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# 11 Health management issues

Health management is concerned with the management of diseases, illnesses and injuries using a range of services (promotion, prevention/early detection and intervention) in a variety of settings (for example, public hospitals, community health centres and general practice). This chapter reports on the management of breast cancer and mental health, and represents only some of the activities of Commonwealth, 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, and jurisdictions' comments relating to all the health chapters are summarised in section 11.6. Definitions are listed in section 11.7.

Improvements to reporting of breast cancer detection and management include:

- the reporting of descriptive information on cancer survival rates;
- replacement of the reporting of 'size and grade of screen-detected invasive breast cancers' by the reporting of size only. This is because the previous indicator was not easily interpreted. Further, the size of breast cancers at the time of detection is a better measure of the effectiveness of the screening program because women with smaller sized cancers generally have a better prognosis;
- changing the definition of a 'small invasive cancer' to achieve consistency with the BreastScreen Australia National Accreditation Standards and to enable comparison with international standards;
- reporting a new indicator reflecting the overall breast cancer detection rate; and
- replacing the indicator, 'ratio of benign to malignant diagnostic open biopsies' previously reported with a measure from the National Accreditation Standards relating to the effectiveness of pre-operative diagnosis.

Improvements to reporting of mental health management include:

- modifications to reporting recurrent spending and mental health patient days to improve comparability;
- changes to reporting separations and reporting of the number of beds;

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- modifications to appropriateness indicators to reflect the objectives in the National Mental Health Strategy; and
  - inclusion of an interim indicator reporting progress in the collection of client outcomes data.

### *Supporting tables*

Supporting tables for chapter 11 are provided on the CD-ROM enclosed with the Report. The files are provided in Microsoft Excel 97 format as \Publications\Reports\2003\Attach11A.xls and in Adobe PDF format as \Publications\Reports\2003\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](http://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**

Some fundamental changes have taken place in the Australian health care system in recent years. Policy makers are seeking alternative service delivery settings and a more coordinated approach to managing health problems. The ability of governments to improve particular health outcomes is maximised when health care providers integrate their promotion, prevention, early detection and treatment services. Measuring the management of a health problem involves measuring the performance of service providers, and the management of prevention/early detection and intervention 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, along with diabetes mellitus, cardiovascular health, injury prevention and the control of asthma, arthritis and musculoskeletal conditions. These areas represent a significant proportion of the burden of illness in Australia and their management offers considerable scope for reducing this burden (AIHW 1998a).

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 (box 11.1). Public health programs require the participation of public hospital services, community health services and general

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practice services. (The public hospital and general practice components of the health care system are discussed in chapters 9 and 10 respectively.)

### **Box 11.1 Public and community health**

Public health is defined as 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. All jurisdictions perform public health services or undertake programs to enhance the health of the population. Activities provided and classified as 'public health' are grouped under four headings:

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

Promotion, protection and prevention activities are referred to as 'population public health' activities because they are delivered to populations rather than to individuals. Prevention and provision activities are termed 'public health personal clinical activities'.

This Report focuses on public health activities related to promotion, prevention and provision activities. (Most protection activities are not the responsibility of health care providers and therefore are not included in the analysis.) Public health efforts currently target areas such as communicable diseases (for example HIV/AIDS and tuberculosis), childhood immunisation and the National Health Priority Areas.

Many public health activities are delivered by a range of health care providers — general practitioners (GPs), public hospitals and community health services. GPs and public hospitals provide a range of services in addition to these public health services, whereas community health services concentrate on health promotion, early detection of health problems and the assessment and care of health problems. Community health care services are diverse by nature, incorporating a range of service providers (dietitians, community nurses, psychologists and so on). This multidisciplinary approach makes it difficult to attribute health outcomes to a particular service or provider.

*Source:* Australian Institute of Health and Welfare (AIHW) (1998a); Fry (1994) and NPHP (1997).

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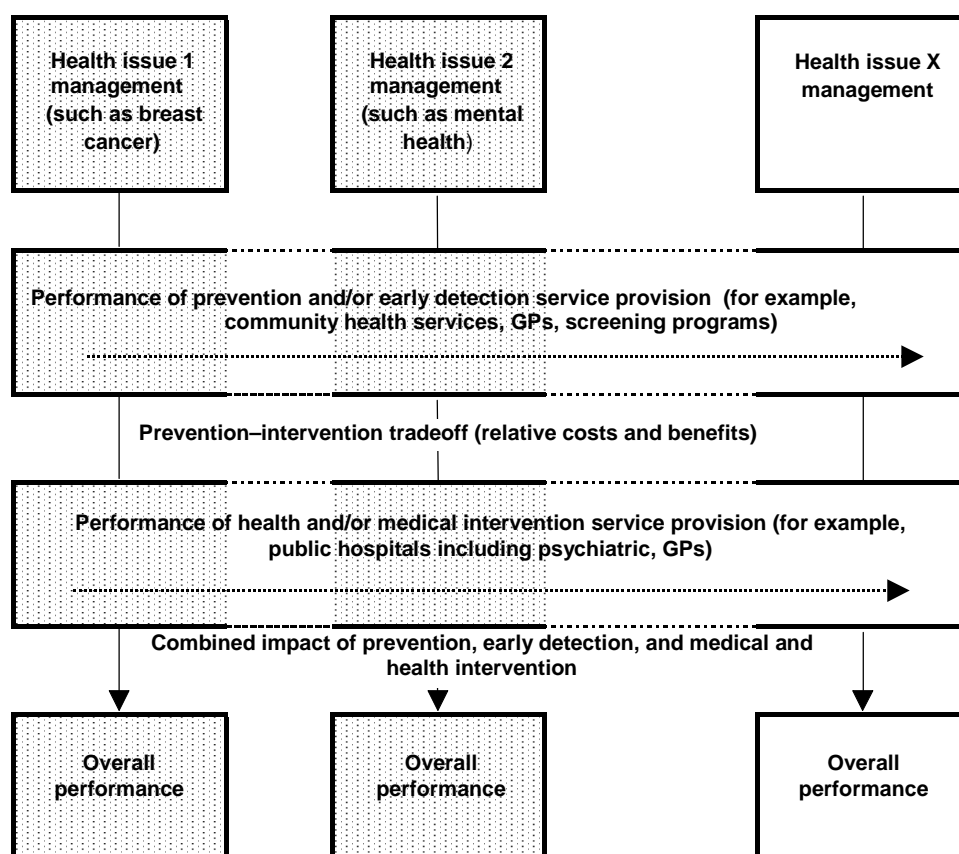
## 11.2 Framework for measuring the performance of health management

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 GPs 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 in this chapter is represented diagrammatically (figure 11.1).

Figure 11.1 Australian health system — measurement diagram

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The appropriate mix of services, including the prevention of illness and injury, medical treatment (prevention versus medical intervention) and the appropriate mix of service delivery mechanisms (hospital-based versus community-based), are measured by focusing on a health management issue (represented by the vertical arrows). As in previous years, the chapter covers breast cancer management and 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.

## 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 11.2).<sup>1</sup> Tumours may expand locally by invading surrounding tissue or may spread via the lymphatic or vascular systems to the rest of the body. If left untreated, most malignant tumours eventually result in the death of the affected person (AIHW 2000b). The focus of this Report is on invasive cancers, although some data are reported on *ductal carcinoma in situ* (non-invasive tumours residing in the ducts of the breast).

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

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**Box 11.2 Some common health terms used in breast cancer 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).

**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:** the ongoing process beginning with initial client contact and including all actions relating to the client. Included are 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 suffering from a disorder or illness for the first time during a given period (often expressed per 100 000 persons).

**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.

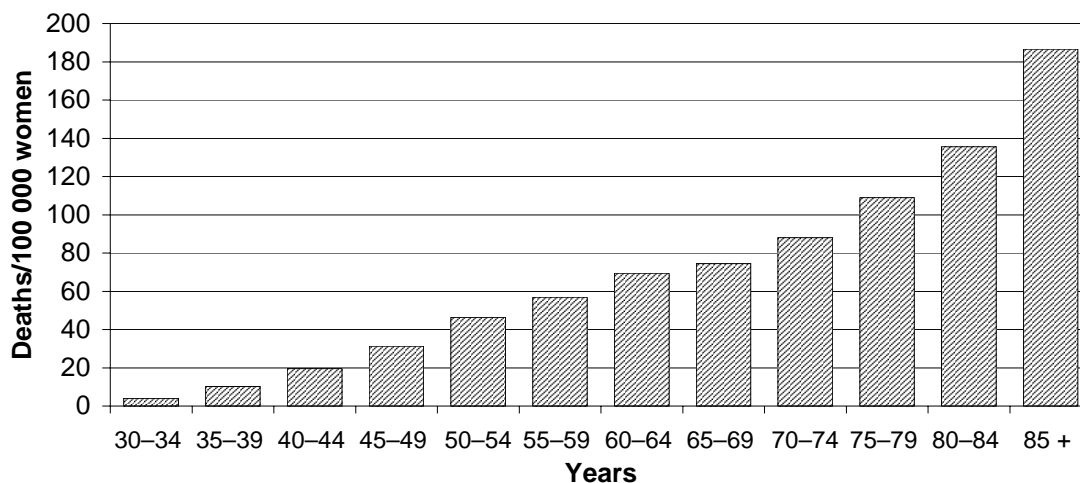
**Screening round (first):** a woman's first visit to a BreastScreen Australia mammography screening service.

**Screening round (subsequent):** a woman's visit to a BreastScreen Australia mammography screening service when she has attended such a service before.

**Total mastectomy:** removal of the breast. This is also known as simple mastectomy.

Breast cancer was responsible for 2505 female deaths in 1999 and 2511 female deaths in 2000, making it the most frequent cause of death from cancer for females (ABS 2000, 2001). The strong relationship between age and the mortality rate from breast cancer is shown for the period 1996–99 in figure 11.2. Whereas women aged 40–44 years have a mortality rate of 19.5 per 100 000 women, women aged 75–79 have a mortality rate of 108.9 per 100 000 women.

Figure 11.2 Age-standardised mortality rates from breast cancer by age group, 1996–99<sup>a</sup>

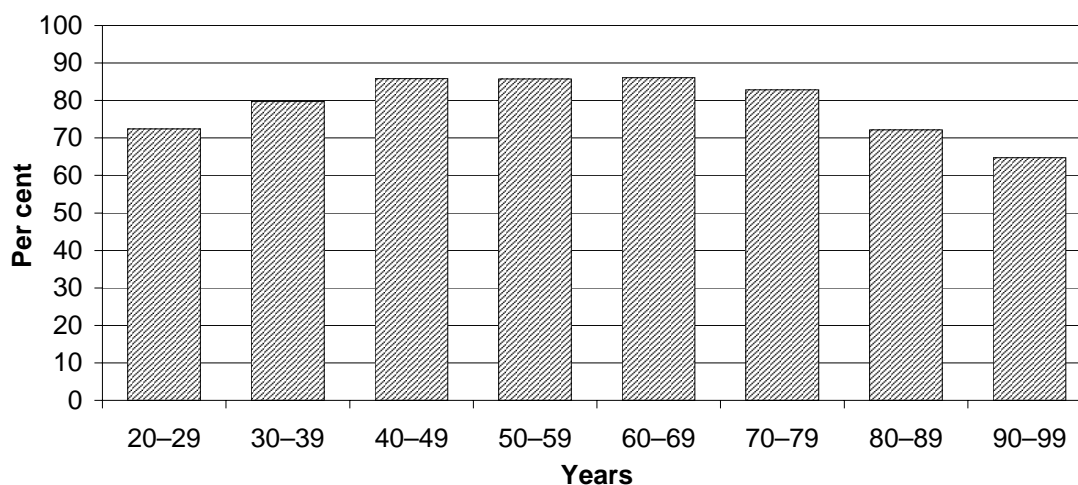


<sup>a</sup> Rates are expressed per 100 000 women and are age-standardised to the Australian population at 30 June 1991.

Source: AIHW (unpublished); table 11A.22.

Relative survival after diagnosis of breast cancer in females is good when compared with other cancers. Over the period 1992–1997, for women of all ages in Australia, relative survival one year after diagnosis was 96.4 per cent, and five years after diagnosis was 84.0 per cent. Relative survival 10 years after diagnosis was 68.3 per cent in the period 1987–1991 (AIHW and Australasian Association of Cancer Registries 2001). The five-year relative survival rate for breast cancer in Australia at diagnosis over the period 1992–97 increases 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 rate in Australia at diagnosis 1992–97<sup>a</sup>**



<sup>a</sup> Five-year relative survival results for the 0–19 age group are not presented as interpretation is made difficult by statistical instability.

Source: AIHW *et al.* (2001); table 11A.5.

### *Incidence and prevalence*

Breast cancer is the most common 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 7997 in 1992 to 10 702 in 1998 (table 11.1). The increase in the number of cases detected reflects both an increase in the underlying rate of breast cancer as well as the detection of cancers that would have previously not been discovered for some years (AIHW 2000b).

Age-standardised incidence rates of breast cancer are presented in figure 11.4. (Age standardisation eliminates differences in population age distributions among jurisdictions to allow valid comparisons of similar age cohorts across jurisdictions.) The Australian incidence rate increased from 69.9 per 100 000 women in 1982 to 101.3 in 1998, the latest year for which data are available for all jurisdictions (table 11A.2). In 1998, the incidence rate for women of all ages was highest in the ACT (113.1 per 100 000 women) and lowest in the NT (76.2 per 100 000 women). Data for the ACT were not available in 1999, but across the other jurisdictions, incidence rates were highest in Queensland (103.6) and lowest in the NT (77.1).

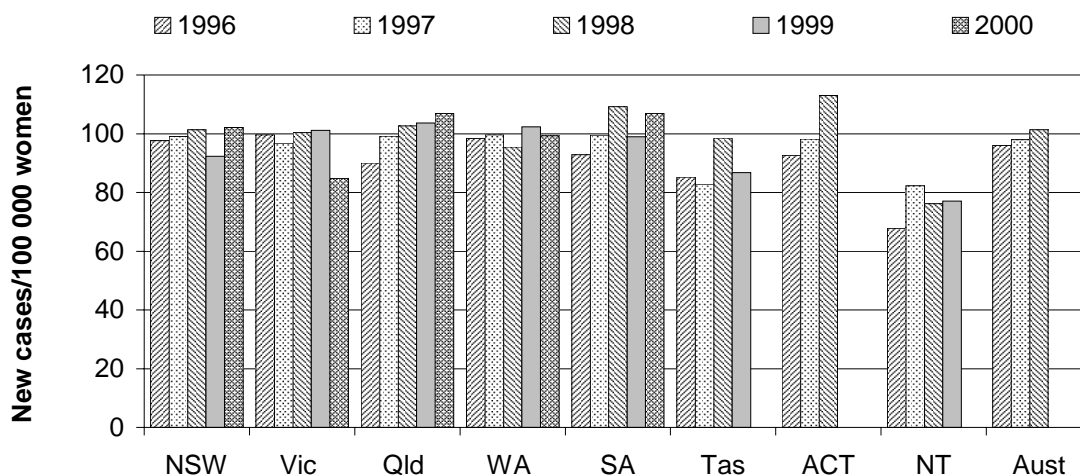
**Table 11.1 New cases of breast cancer diagnosed (number)<sup>a</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
1992	2 683	2 123	1 345	748	763	203	100	32	7 997
1993	3 032	2 256	1 534	773	794	246	114	29	8 778
1994	3 318	2 657	1 587	847	822	287	140	45	9 703
1995	3 490	2 647	1 615	944	911	255	150	32	10 044
1996	3 401	2 612	1 582	878	825	227	134	46	9 705
1997	3 531	2 605	1 787	915	894	231	140	52	10 155
1998	3 703	2 719	1 887	924	983	272	171	43	10 702
1999	3 455	2 779	1 979	1 018	928	244	na	46	na
2000	3 842	2 839	2 100	1 009	996	na	na	na	na

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

Source: AIHW National Cancer Statistics Clearing House (for years 1992 to 1998); Australasian Association of Cancer Registries (unpublished) (for years 1999 and 2000); table 11A.1.

