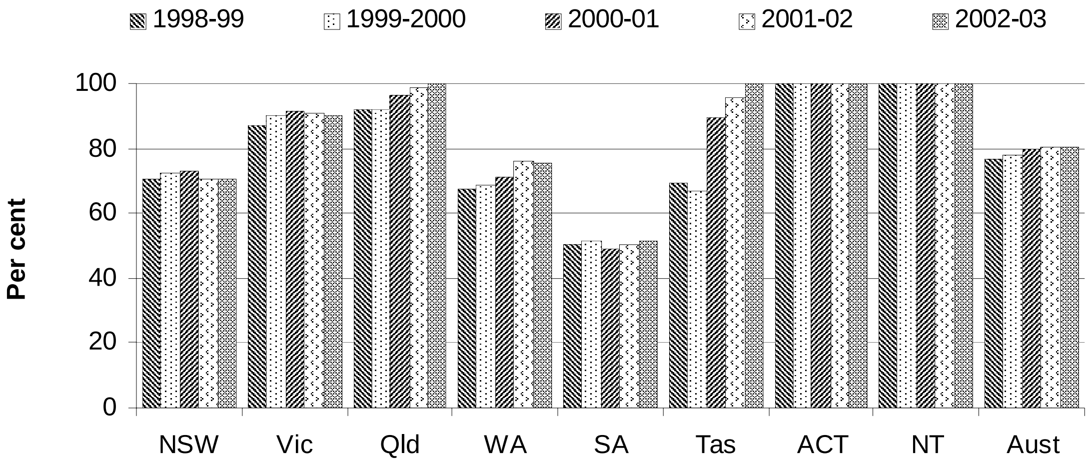
[a] 2002-03 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2005*. [b] The ACT and the NT do not have public psychiatric hospitals. Tasmania did not have public psychiatric hospitals in 2002-03.

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

Figure 11.27 shows acute patient days in public acute hospitals as a proportion of the total acute inpatient bed days in public acute and psychiatric hospitals. In 2002-03, aside from Tasmania and the territories (none of which had psychiatric hospitals), the highest proportion of acute patient days in public acute hospitals was in Queensland (100.0 per cent) and the lowest was in SA (51.5 per cent).

Figure 11.27 **Acute patient days in public acute hospitals as a proportion of total acute inpatient bed days in public acute and psychiatric hospitals**[a]



[a] 2002-03 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2005*.

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

Quality — consumer and carer satisfaction

The Steering Committee has identified 'consumer and carer satisfaction' as a key area for development in future reports (box 11.23).

Box 11.23 **Consumer and carer satisfaction**

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

Quality — consumer and carer involvement in decision making

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

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

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

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

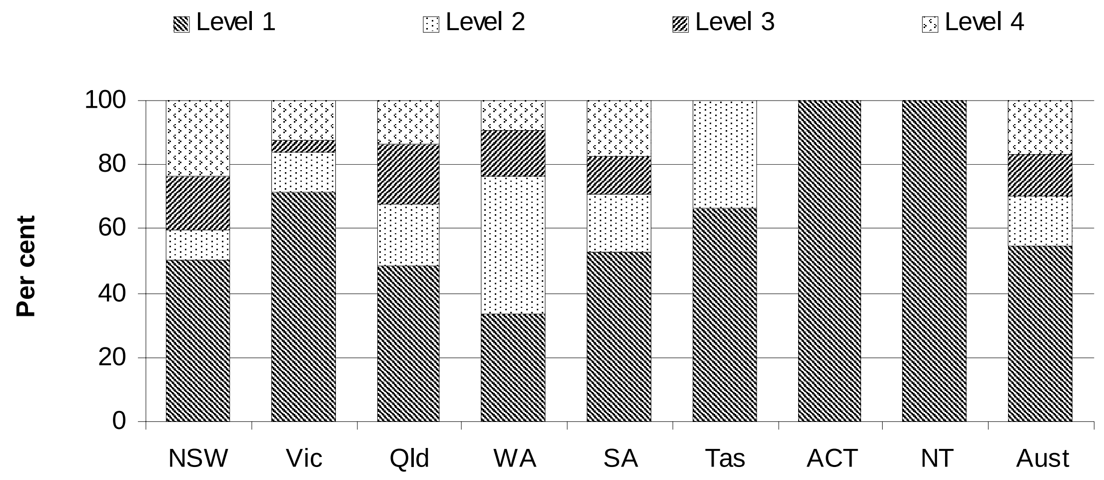
- level 1 — appointment of a person to represent the interests of consumers and carers on the organisation management committee, or a specific consumer and carer advisory group to advise on all aspects of service delivery
- level 2 — a specific consumer and carer advisory group to advise on some aspects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

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

In 2003, the ACT and the NT had the highest proportion of organisations with a level 1 rating (100 per cent). (Data for both jurisdictions are for three organisations.) WA had the lowest proportion (33.3 per cent of 21 organisations). NSW had the highest proportion of organisations reporting no consumer and carer involvement in decision making (level 4) (23.6 per cent of 89 organisations) (figure 11.28).

The *National Mental Health Report 2002* includes additional indicators on consumer and carer participation arrangements (DHA 2002). The Review will investigate including these indicators in the mental health management indicator framework and reporting them in future reports.

Figure 11.28 **Organisations with consumer and carer participation in decision making, 2003[a, b, c, d]**



[a] 2003 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2005*. Non-government organisations are included. [b] NSW advised that the government has no authority to require consumer participation in services delivered through the primary care program. [c] Victoria advised that its model of consumer consultants fits poorly with the Australian Health Care Agreement categories. It has paid consumer consultants working in mental health services. Many agencies report these consultants in the 'other' category, which has a low ranking and, according to Victoria, does not reflect the active role played by consumer consultants in service operation. [d] WA advised that the National Survey of Mental Health Services does not accurately represent consumer and carer participation strategies used in WA. At the State and regional levels, the Office of Mental Health gives high priority to the involvement of consumers and carers in developing a responsive mental health service. Several key consumer and carer advisory groups are supported and provided with financial assistance by the Office of Mental Health. Collectively, these groups provide advice and representation on consumer and carer issues.

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

Quality — collection of outcomes information (interim indicator)

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

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

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

(Continued on next page)

Box 11.25 **(Continued)**

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

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

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

The percentages of specialised mental health services that have introduced routine consumer outcome measurement are shown in table 11.9.