**Figure 11.4 Age-standardised incidence rates of breast cancer, women of all ages<sup>a, b, c</sup>**



<sup>a</sup> Incidence refers to the number of new cases of breast cancer expressed per 100 000 women. <sup>b</sup> Rates are age-standardised to the Australian 1991 population standard. <sup>c</sup> Data for 2000 were not available for Tasmania, the ACT and the NT. Data for 1999 were not available for the ACT. It is not possible to calculate Australian rates for these years. In absolute terms, small jurisdictions tend to have low incidence numbers that can result in large variations in rates from year to year, and for this reason data from 1999 and 2000 for the ACT have not been published.

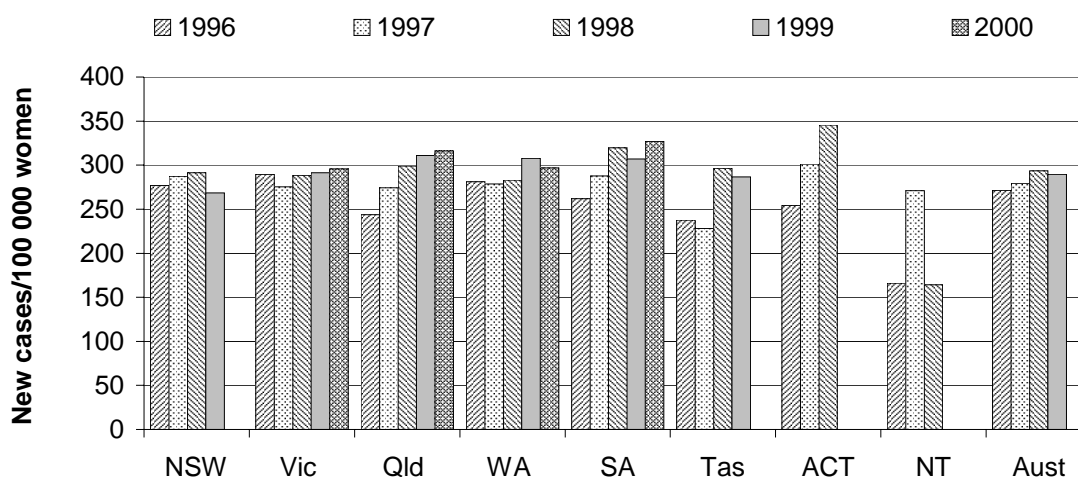
Source: AIHW National Cancer Statistics Clearing House (for years 1996 to 1998); Australasian Association of Cancer Registries (unpublished) (for years 1999 and 2000); table 11A.2.

Age-standardised incidence rates of breast cancer for women aged 50–69 years are shown in figure 11.5. Data for 2000 are not available for NSW, Tasmania, the ACT and the NT, although NSW provided crude rates (table 11A.4). For 2000, for jurisdictions where data are available, incidence rates were highest in SA (327.0 per

100 000 women) and lowest in WA (296.7 per 100 000 women) and Victoria (295.9 per 100 000 women). Data for 1999 are not available for the ACT and the NT. For the other jurisdictions, incidence rates were highest in Queensland (311.2 per 100 000 women) and lowest in NSW (268.6 per 100 000 women).

Incidence rates can vary significantly from year to year particularly for the smaller jurisdictions. In absolute terms, small jurisdictions tend to have low incidence numbers that can result in large variations from year to year. In future reports, incidence data will be presented averaged over a number of years to overcome this problem.

Figure 11.5 **Age-standardised incidence rates of breast cancer, women aged 50–69 years<sup>a, b, c</sup>**



<sup>a</sup> Incidence refers to the number of new cases of breast cancer, expressed per 100 000 women. <sup>b</sup> Rates are age-standardised to the Australian 1991 population standard. <sup>c</sup> Data for 2000 were not available for NSW, Tasmania, the ACT and the NT, although NSW provided crude data for this year. It is not possible to calculate an Australian rate for this year. Data for 1999 were not available for the ACT and the NT. In absolute terms, small jurisdictions tend to have low incidence numbers that can result in large variations in rates from year to year, and for this reason data from 1999 and 2000 for the ACT have not been published.

Source: Australasian Association of Cancer Registries (unpublished); table 11A.4.

### *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 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 [Victoria] 1999).

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The focus of breast cancer control is on the use of screening mammography to enable early detection of breast cancer. There is evidence that population-based screening of women aged 50–69 can reduce deaths from breast cancer. According to the National Breast Cancer Centre (NBCC), if breast cancer is detected early while still localised in the breast, chances of five-year survival are around 90 per cent. The survival rate drops to 18 per cent if the tumour has spread to other parts of the body (NBCC 2002). It is generally argued that cancers detected early may be treated more conservatively and these women generally have a higher likelihood of survival.

A recent 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 has also been suggested that screening may lead to more aggressive treatment that in some cases may be unnecessary (Olsen and Gotzsche 2001). There is also some morbidity 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, however, the risk of such growths posing a future danger are 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 group concluded that there is sufficient evidence of the efficacy of mammography screening for women aged between 50 and 69 years. The reduction in mortality from breast cancer among women who choose to participate in 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 due to differences in coverage of the female population, quality of mammography, quality and appropriateness of treatment, and other factors. Organised screening programs are more effective in reducing death rates from breast cancer than sporadic screening of selected groups of women. The group also concluded that there is insufficient evidence that clinical breast examination or self examination reduces mortality from breast cancer (WHO 2002).

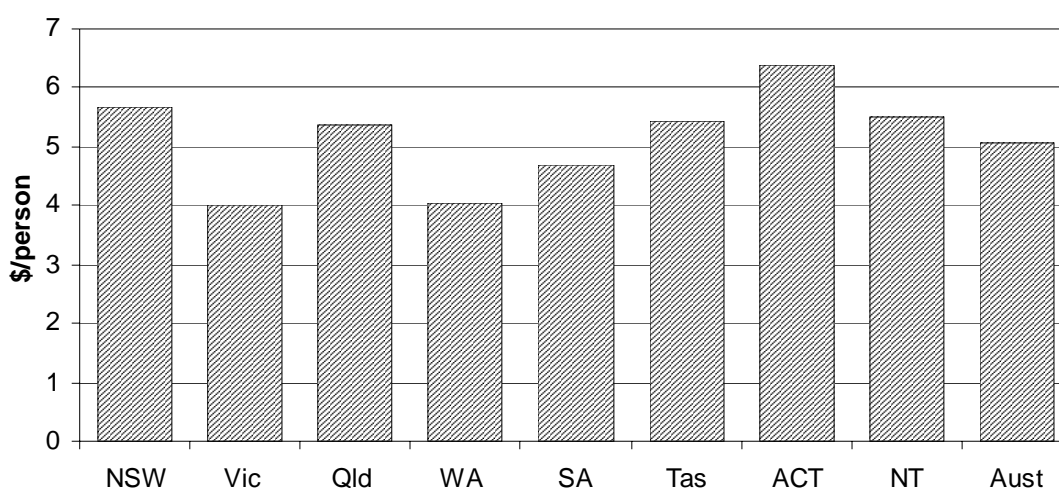
BreastScreen Australia, jointly funded by the Commonwealth, State and Territory governments, undertakes nationwide breast cancer screening. BreastScreen Australia targets women aged 50–69 years for screening once every two years. The program aims to have 70 per cent or more women aged between 50 and 69 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 up to the point of diagnosis and referral for treatment. The program includes health promotion activities, information provision, counselling and data collection across the screening pathway. Each jurisdiction also manages a central BreastScreen Registry for quality assurance, monitoring and evaluation of the program. Some jurisdictions, however, do not include open biopsies in the funded program (table 11A.6).

Estimates of government expenditure on breast cancer screening by jurisdiction are presented in the attachment (table 11A.7) and estimates of expenditure on screening per person in each jurisdiction are presented in figure 11.6. The jurisdictional estimates include Commonwealth, State and Territory government expenditure.

**Figure 11.6 Public health expenditure on breast cancer screening, 1999-2000 financial year<sup>a, b, c, d, e, f, g</sup>**



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

Source: AIHW (2002c); table 11A.7.

Around \$97.2 million was spent by governments on breast cancer screening in 1999-2000 (table 11A.7). Differences across jurisdictions will in part 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 of the difference may also be due to the geography of a State or Territory and to the proportion of women living in rural and remote areas that need to be reached by BreastScreen Australia services. The data need to be viewed with care.

The number of women aged 40 years and over screened by BreastScreen Australia services provides an indication of the size of the BreastScreen Australia program. Around 836 000 women over 40 years of age were screened in 2001 (table 11.2).

**Table 11.2 Number of women screened by BreastScreen Australia<sup>a</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
1999	273 995	171 366	153 931	59 993	64 194	19 382	12 256	<b>na</b>
2000	277 400	177 232	163 722	65 581	65 494	21 314	11 438	4 146
2001	297 372	188 677	171 308	71 431	69 774	20 703	12 144	4 409

<sup>a</sup> First and subsequent screening rounds, women aged 40 years and over. **na** Not available.

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

A number of services assist in the management of breast cancer once diagnosed. Hospitals provide initial treatment for breast cancer and assist in the management of ongoing care and followup. Relevant clinical disciplines include surgery, plastic and reconstructive surgery, pathology, radiation and medical oncology, nursing, diagnostic radiology, 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 followup and palliative care services (DHS [Victoria] 1999).

Inpatient separations in public hospitals for selected breast cancer related diagnosis related groups (DRGs) in 1999-2000 are presented in table 11.3. Chemotherapy and radiotherapy data include procedures unrelated to breast cancer management and therefore overestimate services related to breast cancer. Currently, no disaggregated data are available in relation to these post-acute services.

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.

**Table 11.3 Separations for selected DRGs related to breast cancer, public hospitals (AR-DRG version 4.1) 1999-2000 ('000)**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Major procedures for malignant breast conditions	1.98	1.62	1.13	0.63	0.58	0.12	0.11	0.03	6.19
Minor procedures for malignant breast conditions	0.96	0.61	0.40	0.15	0.28	0.07	0.07	0.01	2.56
Skin, subcutaneous tissue and plastic breast procedures	2.00	1.53	1.47	0.68	0.83	0.13	0.09	0.04	6.77
Other skin, subcutaneous tissue and breast procedures	9.75	7.68	10.04	3.43	4.99	0.82	0.50	0.24	37.44
Malignant breast <sup>b</sup> disorders (age>69 W CC)	0.13	0.13	0.06	0.03	0.06	0.01	–	–	0.40
Malignant breast <sup>a,b</sup> disorders (age<70 W CC) or (age>69 W/O CC)	0.36	0.60	0.27	0.08	0.12	0.07	0.08	0.01	1.59
Malignant breast <sup>a</sup> disorders (age<70 W/O CC)	0.11	0.40	0.11	0.14	0.06	0.04	0.03	–	0.88
Chemotherapy	18.15	40.59	26.69	12.76	12.58	1.73	3.69	0.48	116.66
Radiotherapy	0.23	0.04	0.01	0.02	0.01	–	–	–	0.31
<b>Total separations in public hospitals</b>	<b>1 245.81</b>	<b>1 003.61</b>	<b>707.91</b>	<b>360.39</b>	<b>360.02</b>	<b>75.95</b>	<b>60.66</b>	<b>57.84</b>	<b>3 872.20</b>

<sup>a</sup> W/O CC = 'without complications and comorbidities'. <sup>b</sup> W CC = 'with complications and comorbidities'. – Nil or close to zero.

Source: AIHW (2001b); table 11A.9.

## Policy developments

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. Current BreastScreen Australia 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 National Advisory Committee (NAC) to BreastScreen Australia considered the outcomes of the policy review in July 2001.<sup>2</sup> The Committee has agreed that further work is required to implement a flexible policy framework responsive to the needs of women with symptoms presenting to BreastScreen Australia services. The

<sup>2</sup> The NAC to BreastScreen Australia provides advice to all Australian governments on specific policy, quality, data management and clinical and administrative issues arising out of the management of the BreastScreen Australia Program.

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Committee has 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. Projects will be undertaken in 2002-03 to establish clear and nationally consistent definitions of symptoms, principles of duty of care and protocols to support decision making within a flexible policy framework at the State and Territory level.

Interval cancer rates have previously been reported by symptom status. For the 2002 and 2003 Reports, stratification of reporting by symptom status has been temporarily discontinued until symptom status can be more accurately defined.

Changes to the National Accreditation Standards have affected other indicators. The definition of 'small' for small invasive cancers has changed from 10 millimetres or less to 15 millimetres or less. The small invasive cancer detection rate is an indicator of the ability of the program to identify breast cancers at an early stage. The likelihood of mortality is reduced and breast conserving surgery is greatest when cancers are detected early. The change to the standard reflects that women with cancers of a diameter of 15 millimetres or less have a similarly positive prognosis to those with cancers of diameter 10 millimetres or less.

In addition, there are new National Accreditation Standards that relate to the detection of invasive breast cancers or DCIS without the need for diagnostic open biopsy through invasive surgery. These standards replace the standard measuring the benign to malignant ratio at diagnostic open biopsy due to more recent technical improvements in pre-operative diagnosis at the assessment stage. Accurate diagnoses are increasingly determined through less invasive core biopsies during the assessment of breast abnormalities and without the need for hospitalisation for more invasive diagnostic open biopsies. The change also reflects international standards and will allow for comparison of the effectiveness of breast cancer screening in Australia with that of other comparable programs overseas.

### **Framework of performance indicators**

The indicators developed to report on the performance of breast cancer detection and management are based on the shared government objective for managing the disease (box 11.3).

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**Box 11.3 Objective for breast cancer detection and management**

The objective for breast cancer detection and management is 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.

The performance indicator framework shows which data are comparable in the 2003 Report (figure 11.7). For data that are not considered strictly comparable, the text includes relevant caveats and supporting commentary. Chapter 1 discusses data comparability from a Report-wide perspective (see section 1.6).

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. The performance indicators presented relate to early detection, intervention and overall performance. A similar approach is adopted for Emergency management (chapter 8).

It should be noted that there are still insufficient data available on areas other than early detection through BreastScreen Australia. As a result, this chapter does not yet fully provide a balance of information on all aspects of breast cancer management.

### **Key performance indicator results**

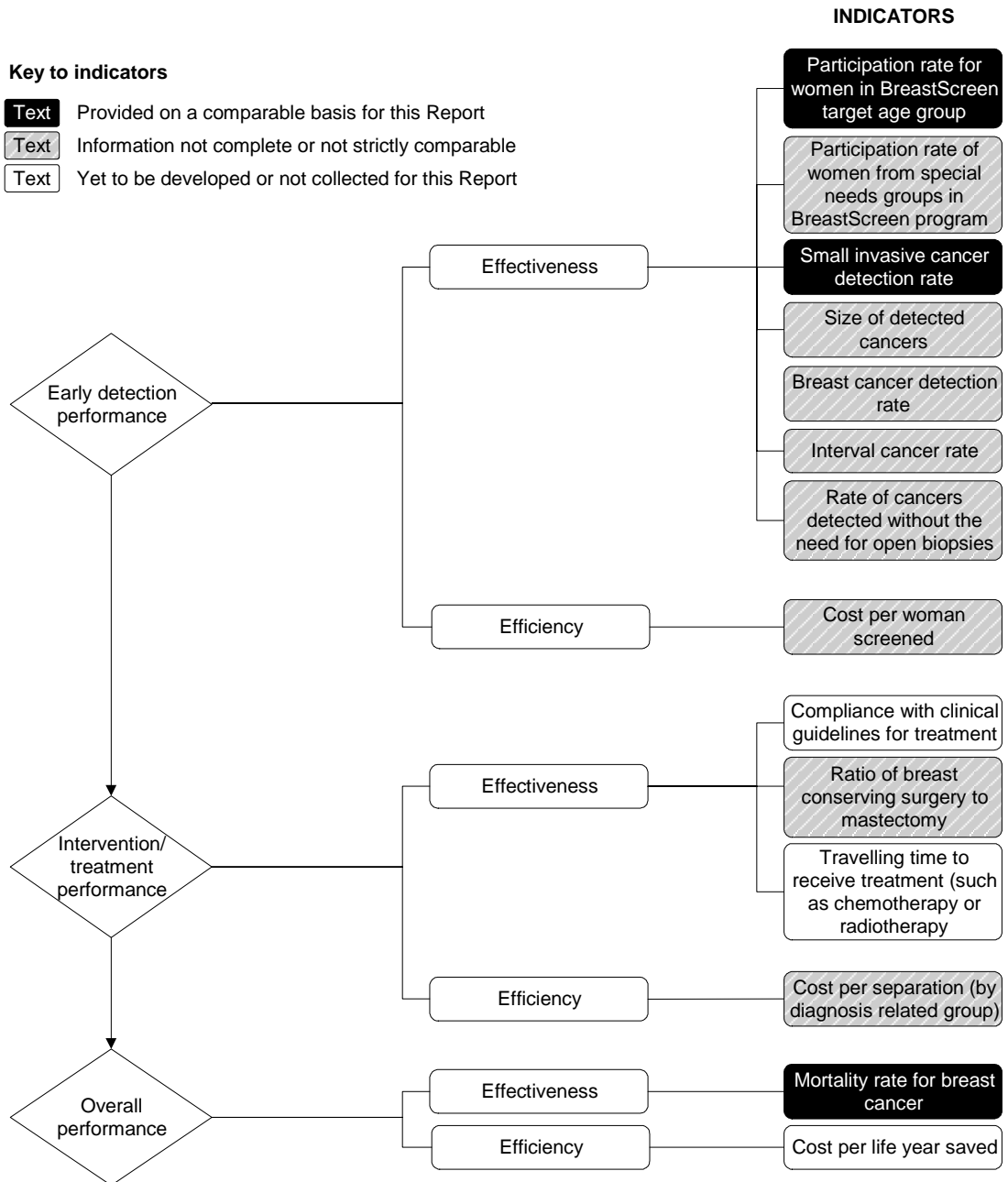
As mentioned, with significant amounts of data relating to breast cancer screening available, this is the focus of reporting. Data relating to the management and treatment of breast cancer are less readily available and it is a priority of the Review to extend reporting in this area in future.

#### *Early detection*

##### *Participation rate of women in the target age group*

The participation of women in the target age group in breast cancer screening is an indicator of the accessibility of the breast cancer screening programs. An objective of BreastScreen Australia is to achieve, after five years, a 70 per cent participation rate in the BreastScreen Australia Program by women in the target group (50–69 years) and access to the Program for women aged 40–49 years and 70–79 years (BreastScreen Australia 2002).

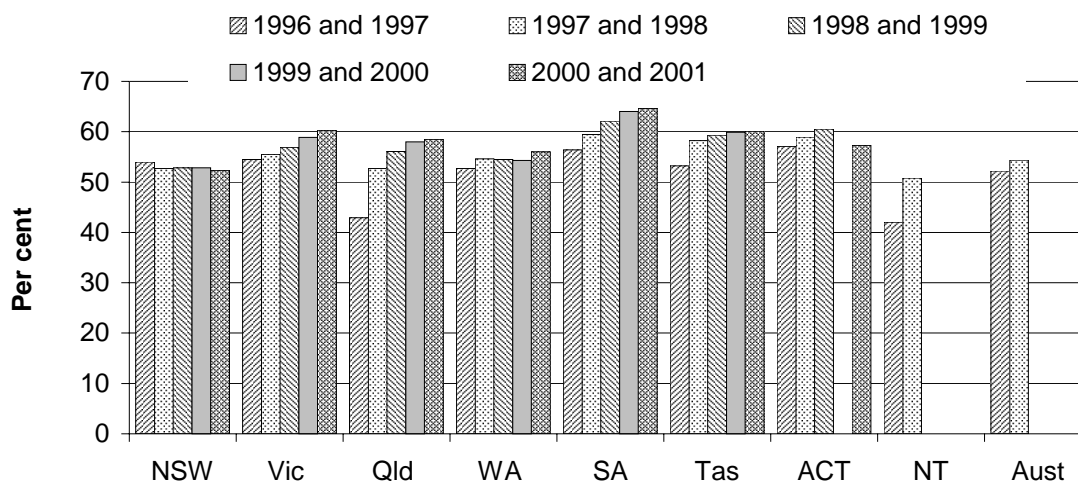
Figure 11.7 Performance indicators for breast cancer detection and management



Data for 2000-01 were not available for the NT. In the 24-month period 2000–2001, the participation rate for women aged 50–69 was highest in SA (64.6 per cent) and lowest in NSW (52.3 per cent) (figure 11.8). It should be noted that data for 1996–97, 1997–98 and 1998–99 were sourced from the Australian Institute of Health and Welfare (AIHW) and more recent data were sourced from State and Territory governments. There may be differences in method between the two sources which cause a break in the time series. Further, crude rates are presented because age-

standardised rates are not available for a number of jurisdictions for women aged 50–69 years.

Figure 11.8 Participation rates of women aged 50–69 years in BreastScreen Australia screening programs (24-month period)<sup>a, b, c, d</sup>



<sup>a</sup> The participation rate is the number of individual women resident in the catchment area of the jurisdiction screened during the 24-month period, divided by the number of women resident in the catchment area using ABS estimated resident populations (ERP). This value will represent the estimated population at the midpoint of the reference period. It will be an average of the two ERPs for the two calendar years (by adding both years and then dividing by two). Where service boundaries cross State localised areas, calculation of resident women is made on a proportional basis. 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 (SLA). <sup>b</sup> Crude rates. <sup>c</sup> 2000–01 data were not available for the NT. 1999–2000 data for women aged 50–69 were not available for the ACT and the NT. 1998–99 data were not available for the NT. It is not possible to calculate Australian rates for these years. <sup>d</sup> Data for 1996–97, 1997–98 and 1998–99 are sourced from the AIHW and data for 1999–2000 and 2000–01 are sourced from jurisdiction governments. There may be differences in method between the two sources which cause a break in the time series.

Source: State and Territory governments (unpublished); AIHW (1998a and 2000b); table 11A.10.

### *Participation rates of women from selected community groups in BreastScreen Australia programs*

The participation rate of women from selected groups in the community (that is, Indigenous women, women from non-English speaking backgrounds (NESB), and women living in rural and remote areas) in breast cancer screening is another indicator of the effectiveness (in terms of access and equity) of the breast cancer screening program. Data for this indicator are presented in table 11.4. Crude rates are reported because age-standardised rates are not available for a number of jurisdictions for women aged 50–69 years. Differences across jurisdictions in the

collection of Indigenous, NESB and rural and remote status make comparisons difficult. Care needs to be taken when comparing data across jurisdictions.

In most jurisdictions, participation rates for Indigenous women aged 50–69 years are lower than for all females in that age group, however this may be influenced by problems with identification of Indigenous status. Participation rates of women in nonmetropolitan areas are generally higher than the rates for women in metropolitan areas. The rates for women from NESB aged 50–69 years are higher than for the total female population aged 50–69 years in Victoria and Queensland and lower in other States for the 24-month periods 1999–2000 and 2000–2001.

**Table 11.4 Participation rates of women aged 50–69 years from selected communities in BreastScreen Australia screening programs (per cent)<sup>a, b</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
1998–1999 (24-month period)								
Indigenous <sup>c</sup>	35.1	na	54.4	42.7	43.0	42.5	52.0	na
NESB <sup>d</sup>	46.7	57.2	65.6	56.0	57.7	33.8	59.0	na
Metropolitan or capital city <sup>e</sup>	52.1	55.8	53.5	51.4	60.3	58.6	61.0	na
Rural and remote or rest of State <sup>f</sup>	57.3	63.7	59.8	63.8	68.2	58.6	na	na
Total 50–69 years	52.8	56.9	56.1	54.5	62.1	59.3	60.5	na
1999–2000 (24-month period)								
Indigenous <sup>c</sup>	29.1	49.0	47.1	35.6	41.9	59.1	48.0	na
NESB <sup>d</sup>	42.4	61.0	65.6	48.0	53.8	28.1	na	na
Metropolitan or capital city <sup>e</sup>	50.7	56.0	55.0	50.7	61.4	60.9	na	na
Rural and remote or rest of State <sup>f</sup>	56.6	66.0	61.0	60.9	64.2	59.9	..	na
Total 50–69 years	52.8	58.9	58.0	54.3	64.0	59.9	na	na
2000–2001 (24-month period)								
Indigenous <sup>c</sup>	32.6	51.0	48.8	35.4	43.6	66.2	36.0	na
NESB <sup>d</sup>	42.4	65.0	67.1	50.6	53.7	28.9	57.1	na
Metropolitan or capital city <sup>e</sup>	51.6	58.0	57.1	54.7	63.5	62.7	57.3	na
Rural and remote or rest of State <sup>f</sup>	59.4	66.0	62.4	58.5	67.7	62.8	..	na
Total 50–69 years	52.3	60.2	58.5	56.0	66.0	60.1	57.3	na

<sup>a</sup> First and subsequent rounds. <sup>b</sup> Crude rates. <sup>c</sup> 'Indigenous' is defined as women who have self identified as being of Aboriginal or Torres Strait Islander descent. <sup>d</sup> 'NESB' is defined as persons who speak a language other than English at home. <sup>e</sup> 'Metropolitan' includes 'capital city' (State and Territory capital city statistical divisions) and 'other metropolitan centre' (one or more statistical subdivisions that have an urban centre with a population of 100 000 or more). <sup>f</sup> 'Rural and remote' includes 'large rural centre' SLAs where most of the population resides in urban centres with a population of 25 000 or more); 'small rural centre' (SLAs in rural zones containing urban centres with populations between 10 000 and 24 999); 'other rural area' (all remaining SLAs in the rural zone); 'remote centre' (SLAs in the remote zone containing populations of 5000 or more) and 'other remote area' (all remaining SLAs in the remote zone). **na** Not available .. Not applicable.

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

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### *Breast cancer detection rate*

The breast cancer detection rate is reported for the first time this year. It is an indicator of the effectiveness of screening services in identifying breast cancers at an early stage. Mammographic screening aims to reduce mortality from breast cancer by detecting cancers while they are still small and localised to the breast. The size of the breast cancer at diagnosis is an independent prognostic indicator of survival, as the smaller the size of the breast cancer diagnosed, the better the chance of effective treatment.

Figure 11.9 reports the number of invasive cancers detected per 10 000 women screened aged 50–69 years by screening round. Detection rates for DCIS per 10 000 women screened are reported in the attachment (table 11A.12). Definitions are presented in box 11.2 and section 11.7. Data are reported by round as it is anticipated that larger cancers will be found in the first round of screening. In subsequent rounds, cancers should be smaller if the program is achieving what it has set out to achieve — that is, early detection of small cancers through regular two-yearly screening.

In the first round in 2001, Tasmania had the highest detection rates (111.0 per 10 000 women aged 50–69 years) while WA had the lowest (41.4 per 10 000 women aged 50–69 years). In the subsequent round in 2001, SA and WA (46.9 per 10 000 women aged 50–69 years and 46.3 per 100 000 aged 50–69 years respectively), had the highest detection rates while Victoria (37.8 per 10 000 women aged 50–69 years) had the lowest. Data for the NT were not available for 2001 (figure 11.9).

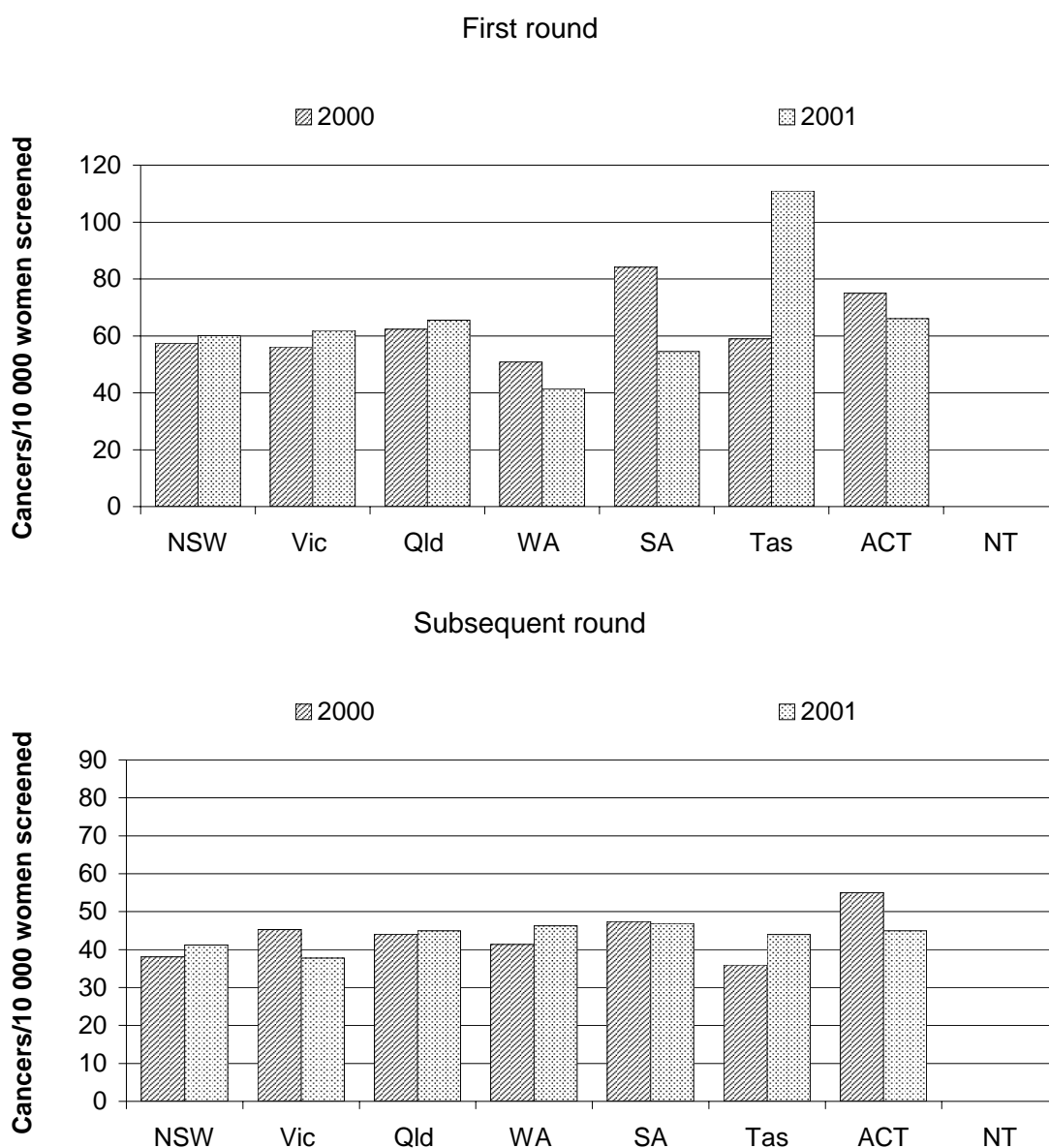
Crude rates are reported because age-standardised rates are not available for a number of jurisdictions for women aged 50–69 years. It should be noted that for the breast cancer detection rate, the reported crude rates differ quite substantially from the age-standardised rates. For example, in the first round in 2001, the ACT had an age-standardised rate of 92.5 per 10 000 women aged 50–69 years, compared to the crude rate of 66.0 per 10 000 women aged 50–69 years. In addition, in the first round in 2001, Queensland had an age-standardised rate of 73.5 per 10 000 women aged 50–69 years, compared to the crude rate of 65.5 per 10 000 women aged 50–69 years (table 11A.12).