Table 11.9 **Specialised mental health services that introduced the routine collection of consumer outcome measurement (per cent)[a]**

	NSW	*Vic*	*Qld*	*WA*[b]	*SA*	*Tas*	*ACT*	*NT*	*Aust*
June 2001	–	11.3	–	–	–	–	–	–	1.4
June 2002	55.8	11.3	–	–	–	17.6	–	–	32.2
June 2003	77.3	72.6	41.8	7.4	–	94.4	81.3	100.0	68.1

[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. [b] There has been a significant delay in the expected Statewide implementation of the new mental health clinical information system, due to technical and system complexity issues. Implementation is expected to be completed by June 2004. All sites that have the new mental health clinical information system implemented are now collecting consumer outcome measurements, with other sites using an interim paper-based collection. – Nil or rounded to zero.

Source: State and Territory governments; table 11A.37.

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

The Steering Committee has identified the ‘proportion of GPs with links to specialist mental health services’ as an indicator of the effectiveness of mental health management (box 11.26). Data for this indicator, however, were not available for the 2005 Report.

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

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

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

The Steering Committee has identified the 'proportion of private psychiatrists with links to specialist mental health services' as an indicator of the effectiveness of mental health management (box 11.27). Data for this indicator, however, were not available for the 2005 Report.

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

The 'proportion of private psychiatrists with links to 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

As noted, the data for 2002-03 are preliminary and will be further validated as part of the production of the annual National Mental Health Report. Data for 2002-03, therefore, need to be treated with caution.

Efficiency — cost per inpatient bed day

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

Box 11.28 **Cost per inpatient bed day**

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

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

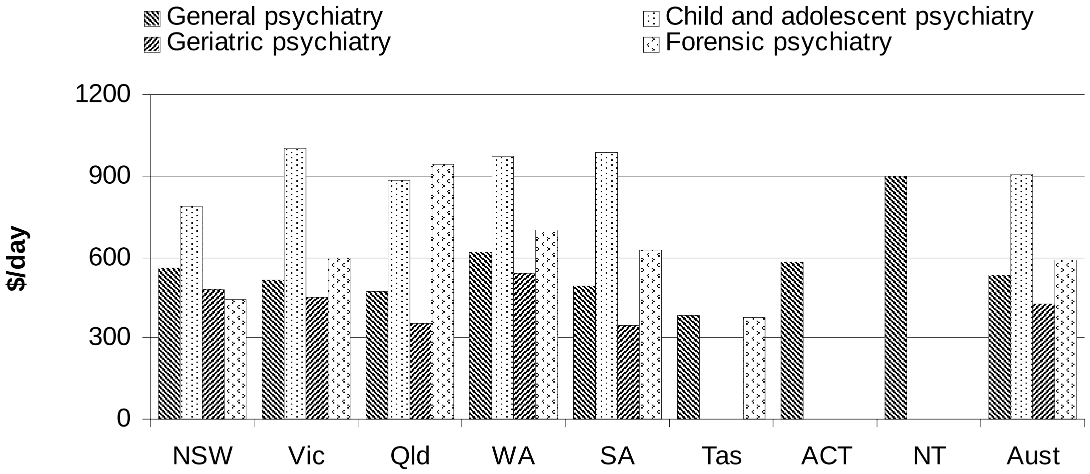
This indicator is affected by factors such as differences in the client mix and average length of stay. The client mix in inpatient settings may differ — for example, some jurisdictions treat a higher proportion of less complex patients in inpatient settings rather than in the community. Longer lengths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

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 (see chapter 9), but casemix data for specialised mental health services are not available.

Reported real inpatient costs per day are disaggregated by inpatient program type (general psychiatry, child and adolescent psychiatry, geriatric psychiatry, and forensic psychiatry) and hospital type (psychiatric hospitals [acute units], psychiatric hospitals [non-acute units] and general hospitals). Disaggregating these data improves comparability across jurisdictions. Real inpatient costs per day are presented in figures 11.29 and 11.30. Changes over time partly reflect institutional change in accordance with the NMHS.

In terms of inpatient program type in 2002-03, average general psychiatry patient day costs were highest in the NT ($897) and lowest in Tasmania ($381) (figure 11.29). Average patient day child and adolescent psychiatry costs were highest in Victoria ($1001) and lowest in NSW ($789). (In 2002-03, child and adolescent psychiatry programs were not available, or could not be separately identified, in Tasmania, the ACT and the NT.) Geriatric psychiatry costs were highest in WA ($539) and lowest in SA ($346). (Geriatric psychiatry programs were not available, or could not be separately identified, in Tasmania, the ACT and the NT.) Forensic psychiatry costs were highest in Queensland ($940) and lowest in Tasmania ($378). Queensland advised that its high bed day cost of forensic psychiatry beds was due to bed day costs associated with a new 21 bed forensic service set up in Townsville in 2002-03. (Forensic psychiatry programs were not available or could not be separately identified in the ACT and the NT.)

Figure 11.29 **Real average recurrent cost per inpatient bed day, public hospitals, by inpatient program type, 2002-03 (2002-03 dollars)**[a, b, c, d, e, f]



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[a] 2002-03 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2005*. [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] Constant price expenditure (in 2002-03 dollars), using government final consumption expenditure on hospital and clinical services as the deflator — see table 11A.55. [e] Queensland advised that it provides geriatric psychiatry inpatient services using different service models, including campus-based and non-campus-based options. All service types are reported as geriatric psychiatry inpatient services, which may have the effect of lowering the average patient day costs compared with the costs of jurisdictions that report aged care units separately. Queensland has also advised that its high bed day cost of forensic psychiatry beds was due to inflated bed day costs associated with a new 21 bed forensic service set up in Townsville in 2002-03. [f] In 2002-03, child and adolescent psychiatry programs were not available, or could not be separately identified, in Tasmania, the ACT and the NT. Geriatric psychiatry programs were not available, or could not be separately identified, in the ACT and the NT. Tasmanian figures include child and adolescent psychiatry within the general psychiatry category. Forensic psychiatry were not available, or could not be separately identified, in the ACT and the NT.