The relevant BreastScreen Australia National Accreditation Standards are:

- 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; and
- greater than or equal to seven per 10 000 women aged 50–69 years are diagnosed with DCIS (BreastScreen Australia 2002).

Figure 11.9 **Breast cancer detection rate, invasive cancers, for women aged 50–69 years<sup>a, b</sup>**



<sup>a</sup> Crude rates. <sup>b</sup> NT data not available.

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

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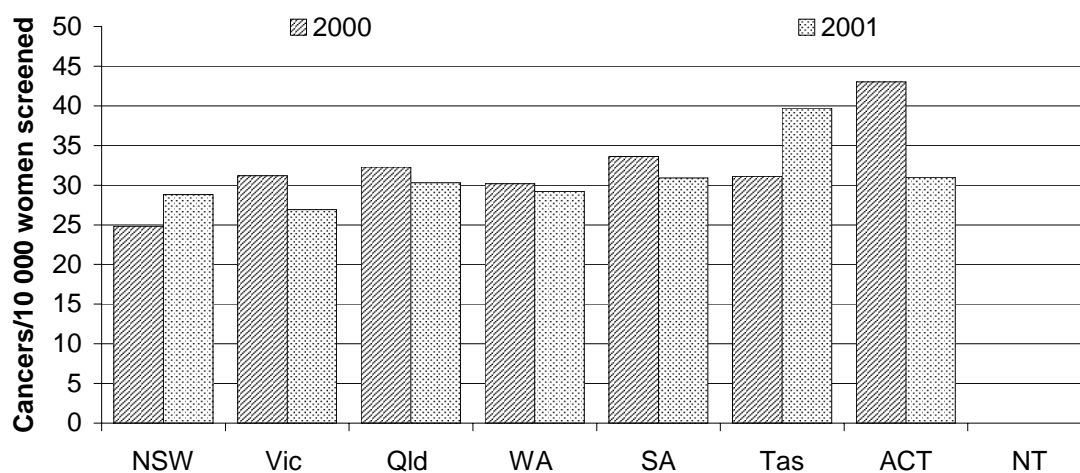
### *Small invasive cancer detection rate*

The small invasive cancer detection rate is an important indicator of the effectiveness of breast cancer screening programs. Small cancers are generally associated with increased survival rates, and reduced morbidity and mortality, with some cost savings to the health care system and to women. Women with small cancers are less likely to require a mastectomy than women with larger tumours (AIHW *et al.* 1998). To ensure consistency within the national accreditation standards, the definition of 'small' in the 'small invasive cancer detection rate' has changed this year from 10 millimetres or less, as reported in previous years, to 15 millimetres or less. The change reflects that women with cancers of a diameter of 15 millimetres or less have a similarly positive prognosis to women with cancers of diameter 10 millimetres or less.

The BreastScreen Australia National Accreditation Standard is that 25 or more 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). The previous national accreditation requirement was that more than eight per 10 000 screened women are diagnosed with an invasive cancer of diameter 10 millimetres or less. Data for the previous standard are reported in the attachment for the period 1996 to 2000 (table 11A.13).

Data for the revised standard are reported for 2000 and 2001 in table 11A.14 and figure 11.10. For women aged 50–69 years screened by BreastScreen Australia in 2000, the small invasive cancer detection rate (per 10 000 women screened) was highest in the ACT (43.0) and lowest in NSW (24.8). In 2001, the highest rate was in Tasmania (39.7) while the lowest was in Victoria (26.9). Data for 2000 and 2001 were not available for the NT. Crude rates are reported because age-standardised rates are not available for a number of jurisdictions for women aged 50–69 years (figure 11.10).

Figure 11.10 **Small diameter cancer detection rate, for women aged 50–69 years, all rounds of screening<sup>a, b, c</sup>**



<sup>a</sup> Crude rates. <sup>b</sup> Small diameter cancers were defined as invasive cancers up to and including 15 millimetres in diameter. <sup>c</sup> Data for the NT are not available.

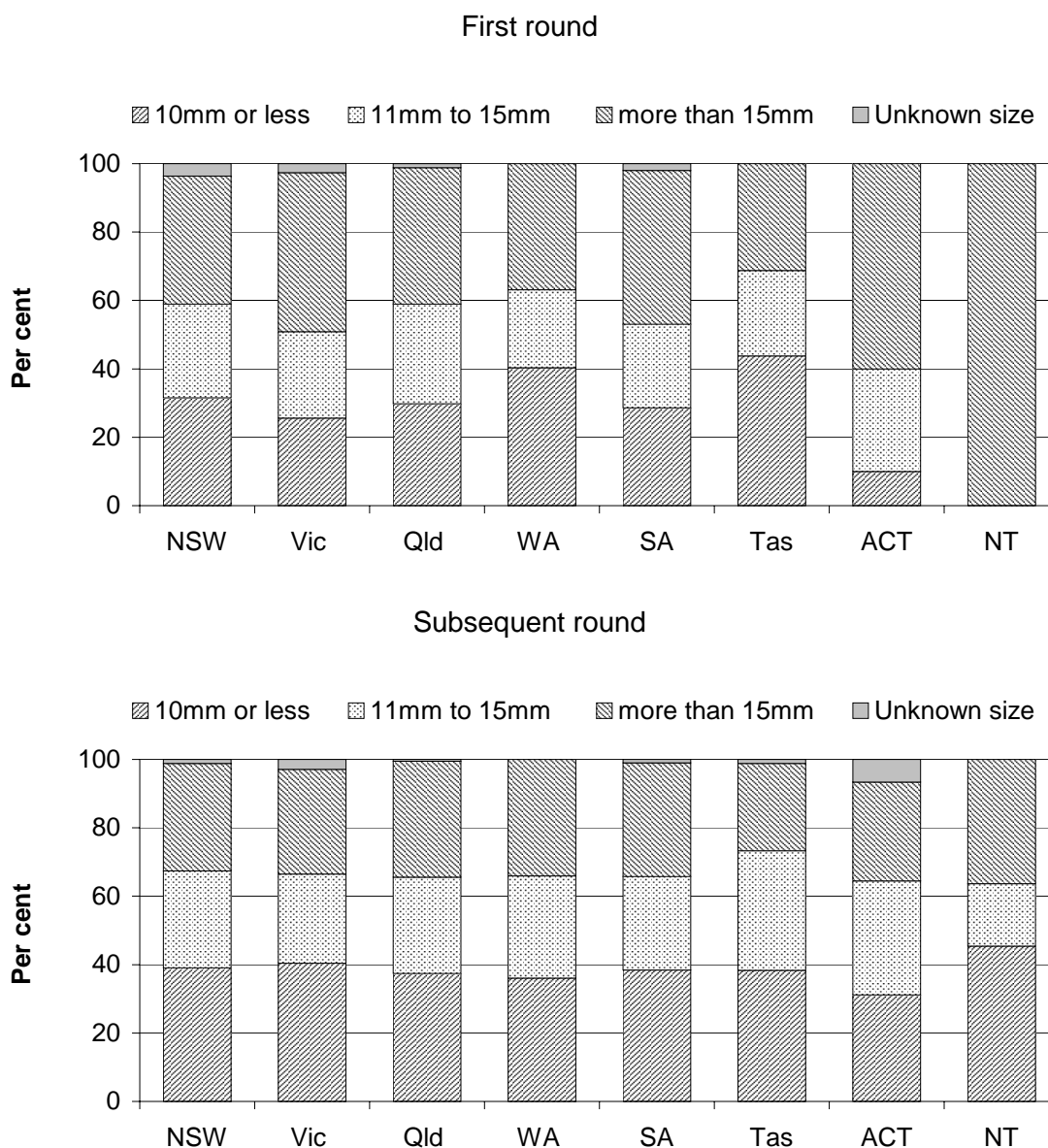
Source: State and Territory governments (unpublished); table 11A.14.

### *Size of detected cancers*

The reporting of size and grade of detected invasive breast cancers has been replaced by the reporting of size by screening round (first and subsequent). Reporting by grade has been discontinued because the previous indicator was not easily interpreted.

Figure 11.11 presents the proportion of cancers by size by screening round for 2001. The source of the data is BreastScreen Australia and covers only clients of BreastScreen Australia. The data for 2001 reflect that larger cancers tend to be discovered in the first round, and smaller cancers detected in subsequent rounds.

Figure 11.11 **Detected invasive cancers by size as a proportion of total detected invasive cancers, women aged over 40 years, 2001<sup>a, b</sup>**



<sup>a</sup> Non-breast malignancies not counted. <sup>b</sup> The first round figure for the NT is based on one invasive cancer detected.

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

### 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 interval cancer rate provides an indication of both the effectiveness and sensitivity

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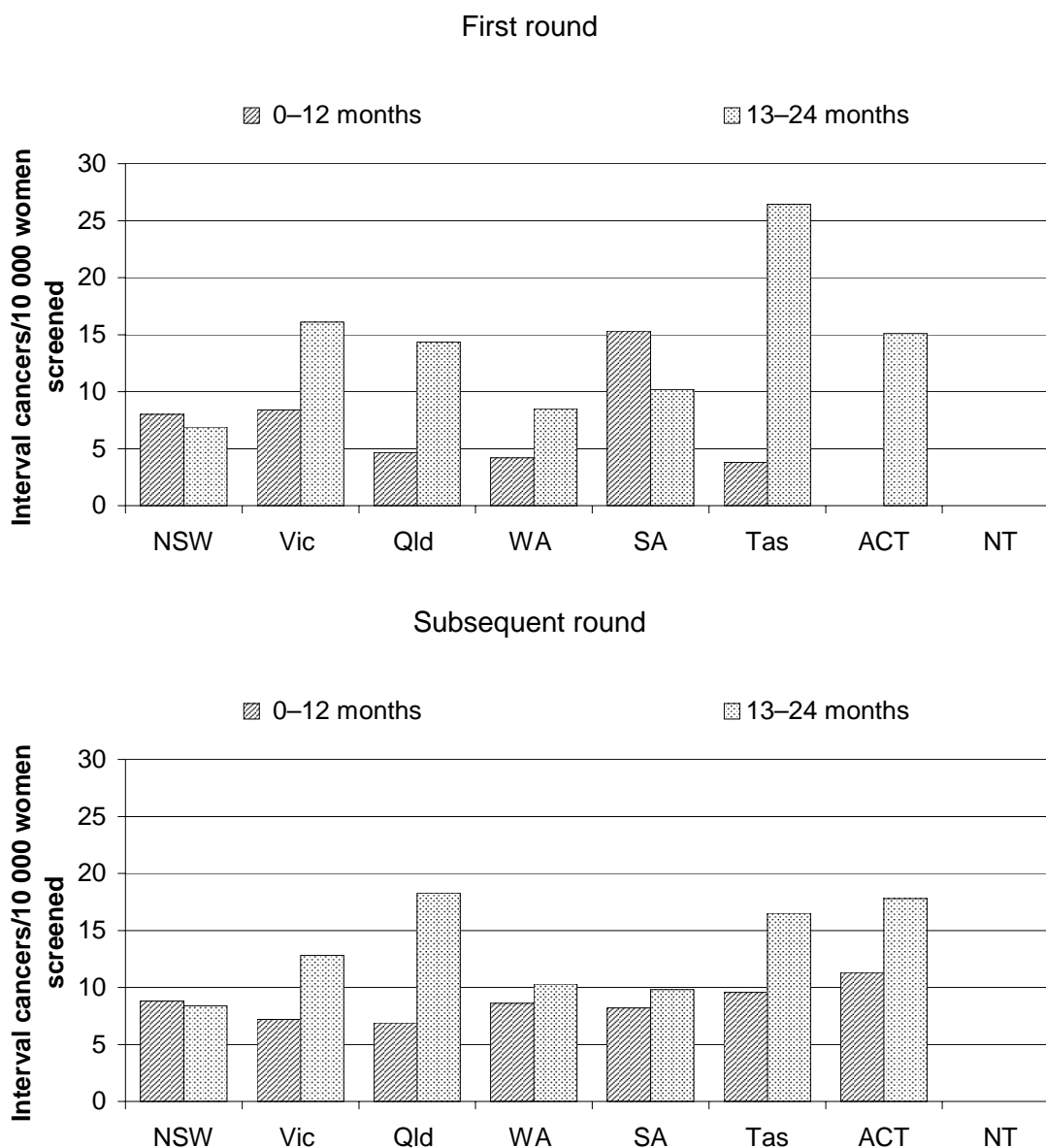
of breast cancer screening. The interval cancer rate should be interpreted in conjunction with the breast cancer detection indicators.

There is a time lag in obtaining data for this indicator due to the detection period falling between the last screening visit in the reference screening year and the next scheduled screening appointment. Following that period, a further lag time 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 1998. As discussed in the policy developments section, data are not stratified by symptom status, and include both symptomatic and asymptomatic women.

Figure 11.12 presents the 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 of the breast cancer screening program. Comparisons across jurisdictions therefore need to be made with care.

In 1998, for women aged 50–69 years in the first round of screening, the interval cancer rate 0–12 months following screening was highest in SA (15.3 per 10 000 women screened) and lowest in the ACT (zero per 10 000 women screened). In the subsequent screening round, the interval cancer rate 0–12 months following screening was highest in the ACT (11.3 per 10 000 women screened) and lowest in Queensland (6.9 per 10 000 women screened). Data for the NT 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 (26.4 per 10 000 women screened) and lowest in NSW (6.9 per 10 000 women screened). In the subsequent screening round, the interval cancer rate 13–24 months following screening was highest in Queensland (18.3 per 10 000 women screened) and lowest in NSW (8.4 per 10 000 women screened).

Figure 11.12 Interval cancer rate, asymptomatic and symptomatic, women aged 50–69 years, 1998<sup>a, b, c, d</sup>



<sup>a</sup> Rates are expressed as the number of interval cancers per 10 000 women screened. <sup>b</sup> The numbers used to measure this indicator are small, resulting in large variations from year to year. It is reasonable to view this indicator over time rather than from one year to the next. <sup>c</sup> Rate for the first screening round for the ACT was zero. <sup>d</sup> Data for the NT were not available.

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

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### *Rate of cancers detected without the need for open biopsies*

This is a new indicator, replacing the indicator ‘ratio of benign to malignant diagnostic open biopsies’. The change reflects technical improvements in pre-operative diagnosis. Accurate diagnoses are increasingly determined through less invasive biopsies during assessment of breast abnormalities and without the need for hospitalisation for more invasive diagnostic open biopsies (surgery). Data for the old indicator — the ratio of benign to malignant diagnostic open biopsies — are reported for the calendar years 1996 to 2000 in table 11A.17.

The new indicator reflects the proportion of women who were diagnosed with breast cancer without the need for a diagnostic open biopsy in relation to their screening visit during the reference year. The number of diagnoses without the need for a diagnostic open biopsy is divided by all breast cancers detected (invasive and DCIS). It is the measure of the effectiveness of the screening programs in diagnosing breast cancer without the need for a diagnostic open biopsy.

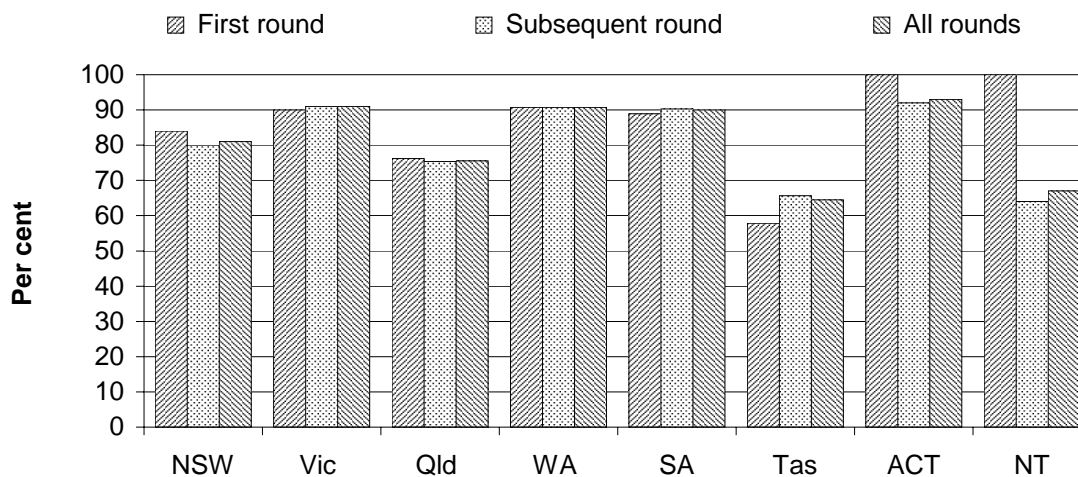
The BreastScreen Australia National Accreditation Standards state that 75 per cent or more of invasive cancers or DCIS should be diagnosed without the need for a diagnostic open biopsy. As the emphasis of breast cancer screening is on detecting small cancers, a high rate of cancers detected without the need for open biopsies indicates effectiveness in detecting malignancies while minimising the need for invasive procedures.<sup>3</sup>

In 2001, the rate of cancers detected without the need for open biopsies for women attending their first screening round was highest in the ACT and the NT (100 per cent in both jurisdictions) and lowest in Tasmania (58 per cent). In the subsequent round, the rate was highest in the ACT (92 per cent), Victoria and WA (91 per cent) and SA (90 per cent), and lowest in the NT (64 per cent) (figure 11.13).

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

**Figure 11.13 Rate of cancers detected without the need for open biopsies, all women, 2001**



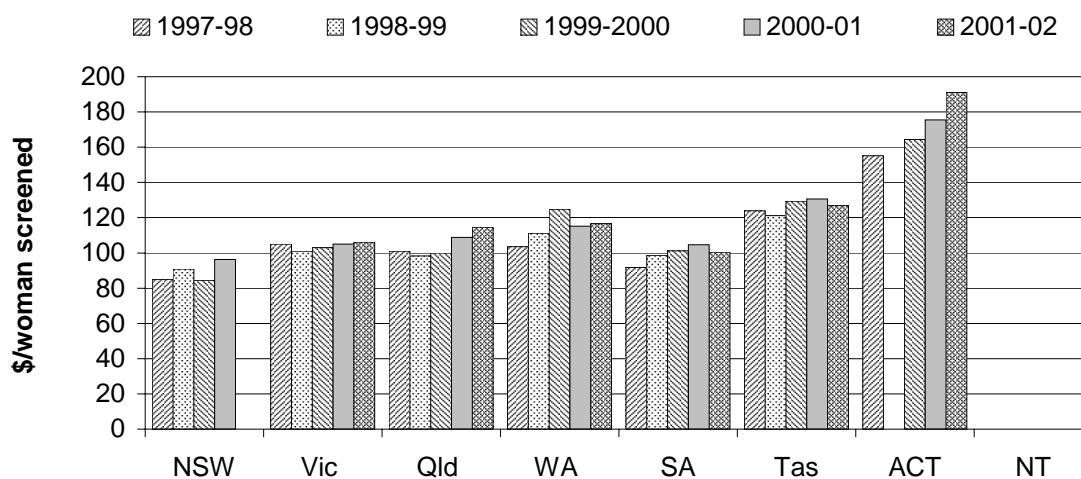
Source: State and Territory governments; table 11A.18.

### *Cost per woman screened*

The cost per woman screened is an efficiency indicator for the breast cancer screening program. It measures the total cost per woman of providing services, including screening, assessment and program management.

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 inclusion of subsidies). There may also be differences across jurisdictions in the scope of activities being costed. Estimates of costs in each jurisdiction are presented in figure 11.14. NSW and the NT data were not available for the financial year 2001-02.

Figure 11.14 **Cost per woman screened, BreastScreen Australia services (financial year)<sup>a, b, c, d</sup>**



<sup>a</sup> Data for NSW do not include subsidies. <sup>b</sup> Data for Queensland includes depreciation and user cost of capital for 2000-01 and 2001-02 Both are excluded for 1997-98, 1998-99 and 1999-2000. <sup>c</sup> Data for SA calculated on accrual, not cash basis. <sup>d</sup> Data for the NT not available. Data for NSW not available for 2001-02.  
 Source: State and Territory governments; table 11A.19.

### *Intervention/treatment*

#### *Ratio of conserving surgery to mastectomy*

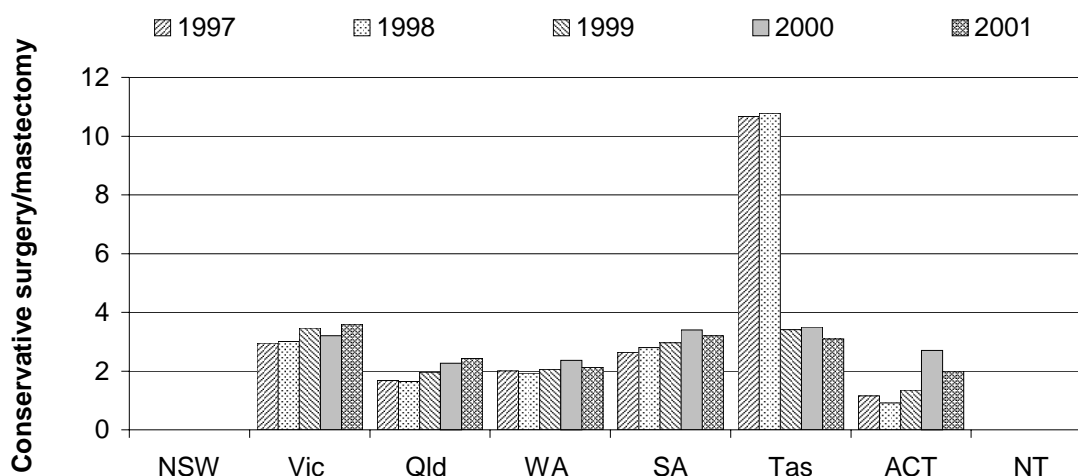
Breast conserving surgery removes the breast cancer but not the breast itself. Types of breast conserving surgery include lumpectomy (removal of the lump), quadrantectomy (removal of one quarter of the breast), and segmental mastectomy (removal of the cancer as well as some of the breast tissue around the tumour and the lining over the chest muscles below the tumour). Mastectomy involves removal of the breast. These terms are also defined in section 11.7 and box 11.2.

A high ratio of conserving surgery to mastectomy may reflect the early detection of breast cancer, as breast conserving surgery is more likely to be able to be carried out when cancers are detected at an early stage. Other factors, however, such as the judgment of surgeons as to the best treatment for the patient, can also affect the type of surgery undertaken.

Data for this indicator are currently derived from BreastScreen Australia and represent only a portion of the total possible treatment information available. Further, because BreastScreen Australia aims to diagnose small cancers that can be treated more effectively and with reduced morbidity for women, the data do not

necessarily provide a good indication of general clinical practice relating to breast cancer. Based on BreastScreen Australia data in 2001 the ratio was highest in Victoria (3.6:1) and lowest in the ACT (2.0:1) (figure 11.15). Data for NSW and the NT were not available.

Figure 11.15 **Ratio of conserving surgery to mastectomy<sup>a</sup>**



<sup>a</sup> Data for NSW and the NT were not available.

Source: State and Territory governments; table 11A.20.

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

The average cost per DRG is used as an indicator of efficiency. It describes the cost of care for admitted patients in public hospitals with selected breast-cancer related conditions. Not all intervention strategies are reported and some of those reported cover treatment of a range of conditions, not all of which are related to breast cancer (for example, chemotherapy).

Table 11.5 provides a summary of costs for selected breast cancer DRGs. The average cost of major procedures for malignant breast conditions across Australia was \$4653 in the 2000-01 financial year. Minor procedures for malignant breast conditions cost on average \$2696 in Australia. Table 11A.21 also summarises the average length of stay in public hospitals associated with each DRG. It needs to be noted that the data are derived from a sample of hospitals in each jurisdiction that is not necessarily representative and that in some cases comprises larger, rather than smaller, hospitals.

**Table 11.5 Average cost per DRG, selected breast cancer DRGs, public hospitals, population estimated 2000-01 (dollars per DRG)<sup>a, b</sup>**

DRGs	NSW <sup>c</sup>	Vic	Qld	WA	SA	Tas	ACT	NT <sup>d</sup>	Aust
J06A Major procedures for malignant breast conditions	4 851	5 395	4 138	4 273	3 582	4 565	3 086	na	4 653
J07A Minor procedures for malignant breast conditions	3 400	2 352	2 364	1 955	1 927	2 367	1 338	na	2 696
J62A Malignant breast disorders age>69 W CC <sup>b</sup>	4 462	3 725	6 183	5 007	5 093	7 158	3 765	na	4 434
J62B Malignant breast disorders (age<70 W CC) or (age>69 W/O CC) <sup>d</sup>	3 582	2 046	3 259	3 887	2 805	3 400	2 651	na	2 777
J62C Malignant breast disorders age<70 W/O CC <sup>b</sup>	1 461	789	893	831	655	2 324	1 036	na	953

<sup>a</sup> Samples are not necessarily representative of all hospitals in each jurisdiction, therefore, a population estimation process is undertaken to create estimated data which are representative of the total population.

<sup>b</sup> W CC='with complications and comorbidities'. W/O CC='without complications and comorbidities'

<sup>c</sup> Approximately 60 per cent of the separations in NSW are from tertiary referral hospitals, which have higher infrastructure and operational costs. <sup>d</sup> NT data were not included in Round 5 (2000-2001) of the National Hospital Cost Data Collection.

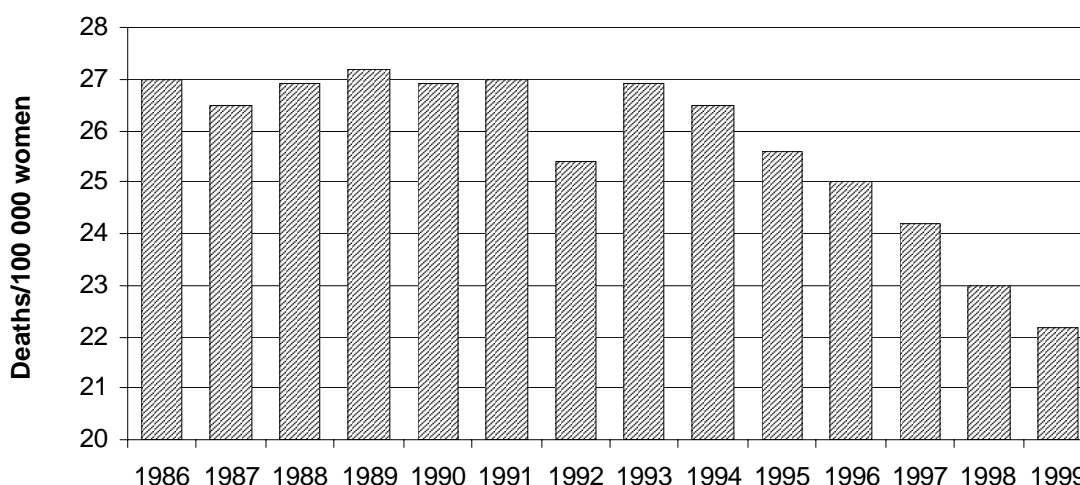
Source: Commonwealth Department of Health and Aged Care, National Hospital Cost Data Collection, Round 5; table 11A.21.

### Overall performance

#### Mortality

Mortality rates indicate the effectiveness of both early detection and treatment services for breast cancer. Age-standardised mortality rates are the most appropriate measure for looking at changes in mortality rates. The age-standardised mortality rate has declined from a peak of 27.2 per 100 000 women in 1989 to 22.2 in 1999. The decline in mortality from breast cancer appears to have been strong and consistent from 1993 onwards (figure 11.16).

Figure 11.16 Age-standardised mortality rate from breast cancer, all ages<sup>a, b</sup>

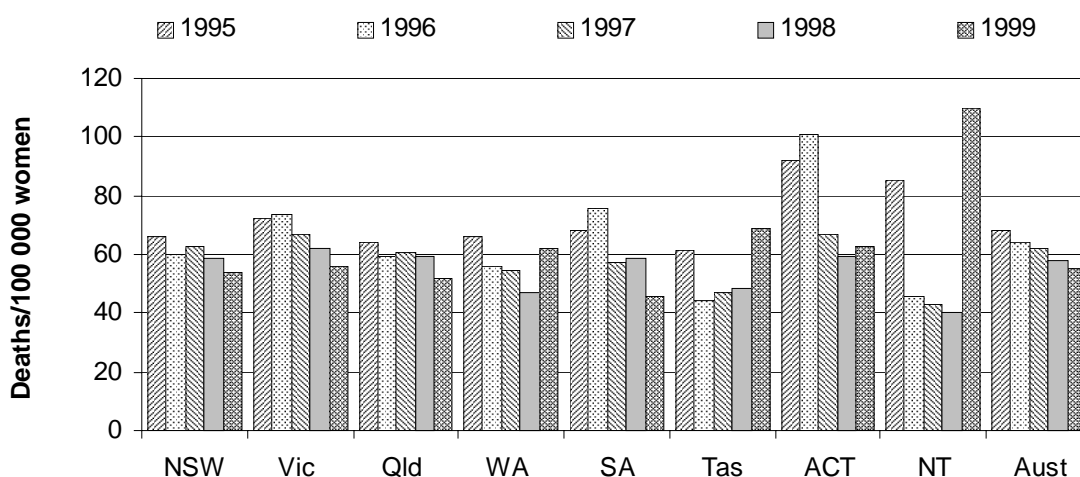


<sup>a</sup> Age-standardised to the Australian population at 30 June 1991. <sup>b</sup> Data for 1986 to 1998 are sourced from AIHW (2000b). 1999 is sourced from AIHW (unpublished).

Source: AIHW (2000b) and AIHW unpublished; table 11A.23.

The age-standardised mortality rate from breast cancer for Australian women aged 50–69 years between 1995 and 1999 was highest on average in the ACT and lowest on average in Tasmania (figure 11.17).

Figure 11.17 Age-standardised mortality rate from breast cancer, women aged 50–69 years<sup>a</sup>



<sup>a</sup> Age-standardised rates.

Source: AIHW (unpublished); table 11A.23.