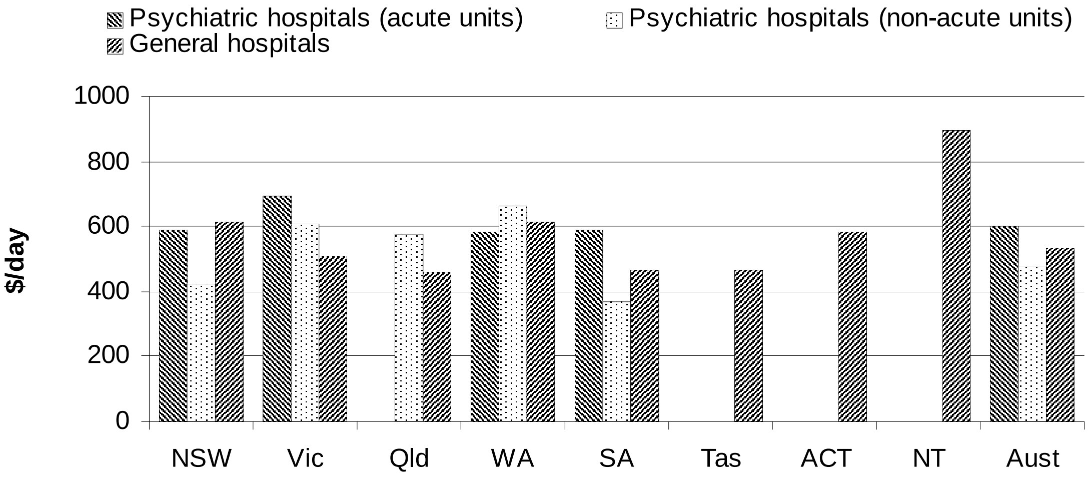
Source: State and Territory governments (unpublished); table 11A.38; DHA (unpublished); table 11A.55.

In terms of hospital type in 2002-03, average patient day costs in psychiatric hospitals (acute units) were highest in Victoria ($694) and lowest in WA ($584). Average costs in psychiatric hospitals (non-acute units) were highest in WA ($661) and lowest in SA ($371). Tasmania, the ACT and the NT did not have psychiatric hospitals. Average patient day costs in public general hospitals were highest in the NT ($897) and lowest in Queensland ($461) (figure 11.30).

Efficiency — average cost for community-based residential care

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

Figure 11.30 **Real average recurrent cost per inpatient bed day, public hospitals, by hospital type, 2002-03 (2002-03 dollars)**[a, b, c, d, e, f, g]



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[a] 2002-03 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2005*. [b] Depreciation 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] Constant price expenditure (in 2002-03 dollars), using government final consumption expenditure on hospital and clinical services as the deflator — see table 11A.55. [e] 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. [f] Queensland data for general hospitals include costs associated with extended treatment units that report through general acute hospitals. [g] The ACT and the NT do not have psychiatric hospitals. Tasmania did not have any psychiatric acute or psychiatric non-acute units in 2002-03.

Source: State and Territory governments (unpublished); DHA (unpublished); tables 11A.39 and 11A.55.

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

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

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

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

The average recurrent cost to government per patient day for community residential services is presented in table 11.10. For general adult units in 2002-03, the average cost to government per patient day for 24 hour staffed community residential services was an estimated $307 nationally (table 11.10). Across jurisdictions, it was highest in the ACT ($646) and lowest in SA ($111). In the NT, there were no 24 hour staffed residential services in 2002-03. For non-24 hour staffed community residential units, the average cost to government per patient day was $87 nationally. Across jurisdictions, it was highest in Victoria ($127) and lowest in NSW ($41). Non-24 hour staffed residential services were not available in SA and Tasmania in 2002-03. As stated, Queensland does not fund community residential services.

For jurisdictions that had community-based aged care units in 2002-03, the average recurrent cost to government per patient day for 24 hour staffed community residential services was $259 nationally. For non-24 hour staffed community residential aged care units, the average cost to government per patient day was $88 in NSW.

Table 11.10 **Average recurrent cost to government per patient day for community residential services, 2002-03**[a, b, c]

	NSW	*Vic*	*Qld*[d]	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
General adult units									
24 hour staffed units	296.1	280.8	na	249.3	110.9	495.5	646.4	..	307.3
Non-24 hour staffed units	40.9	127.4	na	125.8	..	..	59.2	79.1	86.5
Aged care units									
24 hour staffed units	316.1	245.9	na	..	..	284.2	56.2	..	258.6
Non-24 hour staffed units	87.9	..	na	..	..	..	..	..	87.9

[a] 2002-03 data are preliminary only; final validation is ongoing before publication in the *National Mental Health Report 2005*. [b] Depreciation is excluded, although treated differently across jurisdictions. [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. **na** Not available. **..** Not applicable.

Source: State and Territory governments (unpublished); table 11A.40.

Efficiency — average cost for ambulatory care

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

Box 11.30 **Average cost for ambulatory care**

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

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

The provision of ambulatory treatment, rehabilitation and support to non-inpatients, and post-acute care are important components of service provision, and it is a priority for the Steering Committee to continue improving reporting in these areas.

Unit costs (dollars per treated patient in the community) for 2002-03 are presented here for all states and territories. The data reported for this indicator are unreliable, however, and comparisons across jurisdictions are not possible for several reasons. First, information about service costs across jurisdictions is incomplete. Second, the 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 extent of 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 reduce the comparability of data across states and territories. Finally, cost components such as depreciation are not measured consistently across jurisdictions.

- NSW reported ambulatory care unit costs of $955 per treated patient in the community in 2002-03, with 20.1 per cent of services not reporting (table 11A.41).
- Victoria reported ambulatory care unit costs of $1759, with 30.6 per cent of services not reporting (table 11A.42).
- Queensland reported ambulatory care unit costs of $1515, with all services reporting (table 11A.43).
- WA reported ambulatory care unit costs of $2048, with all services reporting (table 11A.44).
- SA reported ambulatory care unit costs of $1647, with 17.6 per cent of services not reporting (table 11A.45).
- Tasmania reported ambulatory care unit costs of $703, with 4.8 per cent of services not reporting (table 11A.46).

- The ACT reported ambulatory care unit costs of $1875, with 11.8 per cent of services not reporting (table 11A.47).
- The NT reported ambulatory care unit costs of $1581, with all services reporting (table 11A.48).
- Across Australia, ambulatory care unit costs were $1326, with 17.0 per cent of services not reporting (table 11A.49).

Outcomes

Prevalence of mental disorders

The Steering Committee has identified the 'prevalence of mental disorders' as a key indicator for development in future reports (box 11.31).

Box 11.31 **Prevalence of mental disorders**

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

While the performance of mental health services is important in reducing suicide, other government services also play a significant role. 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. There can also be a lack of knowledge of how to prevent many of the mental illnesses that make up most of the work of the specialist public sector.

There are no nationally comparable data on the prevalence of mental disorders treated by specialised mental health services, other than the data discussed in the profile for section 11.4 and the in the 2004 Report (SCRGSP 2004).