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## 11.4 Mental health

### Profile

Mental health relates to an individual's ability to negotiate the daily challenges and social interactions of life without experiencing undue emotional or behavioural incapacity (DHAC *et al.* 1999). Problems and disorders that interfere with this ability and diminish quality of life and productivity cover 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 *et al.* 1999). Each of these disorders is unique in terms of its incidence across the lifespan, causal factors and treatments.

Mental disorders are a major cause of chronic disability. In 1996, mental disorders accounted for 1 per cent of years of life lost as a result of mortality, but were the leading cause of years of healthy life lost as a result of disability (nearly 30 per cent of the non-fatal burden of disease) (Mathers *et al.* 1999). Most of this burden has been attributed to affective disorders (35 per cent of the calculated burden), anxiety disorders (24 per cent) and substance use disorders (20 per cent).

### Prevalence

There is little information currently available on the prevalence of mental disorders in Australia. Some data are available from the National Survey of Mental Health and Wellbeing initiated by the Commonwealth Department of Health and Family Services in 1995 which comprised:

- a survey of a nationally representative sample of 10 000 adults aged 18 years and over focusing on common mental disorders;
- a survey of mental disorders among children and adolescents aged 4–17 years; and
- a study of low prevalence disorders (people living with psychotic illness).

The survey of adults (undertaken in 1997) by the Australian Bureau of Statistics (ABS) suggested that almost one in five people suffered from one or more mental disorders during the 12 months before the survey was conducted (ABS 1998). People in institutions, such as nursing homes and psychiatric hospitals, and other accommodation arrangements, such as supported accommodation and boarding houses, were not included in the survey. The survey did not attempt to cover all

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mental disorders. It focused on the relatively common disorders of anxiety, affective disorders and substance use disorders.<sup>4</sup>

The survey suggested that 10.6 per cent of adults aged 18–64 years, and 4.5 per cent of adults aged over 65 years suffered from anxiety disorders. It also suggested that 6.5 per cent of adults aged 18–64 years, and 1.7 per cent of adults aged over 65 years suffered from affective disorders. In terms of substance use disorders, 8.9 per cent of adults aged 18–64 years were sufferers while 1.1 per cent of adults over 65 years were sufferers (ABS 1998). Overall, the survey suggested that almost one in five people aged 18 years and over suffered from one or more mental disorders during the 12 months before the survey was conducted. Of the disorders that were covered, people were most likely to report anxiety disorders (54.6 per cent of those reporting symptoms of a mental disorder), followed by substance use disorders (43.7 per cent), and affective disorders (32.7 per cent) (table 11A.24).

The child and adolescent component of the National Survey of Mental Health and Wellbeing involved 4500 children aged 4–17 years in randomly selected households. The Survey was undertaken by the University of Adelaide in consultation with the National Collaborating Centres for the Survey of Mental Health of Young People. Data were collected between February and April 1998. Prevalence data from the survey were based on information derived from parents and from adolescents aged 13–17 years. The survey found that:

- 14.1 per cent of those aged 4–17 years had mental health problems; and
- Depressive disorders, conduct disorders and attention deficit/hyperactivity disorders were identified in 14.2 per cent of those aged 6–17 years. Importantly, there was substantial comorbidity between these disorders (Sawyer *et al.* 2000).<sup>5</sup>

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<sup>4</sup> An anxiety disorder is represented by feelings of tension, distress or nervousness and includes agoraphobia, social phobia, panic disorder, generalised anxiety disorder, obsessive–compulsive disorder and post traumatic stress disorder. An affective disorder is a mood disturbance that includes mania, hypomania and depression. Substance use disorders are harmful use and or dependence on drugs (including sedatives, stimulants, marijuana and opioids) and/or alcohol. Survey participants in some cases reported more than one disorder, so percentages do not add to 100.

<sup>5</sup> Children with depressive disorders feel sad, lack interest in activities they previously enjoyed, criticise themselves and are pessimistic or hopeless about the future. They may contemplate suicide, or be irritable or aggressive. They may be indecisive and have problems concentrating and sleeping. Children with conduct disorder exhibit antisocial behaviour, such as aggression to people or animals, destruction of property, deceitfulness or theft and serious violations of rules. Attention deficit/hyperactivity disorder is persistent patterns of inattentive behaviour and or hyperactivity–impulsiveness that is more frequent and severe than typically observed in individuals of the same developmental level.

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The University of Western Australia coordinated a epidemiological and clinical study of people aged 18–64 years living with psychotic illness. Psychotic disorders cover a diverse group of illnesses that are characterised by fundamental distortions in thinking, perception or emotional response and include schizophrenia, bipolar affective disorders, and delusional disorders. Participants in the survey were drawn from people who attended mental health services in Queensland and WA.

The study found that, in urban areas, four to seven adults per 1000 are in contact with mental health services during any given month because of symptoms of psychotic disorders. People with schizophrenia and schizoaffective disorders accounted for over 60 per cent of people with disorders covered by the study (Jablensky *et al.* 1999).

### *Services used*

The ABS survey included only self reported service use by adults. It found that of those adults with the mental disorders covered, 38.0 per cent contacted a health service for their problem. GPs were the main mental health service providers, seeing 29.4 per cent of patients with a mental disorder. Less than 1 per cent of people with the types of mental disorder covered by the ABS survey were admitted to hospital (ABS 1998).

People of different ages have different service use characteristics. Of those adults aged 18–34 years with the mental disorders covered by the ABS survey, only 31.8 per cent contacted a health service for their problem. GPs were the main mental health service providers, seeing about 21.2 per cent of patients with a mental disorder in this age group (ABS 1998). Adults aged 35–64 years with a mental disorder were more likely to contact a health service for their problem (44.2 per cent of those with the mental disorders covered by the survey). Again, GPs were the main mental health service providers, seeing about 36.9 per cent of patients with a mental disorder in this age group (ABS 1998). Comparable figures for those aged over 65 were not published in the ABS survey. A substantial proportion of older people with a mental disorder are in nursing home care and were not therefore incorporated in the ABS survey (Commonwealth Department of Health and Family Services 1997).

The child and adolescent survey suggested that:

- of the 14.1 per cent of those aged 14–17 years with a mental health problem, 25 per cent attended one or more services in the six months prior to the survey. Most commonly, the services were provided by family doctors or school-based counselling. Few attended a specialist mental health service;

- 
- of those aged 6–17 years with depression, conduct or attention deficit/hyperactivity disorder, 29 per cent attended at least one service in the six months prior to the survey. The services most frequently used were counselling in schools, family doctors and paediatricians. Around 3 per cent attended a mental health clinic, while only 2 per cent attended a hospital-based department of psychiatry (Sawyer *et al.* 2000).

Over half the participants in the survey of people living with psychotic illness had one or more inpatient admissions in the year prior to interview. On average, the length of an inpatient stay was six weeks, and 10 per cent had been in an inpatient facility for the whole of the year. Outpatient care was used by 60 per cent of survey participants, and 44 per cent used emergency services (mainly attending a general hospital department, or using the services of a psychiatric team). The term ‘outpatient’ is defined in box 11.4. In all, 81 per cent had been in contact with a GP, averaging 12 visits a year (Jablensky *et al.* 1999).

Substance use disorders, which were covered by the ABS survey of adults, are generally not treated by Australian mental health services except where they co-occur with a primary mental disorder. The ABS survey indicated that for all adults, there was low comorbidity of substance use and anxiety disorders (0.6 per cent) and substance use and affective disorders (0.2 per cent) (ABS 1998). For adults aged over 65 years comorbidity of both anxiety disorders and affective disorders with substance abuse was very low as substance use in this age group was negligible (ABS 1998). People with psychotic disorders on the other hand appear to have rates of alcohol abuse or dependence, and drug abuse or dependence, far in excess of the rates found in the general population. Diagnosis of comorbidity of a psychotic disorder and substance abuse was made in every fourth person in the sample of people living with a psychotic illness (Jablensky *et al.* 1999). In most jurisdictions, alcohol and drug problems are treated separately by specialist drug services.

The Report does not cover drug abuse services. This chapter covers specialist mental health care services which mostly treat low prevalence, but severe disorders. GPs are important service providers for people with a mental disorder (chapter 10). The Report does not, however, currently include performance information on services by GPs to those affected by mental illness.

Some common terms used in mental health management are outlined in box 11.4.

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#### Box 11.4 **Some common terms relating to mental health**

**Acute services:** 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 is focused on symptom reduction with a reasonable expectation of substantial improvement. In general, acute psychiatric services provide short term treatment. Acute services may be focused 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 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 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.

**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 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, optimal development and use of mental abilities (cognitive, affective and relational) and the achievement of individual and collective goals consistent with justice.

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

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

(Continued next page)

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Box 11.4 (Continued)

**Mental health promotion:** activities designed to lead to improvement of the mental health functioning of persons through prevention, education and intervention activities and services.

**Non-acute services:** rehabilitation services that have a primary focus on intervention to reduce functional impairments that limit the independence of patients. Rehabilitation services are focused on disability and the promotion of personal recovery. They are also characterised by an expectation of substantial improvement over the short to mid term. Patients treated by rehabilitation services usually have a relatively stable pattern of clinical symptoms. 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 is focused on preventing deterioration and reducing impairment. Improvement is only expected over a long time period.

**Non-government organisations (NGO):** 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 NGO 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 which is readily identifiable as both specialised and serving a mental health function.

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## *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 nursing homes. 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 (General practice) and chapter 12 (Aged care services). Mental health patients often have complex needs and links exist with a number of other services covered in chapter 3 (School education), chapter 7 (Corrective services), chapter 8 (Emergency management) and chapter 13 (Services for people with a disability).

State and Territory governments are the primary sources of funding and service delivery for specialist public mental health services. The Commonwealth directly funds primary care health services for people with mental disorders through the Medicare Benefits Schedule and the Pharmaceutical Benefits Scheme. In addition, the Commonwealth has provided grants to State and Territory governments for mental health service reform under the Australian Health Care Agreements (AHCA). The Commonwealth also funds other services which people with mental disorders can access, such as emergency relief, employment, accommodation, income support, rehabilitation, nursing home care and other disability services. These latter services are not discussed in this chapter, but nursing homes are discussed in chapter 12 and disability services in chapter 13.<sup>6</sup>

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<sup>6</sup> In some jurisdictions, psychiatric disability support services provide specialist mental health care. Victoria advised for example that, while these services receive some Commonwealth funding under the Commonwealth-State Disability Agreement, the Victorian Government provides most of the funding for the Victorian services.

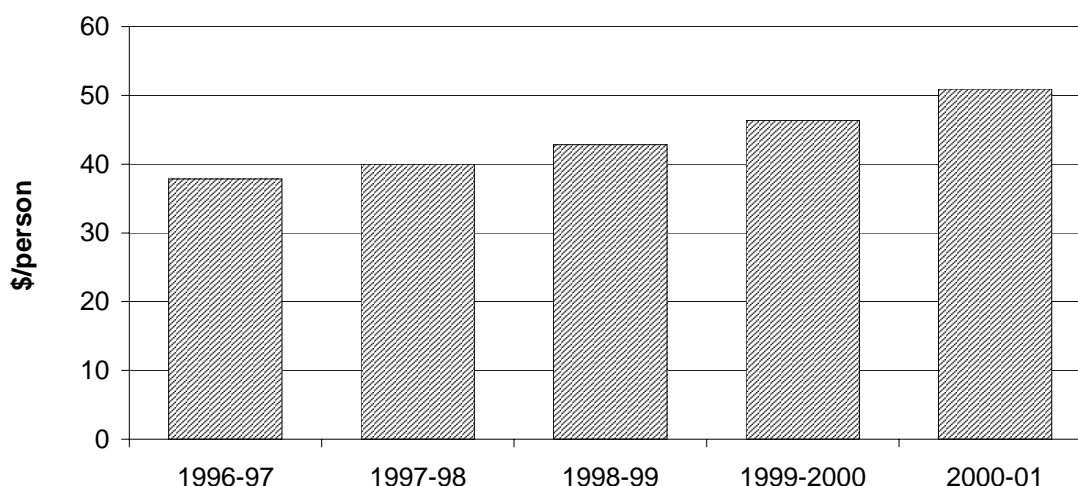
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## Funding

Public real recurrent spending of around \$2.6 billion was allocated to mental health services in 2000-01 (tables 11A.26 and 11A.27).<sup>7</sup> State and Territory governments made the largest contribution (\$1.6 billion or 62.5 per cent) although this includes some Commonwealth funds under the AHCA (table 11A.27). The Commonwealth Government spent \$981.3 million. Real Commonwealth spending per person in 1999-2000 was \$46, increasing to \$51 in 2000-01 (figure 11.18).

Data in the Report relating to public mental health services are drawn from the National Survey of Mental Health Services (NSMHS). It should be noted that NSMHS data for 2000-01 are preliminary, as validation has not yet been completed. There are a number of anomalies yet to be resolved. For example, SA has found some anomalies with its staffing and expenditure data since the NSMHS data were included in this Report (see SA jurisdiction comments). Final validation is ongoing prior to publication in the *National Mental Health Report 2003*. Data for 2000-01 should therefore be treated with care.

Figure 11.18 Commonwealth recurrent spending on mental health per person (1999-2000 dollars) <sup>a, b, c</sup>



<sup>a</sup> 2000-01 data are preliminary only; final validation is ongoing prior to publication in the *National Mental Health Report 2003*. <sup>b</sup> Data for years prior to 2000-01 are as published in the *National Mental Health Report 2002*. Some historical adjustments are likely to be made for *National Mental Health Report 2003*. <sup>c</sup> Constant price expenditure for all years, expressed in 1999-2000 prices, using Implicit Price Deflator for Non-Farm GDP provided in table 11A.74.

Source: Department of Health and Ageing (DHA) (unpublished); table 11A.30.

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<sup>7</sup> The data include revenue from other sources (including patient fees and reimbursement by third party compensation insurers) and 'other Commonwealth funds.'

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The largest component of Commonwealth expenditure on mental health services in 2000-01 was expenditure under the Pharmaceutical Benefits Schedule for psychiatric medication (40.9 per cent). Medicare Benefits Schedule payments for consultant psychiatrists accounted for a further 19.2 per cent of Commonwealth expenditure on mental health services, followed by expenditure for mental health care by GPs (15.3 per cent). The Department of Veterans' Affairs (DVA) (12.5 per cent), the National Mental Health Strategy (NMHS) (7.0 per cent), private hospital insurance premium rebates, research and other time-limited program and project support accounted for the residual (table 11A.26).

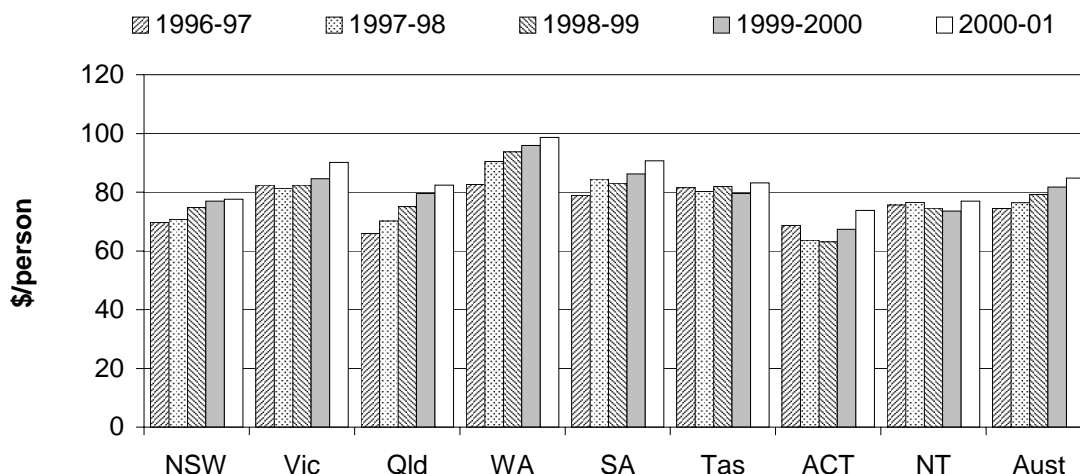
Data for State and Territory government expenditure include Commonwealth funds provided as part of the AHCA for mental health reform. This funding is referred to as expenditure 'at State and Territory discretion.' Real spending per person at State and Territory discretion has increased over time (figure 11.19).

In 2000-01, WA spent the most (\$99 per person) and the ACT spent the least (\$74). Commonwealth funding provided under the NMHS and through the DVA has been excluded from the estimates presented in figure 11.19. State and Territory government expenditure estimates, excluding revenue from other sources and other Commonwealth funds, are presented in the attachment (table 11A.28). They are not presented here as the revenue categories are subject to minimal validation and may be inconsistently treated across jurisdictions. In addition, it is not possible to extract these amounts uniformly across time.

In figure 11.19, expenditure at the discretion of State and Territory governments has been converted to 1999-2000 dollars using State and Territory deflators for government final consumption expenditure on hospital and clinical services. These deflators are reported in table 11A.74. The type of deflator used can affect estimates of expenditure in constant prices. Expenditure data deflated using a national deflator — rather than a State and Territory deflator — are presented in tables 11A.61 and 11A.62. The national deflator is reported in table 11A.75.

The data in figure 11.19 exclude depreciation. Estimates of depreciation are presented in the attachment (table 11A.29).

Figure 11.19 Real recurrent expenditure at the discretion of State and Territory governments (1999-2000 dollars)<sup>a, b, c, d, e</sup>

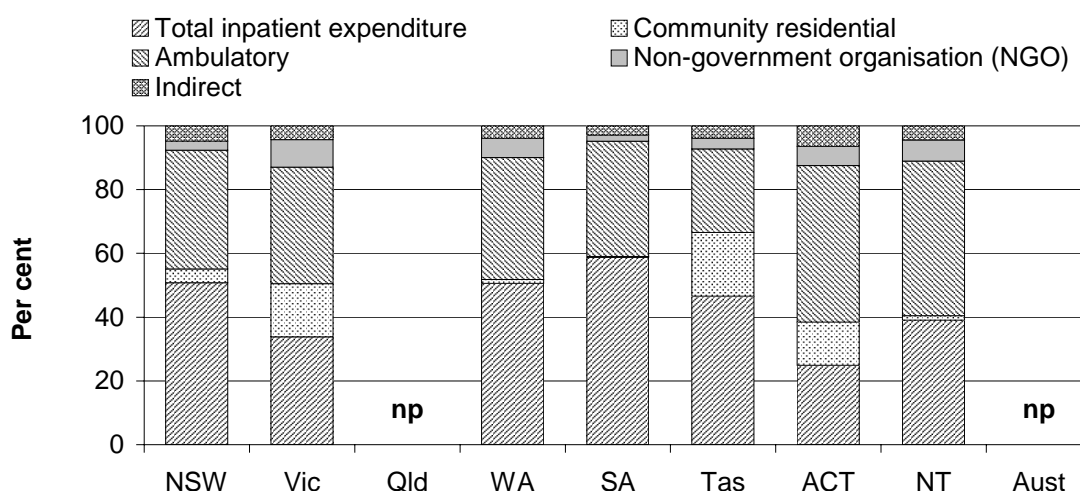


<sup>a</sup> 2000-01 data are preliminary only; final validation is ongoing prior to publication in the *National Mental Health Report 2003*. <sup>b</sup> Constant price expenditure expressed in 1999-2000 prices, using Government Final Consumption Expenditure on Hospital and Clinical Services as deflator. Deflator is reported in table 11A.74. <sup>c</sup> Estimates of State and Territory government spending include revenue from other sources (including patient fees and reimbursement by third party compensation insurers), and 'other Commonwealth funds' but exclude Commonwealth funding provided under the NMHS Funds and through the DVA. <sup>d</sup> Depreciation excluded for all years. Depreciation estimates reported in table 11A.29. <sup>e</sup> Funding is a mix of Commonwealth funds provided under the AHCA as well as funds provided by State and Territory governments.

Source: DHA NSMHS database (unpublished); table 11A.27.

Figure 11.20 shows how Commonwealth, State and Territory government spending was distributed across the range of mental health services in 2000-01. Recurrent expenditure allocated to hospital-based services (including both psychiatric hospitals and psychiatric units in public [non-psychiatric] hospitals) was highest in SA (58.7 per cent) and lowest in the ACT (24.9 per cent). (The ACT does not have a public psychiatric hospital.) Recurrent expenditure allocated to ambulatory services was highest in the ACT (49.1 per cent) and the NT (48.5 per cent) and lowest in Tasmania (26.2 per cent).

Figure 11.20 Recurrent expenditure by service category, 2000-01<sup>a, b, c, d, e, f</sup>



<sup>a</sup> 2000-01 data are preliminary only; final validation is ongoing prior to publication in the *National Mental Health Report 2003*. <sup>b</sup> Includes all spending regardless of source of funds. <sup>c</sup> Depreciation excluded. Depreciation estimates are reported in table 11A.29. <sup>d</sup> Community residential is defined as all staffed community-based units (external to the campus of a general hospital or psychiatric institution) regardless of the number of hours that staff are present. <sup>e</sup> The differential reporting of clinical service providers and NGO artificially segregates the mental health data. As the role of NGOs varies across jurisdictions, the level of NGO resourcing does not accurately reflect the level of community support services available. <sup>f</sup> WA advised that the two community residential facilities in WA are not representative of the development of current state mental health policy and are currently under review. WA has been increasing funding to the NGO sector to provide services to people in their own homes rather than to provide publicly funded community residential services. **np** Not published.

Source: DHA NSMHS database (unpublished); table 11A.31.

### *Size and scope of sector*

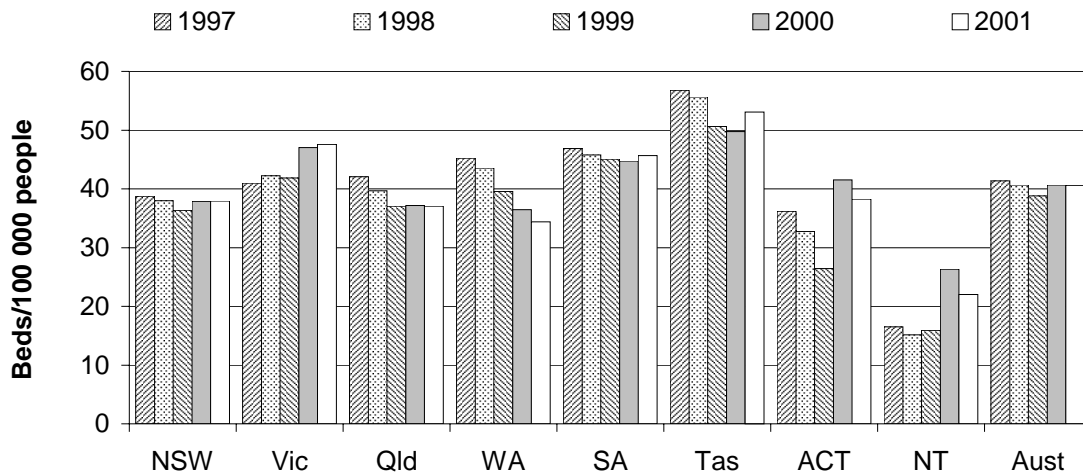
#### *The number of beds*

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

The number of beds per 100 000 people for public hospitals and community residential facilities combined are presented in figure 11.21. It needs to be noted that 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 24-hour staffed residential units in community settings (external to the campus of a public hospital or psychiatric institution) and funded by

government. 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 2001, Tasmania had the highest number of beds per 100 000 people (53.1) and the NT had the lowest (22.0).

Figure 11.21 The number of beds at 30 June<sup>a, b, c, d</sup>



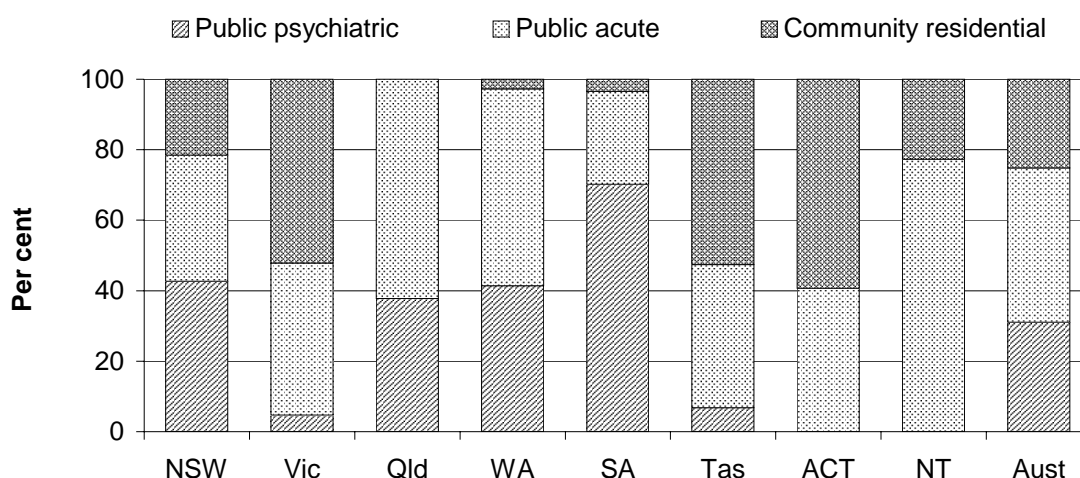
<sup>a</sup> 2001 data are preliminary only; final validation is ongoing prior to publication in the *National Mental Health Report 2003*. <sup>b</sup> Includes beds in public hospitals and publicly funded community residential units. <sup>c</sup> Prior to 1999-2000, community residential was defined as 24-hour staffed residential units in community settings (external to the campus of a public hospital or psychiatric institution) and funded by government. 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. <sup>d</sup> The apparent 18 per cent reduction for Queensland in inpatient bed numbers since 1993 is a temporary artifact of the process of decentralisation and delays in the completion of capital works for new extended treatment facilities.

Source: DHA NSMHS database (unpublished); table 11A.32.

The number of beds by service category are presented for 2001 in figure 11.22. These data show the differences in service mix across States and Territories. SA had the highest proportion of beds in public psychiatric hospitals (70.2 per cent) and Victoria the lowest (4.7 per cent). The ACT and the NT do not have public psychiatric hospitals. The ACT (59.4 per cent) had the highest proportion of beds in community residential services while WA had the lowest (2.7 per cent).

The apparent absence of community residential beds in 2001 in Queensland reflects Queensland's preference to describe such facilities as 'extended inpatient care'. Queensland has adopted a range of extended treatment services to replace the beds previously provided by psychiatric hospitals. New facilities include both campus-based and non-campus-based extended treatment and rehabilitation facilities for the adult and aged populations. Queensland does not consider these facilities to be 'community residential services'. This is not consistent with the definition of such services used by the NSMHS. Data prior to 2000-01 reflect the NSMHS definition.

Figure 11.22 The number of beds at 30 June by service category, 2001<sup>a, b, c, d</sup>



<sup>a</sup> 2001 data are preliminary only; final validation is ongoing prior to publication in the *National Mental Health Report 2003*. <sup>b</sup> The apparent absence of community residential beds in 2001 in Queensland reflects Queensland's preference to describe such facilities as 'extended inpatient care'. This is not consistent with the definition of such services used for the NSMHS. <sup>c</sup> WA advised that the two community residential facilities in WA are not representative of the development of current State mental health policy and are currently under review. WA has been increasing funding to the NGO sector to provide services to people in their own homes rather than provide publicly funded community residential services. <sup>d</sup> Tasmania advised that beds reported under 'public psychiatric hospitals' are located in a community-based mental health inpatient (non-residential) facility. The facility is not regarded by Tasmania as a hospital.

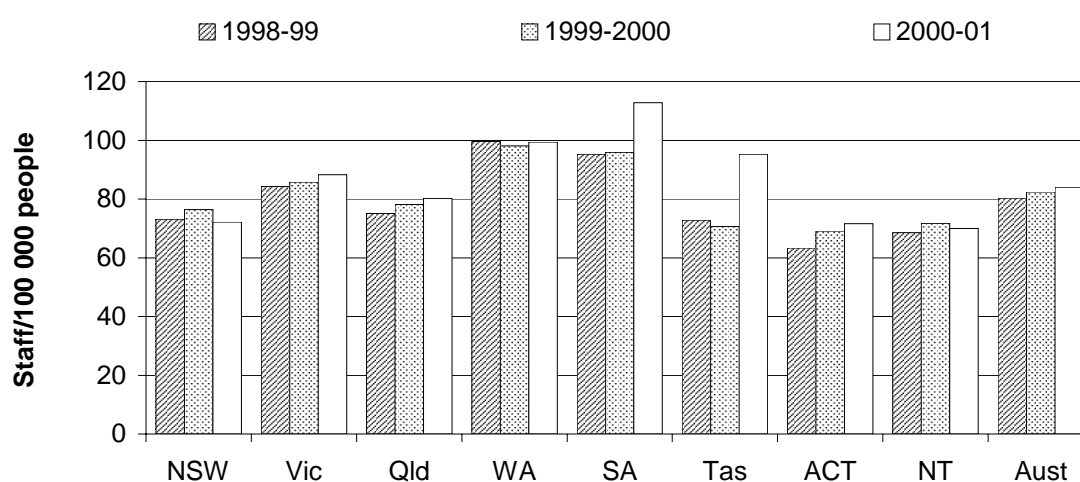
Source: DHA NSMHS database (unpublished); table 11A.32.

### 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 officers who are neither registered as psychiatrists within the State or Territory, or are formal trainees of the Royal Australian and New Zealand College of Psychiatrists' Postgraduate Training Program. Nursing consists of registered and nonregistered 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, wardsmen, orderlies, ward assistants and nursing assistants engaged primarily in the provision of personal care to patients or residents, who are not formally qualified or undergoing training in nursing or allied health professions. Definitions for staffing categories are provided in more detail in section 11.7.

In 2000-01, SA had the most FTE direct care staff per 100 000 people in specialist mental health services (112.8) and the NT had the least (70.0). It should be noted, however, that validation of the 2000-01 data is ongoing prior to the publication of the *National Mental Health Report 2003*. For example, SA has identified a number of anomalies with its staffing data since the NSMHS data were included in this Report. In addition, there was a definitional change for community residential facilities in 1999-2000 which caused a break in the time series.

Figure 11.23 **FTE health professional direct care staff per 100 000 people**<sup>a, b, c, d, e</sup>



<sup>a</sup> 2000-01 data are preliminary only; final validation is ongoing prior to publication in the *National Mental Health Report 2003*. <sup>b</sup> Includes health professional occupational categories only. <sup>c</sup> Prior to 1999-2000, community residential was defined as 24-hour staffed residential units in community settings (external to the campus of a general hospital or psychiatric institution) and funded by government. From 1999-2000, the definition was broadened to incorporate all staffed community-based units, regardless of the number of hours that staff are present. <sup>d</sup> NSW noted that its total staff numbers rose between 1999-2000 and 2000-01. The data reported in this chart reflect only health professionals, and do not incorporate non-professional staff. The discrepancy may be addressed when validation has been completed. <sup>e</sup> Tasmania has suggested that, in previous years, some direct care staff were not counted as they were incorrectly attached to administrative cost centres.