Mortality due to suicide

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

Box 11.32 **Mortality due to suicide**

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

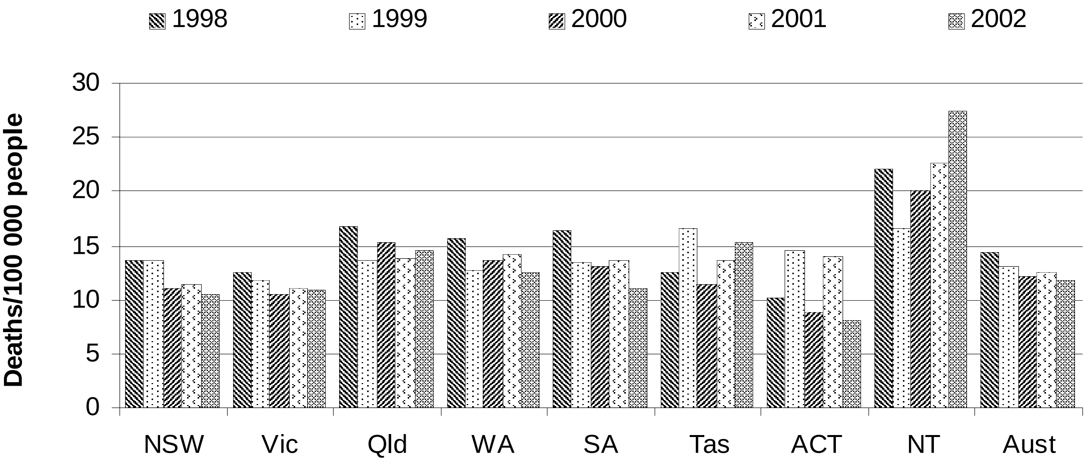
This indicator is reported as the rates per 100 000 people for all people, people aged 15–24 years, people living in capital cities, people living in other urban areas, people living in rural areas and Indigenous people. While the performance of mental health services is important in reducing suicide, 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.

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

In 2002, 2320 deaths by suicide were recorded in Australia — equivalent to 11.8 deaths per 100 000 people. The national rate fell each year from 1997 to 2000, followed by a slight increase in 2001 and then a fall in 2002. The rate for males was almost four times that for females in 2002 — a ratio that was constant over the 10 years to 2002 (table 11A.50). The NT had the highest suicide rate in 2002 (27.4 suicides per 100 000 people) and the ACT had the lowest rate (8.1) (figure 11.31).

Figure 11.31 **Suicide rate**[a, b, c]



[a] By year of registration of death. Year-to-year variation can be influenced by coronial workloads. [b] For 1998 to 2000 the death rate is age standardised to the mid-year 1991 population. For 2001 and 2002 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 (which are not statistically significant).

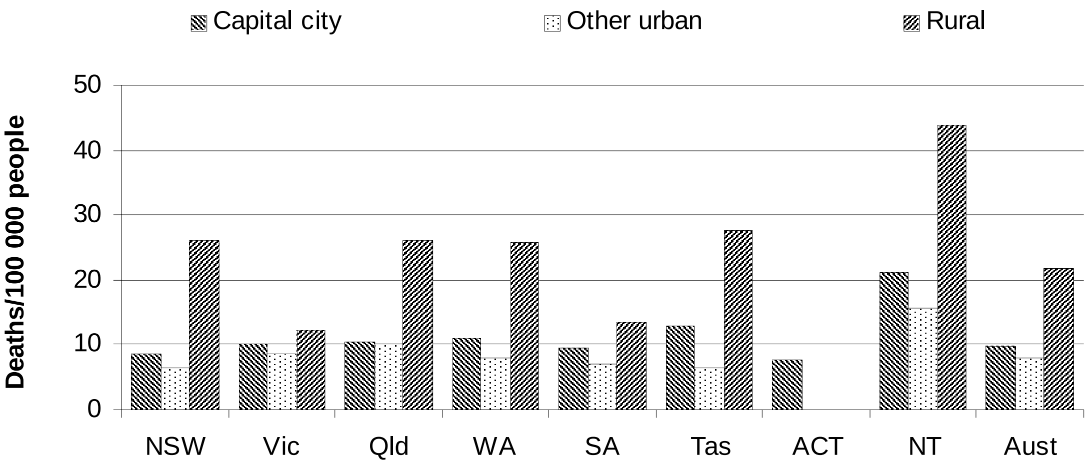
Source: ABS (various issues, cat. No. 3303.0); table 11A.51.

In 2002, suicide was the second leading cause of death (after transport accidents) for people aged 15–24 years, accounting for 22.0 per cent of deaths in this age group (ABS 2003). The NT recorded the highest suicide rate per 100 000 people aged 15–24 years (39.5 deaths) (table 11A.52). Suicide was the leading cause of death for 25–34 year olds in 2002, with 24.9 per cent of deaths in this age group resulting from suicide (ABS 2003).

The suicide rate in 2002 was generally higher in rural areas. Nationally, there were 9.8 suicides per 100 000 people in capital cities and 8.1 suicides per 100 000 people in other urban areas, compared with 21.8 suicides per 100 000 people in rural areas (figure 11.32).

The Indigenous suicide rate is presented for the period 2000–2002 for four jurisdictions: Queensland, WA, SA and the NT. The rate calculations have not been adjusted for differences in the completeness of identification of Indigenous deaths across jurisdictions. The suicide rate for Indigenous people for the period 2000–2002 in the jurisdictions for which data are presented in table 11A.54 is considerably higher than the rate for the total population in 2002.

Figure 11.32 **Suicide rate, by area, 2002**[a, b, c, d]



[a] ‘Other urban’ comprises centres with more than 20 000 population. ‘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 rate for rural was zero. The ACT did not have any ‘other urban’ areas.

Source: ABS (unpublished); table 11A.53.

Care needs to be taken when interpreting these data because data for Indigenous people are incomplete and data for some jurisdictions are not published. Estimating the Indigenous population is difficult given the low number of suicides among Indigenous people and the varying propensity of people across jurisdictions and over time to identify as Indigenous. In addition, Indigenous people are not always accurately identified in administrative collections (such as hospital records, and birth and death registrations) due to definition variations, different data collection methods and failure to record Indigenous status. The ‘Health preface’ discusses the quality of Indigenous mortality and other data.

Quality of life

The Steering Committee has identified ‘quality of life’ as an indicator for development in future reports (box 11.33).

Box 11.33 **Quality of life**

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

11.5 Future directions in performance reporting

Breast cancer

Key challenges for improving reporting of breast cancer include:

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

Expanding the scope of reporting

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

The AIHW is working with BreastScreen Australia on a data linkage project to support the mortality feasibility study. This project could begin to broaden the emphasis of the chapter from breast screening towards overall breast cancer management.

Developing indicators of outcomes

A number of international studies have found evidence linking screening to a reduction in breast cancer mortality — in the United Kingdom, for example, Alexander *et al.* (1999) and Moss *et al.* (1999) — although there is some doubt about breast self-examination (Moss *et al.* 1999). Neither of the two United Kingdom studies noted, however, used economic evaluation tools. At present, there are no Australian studies of this nature.

The Australian Screening Advisory Committee Monitoring and Evaluation Working Group has developed an evaluation plan and monitoring plan that will facilitate reporting of outcomes in future.[9]

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[9] The Australian Screening Advisory Committee advises all Australian governments on specific policy, quality, data management, clinical and administrative issues arising out of the management of the BreastScreen Australia program.

Improving data and the measurement of existing indicators

Work was undertaken this year to identify the comparability of some expenditure items in the calculation of the cost per woman screened across jurisdictions. Further work will be undertaken for the 2006 Report to improve the comparability of these cost data.

BreastScreen Australia's policy on symptomatic women was reviewed in 2000-01. BreastScreen Australia is a population-based mammographic screening program for women without symptoms. Its current policy states that it is preferable for women with symptoms, such as breast lumps or nipple discharge, to be referred by their medical practitioner to a diagnostic service.

The Screening Advisory Committee considered the outcomes of the policy review in July 2001. It agreed that further work is required to implement a flexible policy framework responsive to the needs of women with symptoms who present to BreastScreen Australia services. It also determined that standardised definitions of symptoms are critical for the local monitoring of symptomatic women in the program, and for consistent national monitoring and reporting.

Interval cancer rates have previously been reported by symptom status. Since the 2002 Report, stratification of reporting by symptom status has been discontinued until symptom status can be more accurately defined.

Victoria has developed a set of clinical performance indicators for breast cancer management as part of a comprehensive approach to quality improvement through performance monitoring and reporting. BreastCare Victoria (Department of Human Services) commissioned the project, which a BreastScreen Victoria Inc. team is undertaking. A collaborative approach has been adopted in the development and field testing of the indicators, to maximise key stakeholder participation in, and ownership of, the project. Involvement of consumers is also a key feature of the method.

BreastScreen Victoria Inc. conducted a comprehensive review of the national and international literature in this area, and the recommended performance indicators are based on a combination of internationally accepted best practice and consensus among stakeholders. Nine rate-based indicators measure aspects of patient care across the continuum, and three 'critical events' are recommended for review by a breast service on a case-by-case basis. The indicators are supported by a data dictionary and framework for reporting. Further work will be undertaken to undertake a phased implementation and model, and to evaluate these indicators as a quality improvement tool at the service level. Details on the recommended set of indicators are available from the Victorian Department of Human Services or BreastScreen Victoria Inc.

Mental health

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

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

The National Mental Health Working Group Information Strategy Committee is working on specifying and piloting a number of performance indicators that could be reported in future. The *National Mental Health Report 2002* includes additional indicators on consumer and carer participation arrangements (DHA 2002). The Review will investigate including these indicators in the mental health management indicator framework and reporting them in future reports.

Information structures are being developed under the NMHS that will enable improved performance reporting in future. At present, while community-based mental health care is expanding in accordance with the NMHS, performance reporting in this area is limited by the quality of data.

The Australian Council for Safety and Quality in Health Care was formed by the Australian Government with the support of all Australian Health Ministers in 2000 to establish a safety and quality agenda across health care in Australia. The Australian Council for Safety and Quality in Health Care is working with the Australian Health Ministers Advisory Council’s National Mental Health Working Group’s Safety and Quality Partnership Group (which includes other key mental health stakeholders) to develop a Safety Action Plan for the mental health sector. The draft plan draws on the work of the Council and has identified the following priorities for immediate focus:

- suicide and intentional self harm in mental health and related settings
- seclusion and restraint
- adverse medication events

- safe transport of people with mental illness

The *Mental Health Information Development Plan: National Information Priorities and Strategies under the Second Mental Health Plan 1998–2003* was released in September 1999 and includes the introduction of routine consumer outcome measurement in mental health services. To strengthen the focus on consumer outcomes the plan puts forward information development strategies, which include: developing agreed measurement standards; developing national reporting guidelines; establishing a national network of accredited organisations to provide clinician training in the use of outcome measures; encouraging broad adoption by service organisations of outcome measurement as an integral part of service delivery; and agencies' regular reporting of core measures.

In addition, all jurisdictions have undertaken to begin collecting unit record consumer outcomes data, so as to develop the mental health casemix classification system and to collect data on the implementation of standards. Delays in the adoption of a consistent mental health casemix classification system are a particular constraint on comparable performance reporting, but all states and territories are now collecting outcomes data, and comprehensive coverage is expected in 2005.

Australian, State and Territory governments are also required to agree on performance indicators under the Australian Health Care Agreements. Work by the Australian Health Ministers' Advisory Council National Mental Health Working Group will contribute to performance reporting in the medium to longer term.

All of these initiatives will facilitate improvements in both the performance framework and data used by the Review to report on mental health care.

11.6 Jurisdictions' comments

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

Australian Government comments

> “The Australian Government welcomes this edition of the Report on Government Services and supports the continued commitment to expanding the data being presented on key health priorities.
>
> The Australian Government continues its strong focus on mental health, both in funding major national initiatives such as beyondblue, MindMatters and the Better Outcomes in Mental Health Care Initiative, and through its role in national reporting and strengthening accountability in the delivery of mental health services across Australia. Under the current Australian Health Care Agreements, $331 million is to be provided directly to states and territories to assist them in meeting their reform commitments under the National Mental Health Strategy, with a further $66 million to advance national activities.
>
> The Strengthening Medicare package invests more than $4 billion over five years in Australia’s primary care system. It provides more opportunities for Australians to be bulk billed, introduces an extended and comprehensive Government funded safety net to cover all Australians against high out-of-pocket medical costs for Medicare Benefits Schedule services provided out-of-hospital, substantially increases the supply of doctors and practice nurses and provides more services for people in aged care homes. Strengthening Medicare will be further complemented by the Government’s 100 per cent Medicare and Medicare Round the Clock commitments. Together these commitments will strengthen and protect Medicare.
>
> 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, representing a real increase of 17 per cent over the previous Agreements. This includes funding for Mental Health, Palliative Care and the Pathways Home program. State and Territory governments are responsible for ensuring the provision of public hospital services free of charge to public patients on the basis of clinical need and within clinically appropriate times.
>
> In the 2004-05 Budget, the Australian Government reaffirmed its support to rural health and aged care by providing renewed funding for what is now retitled the Rural Health Strategy. The funding of $830 million over the next four years gives continuing support for programs to provide increased access to doctors and other health professionals in rural areas. The Rural Health Strategy will support a flexible package of health and aged care services and workforce measures.”

New South Wales Government comments

“In 2003-04, NSW Health spent $9.7 billion on the public health system. In particular, the budget provided $2.6 billion for public health services in rural and regional communities.

In November 2003, the Department was restructured to improve its focus on providing strategic direction for the NSW health system. Responsibility for delivering health services was devolved to Area Health Services and other appropriate bodies.

During 2004, the Department developed proposals to improve the way Area Health Services deliver health services. The Minister for Health announced the Planning Better Health reforms on 27 July 2004.

Planning Better Health involves the most significant reshaping of the health system since Area Health Services were established in 1986. The key principle that underpins these reforms is that more of NSW Health’s resources should be spent on direct patient care, and less on administration. They will encourage the building of better clinical networks, enhance academic and teaching links and improve the distribution of the health workforce. The benefits of these reforms for NSW will be reflected in later versions of this Report.

NSW is pleased with the developmental work for new performance indicators, particularly those relating to the quality in public hospital performance undertaken by the Health Working Group. We look forward to having better indicators in this and other health service areas in the near future.

NSW continues not to provide waiting times for elective surgery by urgency category. As raised with the Health Working Group and other groups previously, NSW does not believe that these data are comparable within and across jurisdictions, and this position is supported by most other jurisdictions. Investigations locally and nationally have shown that urgency category is inconsistently applied by clinicians, and therefore not comparable between jurisdictions. This issue was raised with the Australian Health Ministers Advisory Council (AHMAC) in 2001, an alternative, the reporting of the number of days waiting at the 50th and 90th percentiles, was developed by the Australian Institute of Health and Welfare. This was endorsed by jurisdictions at the November National Health Information Management Group 2001 meeting (as referred by AHMAC). Although these new indicators have been included in the report, which NSW is pleased about, the waiting times by urgency category remain.

NSW recommends that unless significant resources are invested into a substantial review of urgency category and a process that results in data being comparable between and within jurisdictions, that reporting waiting times for elective surgery by urgency category be dropped from the Report.”

Victorian Government comments

“The 2005 Report on Government Services continues to provide valuable insights into the performance of key areas of public service provision. A key challenge continues to be the development of the Report so that it better reflects performance and outcomes of changing models of care both within and across traditional service systems. Victoria’s Community Health policy is strengthening community health services to provide an expanded range of ambulatory care services. These services will range from proactive health promotion to delivery of multidisciplinary care for people with chronic and complex conditions. Victoria is also currently developing an Ambulatory Care Framework that seeks to further expand the provision of community-based care/service options and improve the integration of care across traditional organisational and program boundaries.

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

Victoria strongly supports the expansion of the Report to provide a greater focus on the interrelationships between services across the health and aged care systems. This reflects the reality that many consumers will use multiple services and their satisfaction and health outcomes will be impacted by performance dimensions related to continuity of care, timely referral between services, and coordinated management of care and information.

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

Queensland Government comments

“Queensland Health provides a wide range of health services to Queensland’s population of over 3.5 million people. Services include health promotion, disease prevention, acute hospital and non-admitted patient services, rehabilitation, mental health services, community-based care, and aged care. By international standards, Queenslanders enjoy good health and have access to quality care from highly skilled professionals.

The Report on Government Services continues to provide a valuable source of comparison on key publicly provided health services and the increased emphasis on Indigenous health issues in this year’s Report is a welcome addition. However, as in previous Reports, considerable data comparability issues across jurisdictions remain.

Queensland Health continues to deliver one of the most accessible and efficient health care systems with the achievement of the shortest waiting times for elective surgery patients in public hospitals and one of the lowest average costs for services provided in public hospitals in Australia.

However, over the next two decades the health care system in Queensland will confront a complex array of challenges. In particular, Queensland’s growing and ageing population has major policy implications for the delivery and sustainability of health care services.

In response to these challenges and to ensure that Queensland’s health system remains healthy and sustainable, Queensland Health has recently released it’s Strategic Plan 2004-10. The Plan outlines Queensland Health’s mission to promote a healthier Queensland. To achieve this mission Queensland Health will focus activities on key strategic intents including: an increased emphasis on prevention and health promotion; improving partnerships with all levels of government, the community and other health providers; providing the highest quality acute services, integrated with community-based services; optimising staffing levels, training and support; and ensuring that funding is used to maximum advantage.

Further to these strategic intents, the government will undertake a range of initiatives including increases in elective surgery to further reduce waiting lists and additional resources to reduce pressure on emergency departments. In addition there will be increased investments in preventative programs and acute treatments for kidney disease, cancer, stroke, and heart disease, together with investments in dental care, home and community services, and improved mental health services.”

Western Australian Government comments

“ The increased focus on primary and community care in this report is greatly appreciated by Western Australia as it coincides with the State’s continuing efforts to increase awareness of health promotion and illness prevention both in the community and among service providers. Work to better measure service quality and safety including the workshop that involved quality and safety interest groups were welcome initiatives in an environment where significant resources are devoted to producing numerous statistics of varying degrees of reliability and consistency. These efforts will be certain to enhance the Report’s credibility and increase its utility among its audience.

In Western Australia, the year 2004 has seen a number of strategies put in place to facilitate more efficient and effective service provision. For instance, in the metropolitan area, an Emergency Demand Management Strategy was initiated to assist in dealing with the call on emergency services particularly during the winter months. The program included opening additional beds and working in collaboration with general practitioners to offer alternatives to services provided in hospital Emergency Departments in order to ease the demand for these services particularly after hours.

A series of waiting list management strategies were funded in 2004 specifically to address the lists of extended wait patients. The strategies included programs aimed at patients waiting longer than 500 days for surgical treatment, patients who had waited longer than 14 months for dental treatment and a general blitz on elective surgery waiting lists. These initiatives have resulted in a significant reduction in the number of long wait cases.

Population Health programs continued to receive particular attention during the year. As an example, a special Whooping Cough Vaccination Program was implemented in the fourth school term of 2004 to vaccinate all high school students in the State to reinforce immunity among this cohort of the population.

Early in the year, the system wide review of services under the auspice of a Government Health Reform Committee, produced its report. The Government endorsed 85 of the 86 recommendations in the report which provides a blueprint for taking the public health system forward into the next 10 to 15 years. An action plan and implementation strategy were prepared. The Health Reform Implementation Taskforce commenced the process of reform initiatives implementation in the second half of 2004. ”

South Australian Government comments

“The Generational Health Review was a comprehensive review of South Australia’s health system including its interface with the private and non-government sectors. The SA Government’s initial response to this review identifies three key areas; building better governance, building better services and building better system support. These First Steps Forward will provide immediate action to two thirds of the reviews recommendations.

On 1 July 2004 the SA Department of Human Services was split into the Department of Health and the Department of Families and Communities, a move which will give greater strength and focus to the priorities of implementing the First Steps Forward initiatives. The Department of Health continues to provide a quality health service for the South Australian community. The Department maintains its efforts to ensure that appropriate health care is provided to all who need it.

Metropolitan Adelaide has been divided into two health regions, the Central/Northern Adelaide Health Service and the Southern Adelaide Health Service, with each region overseen by a new Board responsible for coordinating all the health services within the region. In addition, a third Board was created to oversee the newly combined operations of the Women’s and Children’s Hospital and Child and Youth Health. The new Boards will be instrumental in creating a system which will allow funding, resourcing and service-delivery decisions to be made in a coordinated way, based more on the total health needs of local communities instead of individual health institutions operating in isolation from each other.

South Australia’s Strategic Plan was launched by the SA Government in March 2004. The Plan is about improving the wellbeing of South Australians, which means improved prosperity and economic growth and better access to important services such as health and education. The six key objectives of the plan are; growing prosperity, improving wellbeing, attaining sustainability, fostering creativity, building communities and expanding opportunity. The whole-of-state Plan includes a number of quantifiable indicators to measure and track the state's economic, social and environmental health; and specifies targets for improvement, including health related targets.

A strategy for Chronic Disease: Prevention and Management Opportunities for SA was released in January 2004 in response to the GHR recommendation to reorientate the current health system from acute to primary health care, with an emphasis on prevention and early intervention, and a focus on the consumer rather than on institutions. The strategy recommends reinforcing the role of integrated care planning, the role of self-management, and the role of primary prevention and early intervention. The SA Government has approved a renewed primary health care policy to underpin health system reform in SA, in particular to strengthen primary health care. The policy draws on the substantial evidence of the contribution primary health care can make to improve health outcomes.”

Tasmanian Government comments

“ All Australian governments face challenges in providing health services that meet changing needs, including the ageing of the population, the increasing cost of new health technologies, the increasing cost of recruiting and retaining specialist staff, and the need to maintain the highest standards of patient care.

In addition, Australian Institute of Health and Welfare data indicate that, in a number of health care professions, Tasmania is at a disadvantage compared to most other jurisdictions. Tasmania has less than the national per capita average number of dentists, employed medical practitioners (clinicians and non-clinicians), hospital non-specialists, physiotherapists, registered and enrolled nurses, and specialists.

Currently, Tasmania has a heavy reliance on overseas-trained medical staff, particularly in the rural and regional areas of the state, but also in Launceston and Hobart. While this mitigates the problems of recruitment, some overseas-trained health care professionals do not possess full Australian registration. Reliance upon this workforce is an unsure and risky strategy in the long term.

In September 2003, the Tasmanian Minister for Health and Human Services announced the formation of an Expert Advisory Group to examine the operation of Tasmania’s major public and private hospitals. The Expert Advisory Group, chaired by Professor Jeff Richardson, conducted a process of public consultation over an eight month period and produced a report, ‘The Tasmanian Hospital System: Reforms for the 21st Century’, containing 34 major recommendations concerning the future of hospital services in Tasmania. The report warned against an indiscriminate increase in funding and instead urged that Tasmania should start by reforming the system to ensure that the resource benefits are maximised.

In terms of primary health care, the prevention and management of chronic conditions is a priority in Tasmania due to the increasing prevalence of prolonged illnesses, injuries and social problems and their associated costs to the community and health and human service system. Reducing chronic conditions and the risk behaviours that influence them also feature in the Tasmania Together goals and targets. A highlight during 2004 has been the work of a whole-of-government Health and Wellbeing Group, under the auspices of Tasmania Together, a 20-year social and economic plan for the State. This group has overseen the funding and implementation of projects in various settings such as schools, workplaces and local communities focusing on the prevention of chronic conditions.

The Department of Health and Human Services acknowledges the value of the Report on Government Services and uses information from the Report in monitoring its own performance. ”

Australian Capital Territory Government comments

The ACT provides a near complete range of health services to its own residents as well as to many people living in adjoining regions of NSW. While the ACT continues to support the reporting of data across jurisdictions, readers should take care when comparing states and territories.

The small population of the ACT can lead to substantial year on year variations in indicator measures for selected services and target groups. Published data for certain population groups may not provide reliable insights into population health needs or service utilisation. For example, reported separations for Aboriginals and Torres Strait Islanders for the ACT are problematic. In 2002-03, approximately 60 per cent of separations for this group were for maintenance dialysis. Approximately one third of these dialysis episodes were for people living in NSW, and almost all of the remainder were for regular dialysis given to fewer than five persons.

Readers should also note the effect of cross border patients in the ACT when considering reported mortality due to breast cancer. In the Review, these rates are reported by place of registration. The mortality rate for the ACT is distorted by a number of deaths of women from NSW that were reported through the ACT registration service.

Comparison of hospital costs remains a particular concern for the ACT. There is substantial variation across jurisdictions in costing methodology. Cost drivers such as economies of scale also vary substantially across the states and territories.

In 2004, the ACT Government launched its Social Plan. This plan included a number of whole of government projects to address issues such as childhood obesity, health issues among marginalised youth, Aboriginal and Torres Strait Islander people’s health, and mental health problems. The Social Plan places a special emphasis on community consultation, health promotion, and early intervention. The ACT hopes that the Review will pay increasing attention to service interface reporting, which is of particular relevance in responses to health issues affecting disadvantaged groups.

Northern Territory Government comments

The Department of Health and Community Services (DHCS) is responsible for health planning and delivery of community-based and hospital services in the Northern Territory (NT).

The NT faces unique challenges in the delivery of health services. Close to 30 per cent of the NT population are Aboriginal or Torres Strait Islanders (ATSI), a much larger proportion than elsewhere in Australia. About 80 per cent of Aboriginal people live in remote or very remote areas of the NT. Remoteness, along with diseconomies of scale, an environment ranging from desert to tropical and the special needs of a culturally diverse population, require unique ways of providing health and community services in the NT.

There is only one private hospital in the NT. Limited availability of private sector health services such as GPs in rural and remote communities combined with reduced access to bulk billing, increases the demand on the public hospital system. The unavailability of some clinical specialists in the NT leads to significant additional health expenditure. An example is BreastScreenNT that contracts for interstate specialist services contributing to higher unit costs than elsewhere.

While the Report aims to present comparable data across jurisdictions, the differences may not necessarily be due to service delivery variation, but rather data definition and collection issues. One example is the variation across jurisdictions in the classification of nonsurgical same day admissions. Some states classify these patients as ‘admitted’ patients while others as outpatients. This variation distorts a number of indicators. Jurisdictions that apply lower thresholds for treating some patients as admitted patients show a higher per capita separation rate. This is particularly the case in the NT where 30 per cent of all admissions are for renal dialysis.

Aboriginal and Torres Strait Islanders have the greatest health and welfare needs of any Territorians. ATSI people account for more than half of the Department’s budget representing 64 per cent of hospital separations. Comparisons across jurisdictions adjusted for casemix may not take into account Indigenous status therefore these comparisons can be distorted, for example the relative stay index.

The NT supports strategies to improve data definition, collection and reporting particularly in relation to Indigenous, rural/remote and other population groups to ensure continuous improvement of this Report.

11.7 Definitions of key terms and indicators

AR-DRG v4.1 (Australian refined diagnosis related group, version 4.1)	A patient classification system that hospitals use to match their patient services (hospital procedures and diagnoses) with their resource needs. AR-DRG v4.1 is based on the ICD-10-AM classification and replaces the earlier AN-DRG v3.0/3.1.
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 and 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 suffering from a disorder or illness for the first time during a given period (often expressed per 100 000 people).
Separation	The process whereby an admitted patient completes an episode of care.

Breast cancer

Adjuvant therapy	Treatment given after the primary treatment to increase the chances of a cure. Adjuvant therapy may include chemotherapy, radiation therapy or hormone therapy.
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 should include 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 per cent. If a woman is screened more than once during the reference period, then only the first screen is counted.. Catchment area is a geographic region based on service size in relation to the population, accessibility and the location of other services. It is uniquely defined for each service based on postcode or statistical local area.
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	The percentage of 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 provide specialist psychiatric care for people who present with acute episodes of mental illness. These episodes are characterised by recent onset of severe clinical symptoms of mental illness that have potential for prolonged dysfunction or risk to self and/or others. The key characteristic of acute services is that the treatment effort focuses on symptom reduction with a reasonable expectation of substantial improvement. In general, acute psychiatric services provide relatively short term treatment. Acute services may: • 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 psychiatry services.
Affective disorders	A mood disturbance, including mania, hypomania, bipolar affective disorder, depression and dysthymia.

Agoraphobia	Fear of being in public places from which it may be difficult to escape. A compelling desire to avoid the phobic situation is often prominent.
Ambulatory care services	Mental health services dedicated to the assessment, treatment, rehabilitation or care of non-admitted inpatients, but not confined to crisis assessment and treatment services, mobile assessment and treatment services, outpatient clinic services (whether provided from a hospital or community mental health centre), child and adolescent outpatient treatment teams, social and living skills programs (including day programs, day hospitals and living skills centres), and psychogeriatric assessment teams and day programs.
Antidepressant	A drug that alleviates depression, usually by energising the person and thus elevating mood.
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.
Anxiolytics	Tranquillisers; drugs that reduce anxiety.
Available beds	The number of immediately available beds for use by admitted patients if required at 30 June. Beds are immediately available for use if located in a suitable place of care with nursing or other auxiliary staff available within a reasonable period. Includes beds in wards that are temporarily closed due to factors such as renovations or strikes but that would normally be open and, therefore, available for admission of patients. 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.
Bipolar disorder	A mood disorder characterised by a history of manic (or hypomanic) episodes usually alternated with depressive episodes.
Child and adolescent psychiatry 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.
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 illness or psychiatric disability. To be defined as community-based residences, the services must: provide residential care to people with psychiatric illness or disability; be located in a community setting external to the campus of a general hospital or psychiatric institution; employ onsite staff for at least some part of the day; and be government funded.
Co-morbidity	The simultaneous occurrence of two or more disorders such as depressive disorder with anxiety disorder, or depressive disorder with anorexia.
Consumer and carer involvement in decision making	Consumer and carer participation arrangements in public sector mental health service organisations according to the scoring hierarchy (levels 1–4) developed for monitoring State and Territory performance under Medicare Agreements Schedule F1 indicators.

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.
Dysthymia	Constant or constantly recurring chronic depression of mood, (lasting at least two years) that is not sufficiently severe, or whose episodes are not sufficiently prolonged, to qualify as recurrent depressive disorder. The person feels tired and depressed, sleeps badly and feels inadequate, but usually can cope with the basic demands of everyday life.
Forensic psychiatry 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.
General psychiatry services	Services that principally target the general adult population (18–65 years old) but that may provide services to children, adolescents or the aged. Includes, therefore, those services that cannot be described as specialist child and adolescent, geriatric or forensic services. General psychiatry inpatient services include hospital units whose principal function is to provide of some form of specialised service to the general adult population (for example, inpatient psychotherapy) or to focus on specific clinical disorders within the adult population (for example, post-natal depression, anxiety disorders).
Generalised anxiety disorder	Unrealistic or excessive anxiety and worry about two or more life circumstances for six months or more, during which the person has these concerns or more days than not.
Geriatric psychiatry 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. Excludes general psychiatry services that may treat older people as part of a more general service.
Hypomania	A lesser degree of mania characterised by a persistent, mild elevation of mood and increased activity lasting for at least four days. Increased sociability, overfamiliarity and a decreased need for sleep are often present, but not to the extent that they lead to severe disruption.
Inpatient services	Stand-alone psychiatric hospitals or specialist psychiatric units located within general hospitals.
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	Activities designed to improve the mental health functioning of persons through prevention, education and intervention activities and services.

Mental illness prevention	Interventions that occur before the initial onset of a disorder.
Mortality rate from suicide	The percentage of the population who die as a result of suicide.
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 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.
Obsessive–compulsive disorder	*Obsessions*: recurrent, persistent ideas, thoughts, images or impulses that intrude into the person's consciousness against his or her will. The person experiences these as being senseless or repugnant, but cannot ignore or suppress them. *Compulsions*: recurrent, stereotyped behaviours performed according to certain rules. The person often views them as preventing some unlikely event, often involving harm to, or caused by, themselves. The person generally recognises the senselessness of the behaviour, attempts to resist it and does not derive any pleasure from carrying out the activity.
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.
Panic disorder	Panic (anxiety) attacks that occurs suddenly and unpredictably. A panic attack is a discrete episode of intense fear or discomfort.
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 data 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.
Post-traumatic stress disorder	A delayed and/or protracted response to a psychologically distressing event that is outside the range of usual human experience.
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.
Social phobia	A persistent, irrational fear of being the focus of attention, or fear of behaving in a way that would be embarrassing or humiliating.
Specialised mental health services	Services whose the primary function is specifically to provide treatment, rehabilitation or community support targeted towards people affected by a mental disorder or psychiatric disability. This criterion applies regardless of the source of funds. Further, such activities are delivered from a service or facility that is readily identifiable as both specialised and serving a mental health function.
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. *Other medical officers:* medical officers employed or engaged by the organisation who are not registered as psychiatrists within the State or Territory, or as formal trainees within the Royal Australian and New Zealand College of Psychiatrists' Postgraduate Training Program.

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

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

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

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

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

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

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

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

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

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

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

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

Stand-alone hospitals

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

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

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