Source: DHA NSMHS database (unpublished); table 11A.34.

Nursing staff comprise the largest FTE component of health care professionals employed in mental health services. Across Australia in 2000-01, there were 55.0 nurses per 100 000 people working in specialised mental health services, compared with 19.6 allied health care staff (occupational therapists, social workers, psychologists and other allied health staff) and 9.4 medical staff (psychiatrists and other medical officers) (table 11A.34).

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### *Services provided*

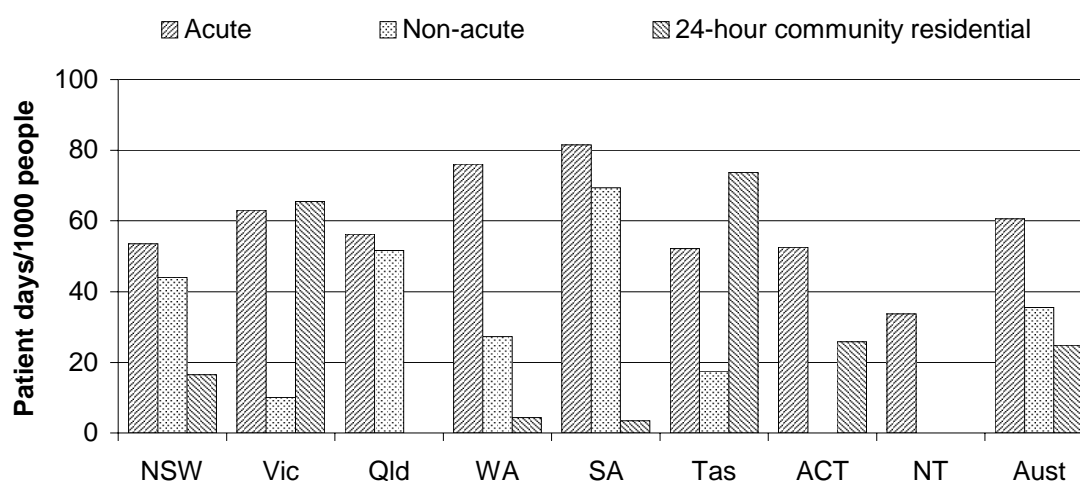
Estimating activity across the specialised mental health services sector is problematic. Data for ‘patient days’ are provided in (figure 11.24) by acute, non-acute and 24-hour staffed residential care (definitions are in box 11.4) but show only part of the picture.<sup>8</sup> Hospital inpatient days and community residential patient days are included in figure 11.24, but other types of community services are not covered. Data outlining community mental health care patient contacts are limited, although collection of these data commenced in July 2000 as part of the National Minimum Data Set.

In 2000-01, patient days per 1000 people in acute units were highest in SA (81.6) and lowest in the NT (33.7). In non-acute units, patient days per 1000 people were highest in SA (69.4) and lowest in Victoria (10.0). The ACT and the NT did not provide mental health care in non-acute units in 2000-01. Tasmania had the highest patient days per 1000 people in 24-hour community residential facilities (73.7) and SA had the least (3.5) (figure 11.24). The NT did not provide mental health care in 24-hour community residential facilities in 2000-01. The previously discussed caveat for the apparent absence of community residential beds in Queensland also applies to the data in figure 11.24.

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<sup>8</sup> Under the NSMHS, patient days refer to all days or part days that the patient was in hospital during the period, regardless of the original date of admission or discharge.

Figure 11.24 Mental health patient days, 2000-01<sup>a, b, c, d, e</sup>



<sup>a</sup> 2000-01 data are preliminary only; final validation is ongoing prior to publication in the *National Mental Health Report 2003*. <sup>b</sup> The apparent absence of community residential beds in 2001 in Queensland reflects Queensland's preference to describe such facilities as 'extended inpatient care'. This is not consistent with the definition of such services used for the NSMHS. <sup>c</sup> The two community residential facilities in WA are not representative of the development of current State mental health policy and are currently under review. WA has been increasing funding to the NGO sector to provide services to people in their own homes rather than provide publicly funded community residential services. <sup>d</sup> The ACT and the NT did not provide mental health care in non-acute units. <sup>e</sup> The NT did not provide mental health care in 24-hour community residential facilities.

Source: DHA NSMHS database (unpublished); table 11A.35.

In public psychiatric hospitals in 1999-2000, there were 15 568 overnight separations with specialised psychiatric care and 2379 same day separations (AIHW 2002b). In public acute hospitals in that year, there were 63 635 overnight separations with specialised psychiatric care and 24 316 same day separations. Schizophrenia accounted for a large proportion of overnight separations related to mental disorders in public hospitals (22.6 per cent of overnight separations related to mental disorders in public acute hospitals and 24.6 per cent in public psychiatric hospitals in 1999-2000) (table 11A.36).

The high level of same day separations reflects varying admission practices rather than genuine 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 represent only 6-10 per cent of all same day separations. Available evidence (for example, see *Mental Health Classification and Service Costs Report*, vol 1, p. 141) suggests that the majority of same day hospitalisations are in fact better described as ambulatory care, and involve the attendance by consumers at a variety of day and group-based programs that could otherwise be provided in community settings.

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There are limited data available relating to care by GPs of mental health patients. The following data are collected from a sample of 1000 GPs. In 1999-2000, the most frequently reported mental health-related patient reason for an encounter with a GP was depression (1.7 per 100 encounters).<sup>9</sup> Sleep disturbance was the next most common reason (1.2 per 100 encounters), followed by anxiety (1.0 per 100 encounters) and acute stress reaction (0.6 per 100 encounters). In total there were 7.2 per 100 encounters involving mental health problems reported by patients as a reason for an encounter with a GP (AIHW 2002b).

In 2001-02, depression was the fourth most frequently managed problem by a GP (Britt, *et al.* 2002).<sup>10</sup> In 1999-2000, the most frequently reported mental health-related problem managed by a GP was depression (3.4 per 100 encounters). Anxiety was the next most common problem managed (1.7 per 100 encounters), followed by sleep disturbance (1.5 per 100 encounters) and drug abuse (0.6 per 100 encounters). In total there were 10.5 per 100 encounters involving mental health problems managed by a GP in 1999-2000 (AIHW 2002b).

There are very limited data available on specialised psychiatric care provided by hospitals to Indigenous patients. Comparisons are difficult because data on Indigenous status are incomplete and there may be differences in the use of hospital services relative to other health services by Indigenous status. The data reflect a range of factors, such as the spectrum of public, primary care and post hospital care available, Indigenous 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 to be admitted for overnight psychiatric care compared with the rest of the population. The average length of stay for Indigenous people was, however, similar to that for the rest of the population (table 11.6).

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<sup>9</sup> 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.* 2001). Reasons for encounter reflect the patient's demand for care and can indicate service use patterns.

<sup>10</sup> More than one problem is often managed by a GP at a single encounter. Problems managed reflect the GP's understanding of the health problem presented by the patient.

**Table 11.6 Specialised psychiatric care by Indigenous status, Australia 1999-2000<sup>a, b</sup>**

	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
<i>No.</i>							
Indigenous	503	3 204	3 707	76 531	76 053	23.7	23.6
Total pop.	72 219	99 329	171 548	2 494 675	2 440 474	24.4	23.8
<i>Per 1000 population</i>							
Indigenous <sup>c</sup>	1.5	9.2	10.7	255.8	255.1	..	..
Total pop.	3.8	5.2	9.1	131.7	128.9	..	..

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

<sup>b</sup> Specialised psychiatric care refers to separations in which at least one day of specialised psychiatric care was received. <sup>c</sup> Separations per 1000 population are indirectly age-standardised rates based on the projected Aboriginal and Torres Strait Islander population for 30 June 1999 and the estimated resident population for 30 June 1999. .. Not applicable.

Source: AIHW (2002b); table 11A.37.

Schizophrenia disorders accounted for a large proportion of overnight specialised psychiatric care separations reported for Indigenous patients in Australia in 1999-2000 (22.3 per cent). Schizophrenia disorders also accounted for around 40.1 per cent of patient days for Indigenous patients, and a similar percentage of psychiatric care days (40.3 per cent) in 1999-2000 (table 11A.38).

## Policy developments

The NMHS — agreed by Commonwealth, State and Territory Health Ministers in 1992 — places the focus of care in the community, advocating a fundamental shift in the service balance away from the historical reliance on separate psychiatric hospitals and on to the development of local, comprehensive mental health service systems. The aim is to provide integrated services that emphasise continuity of care, both over time and across service boundaries, mainstreamed with the health system as a whole. While the NMHS calls for a change in the balance of services, it does not prescribe a specific service mix. Instead, each State and Territory (and area/region where required) is to develop a plan covering the range of mental health services to be made available. Hence, while community-based care has been expanding (only a small proportion of people with mental disorders now spend extended periods in psychiatric hospitals; most are cared for in the community), differences exist across States and Territories in the balance of inpatient services and of community care across ambulatory, residential and non-government services.

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The NMHS consists of several components: the *National Mental Health Statement of Rights and Responsibilities*, the *National Mental Health Policy*, two national mental health plans, and the AHCAs. The aims of the Policy are to:

- promote the mental health of the Australian community and, where possible, prevent the development of mental health problems and mental disorders;
- reduce the impact of mental disorders on individuals, families and the community; and
- assure the rights of people with mental disorders.

The First Plan (1992–1998) outlined agreed strategies for implementing the Policy. The Second Plan (1998–2003) maintains the same policy objectives and targets three additional themes: quality and effectiveness, promotion and prevention, and partnerships in service reform and delivery. Governments have agreed to develop performance indicators and targets around these themes and to improve information structures to support data collection to assist reporting.

While some data in this Report flow from these new information structures, other data developments are likely to impact on future reports and are outlined in the Future directions section (section 11.5).

## **Framework of performance indicators**

The distinction between prevention and intervention is more 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 and, in particular, at determining the most appropriate setting for providing treatment as well as emphasising early intervention. The mental illness indicators in this Report focus on reforms to service delivery that commenced under the first National Mental Health Plan and were extended under the second National Mental Health Plan. However, the Second Plan also emphasises promoting mental health and preventing mental illness. The Mental Health Promotion and Prevention National Action Plan has been drawn up specifically to meet the prevention and promotion priorities and outcomes outlined in the second plan. Details of national initiatives in the field on mental health promotion and prevention are described in chapter 7 of the *National Mental Health Report 2002* (DHA 2002). The performance indicator framework will be redeveloped to reflect these components of mental illness management in future reports.

The framework of performance indicators for mental health services builds on government objectives for mental health service delivery (box 11.5) as

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encompassed in the NMHS. The framework reports on the effectiveness (in terms of quality, appropriateness, access and outcomes) and efficiency (in terms of unit cost) of 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 for the Review and the Australian Health Ministers' Advisory Council National Mental Health Working Group.

**Box 11.5 Objectives for mental health service delivery**

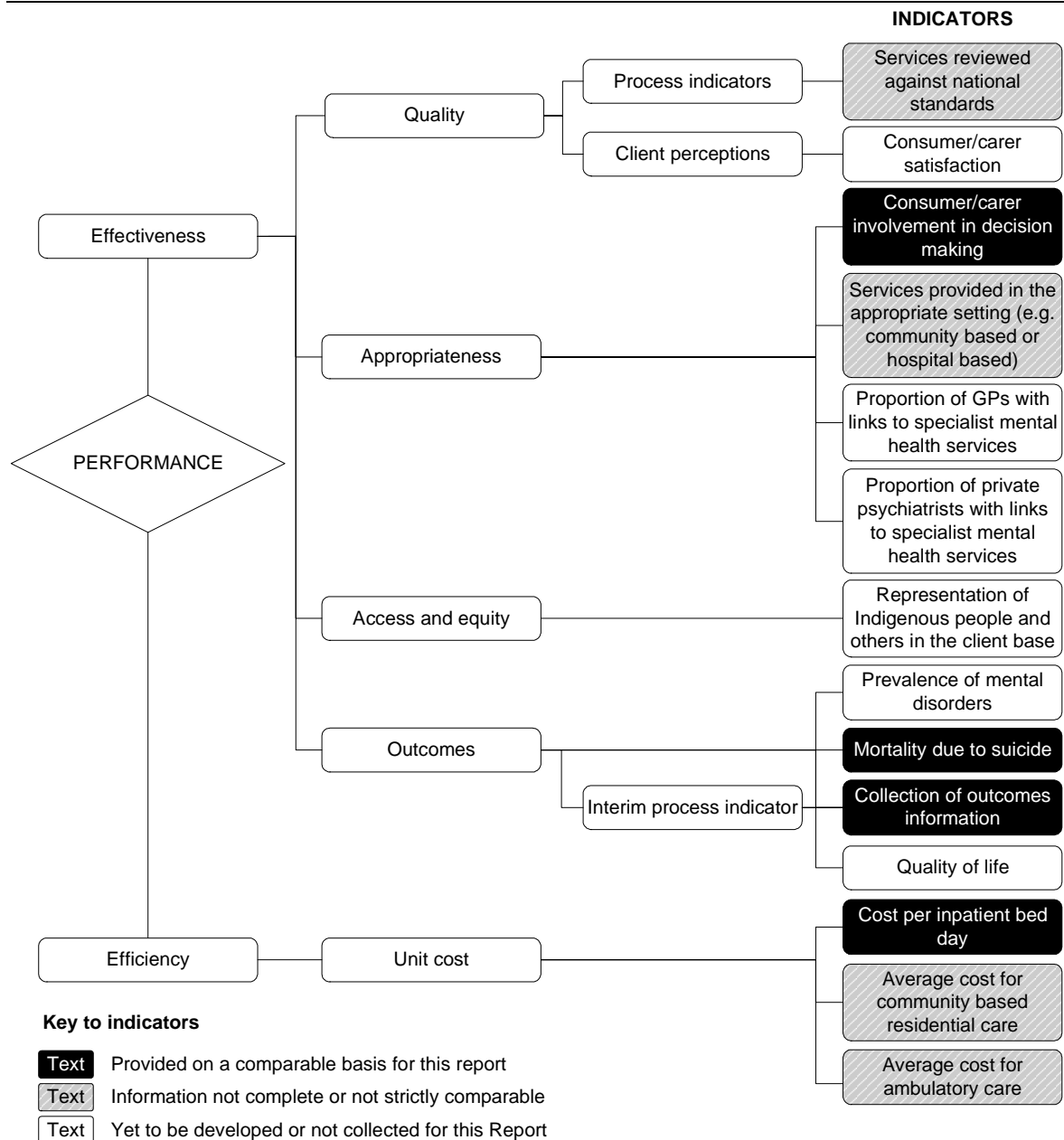
Key objectives include to:

- 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; and
- 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 2003 Report (figure 11.25). For data that are not considered strictly comparable, or that have not been completely validated, the text includes relevant caveats and supporting commentary. Chapter 1 discusses data comparability from a Report-wide perspective (see section 1.6).

Figure 11.25 Performance indicators for mental health management



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## Key performance indicator results

### *Quality*

#### *Per cent of specialised public mental health services reviewed against the National Standards for Mental Health Services*

The percentage of specialised public mental health services reviewed by an external accreditation agency against the National Standards for Mental Health Services is used as a process indicator of quality. It reflects accreditation against the National Standards. All jurisdictions have indicated an intent to formally commence external review against the National Standards for Mental Health Services in all specialist public mental health services by June 2003. At this point in time, therefore, it cannot be concluded that services yet to undergo review are necessarily of poorer quality. The National Standards for Mental Health Services are summarised in box 11.6.

#### **Box 11.6 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 as follows:

- Consumer rights;
- Safety;
- Consumer and carer participation;
- Promoting community acceptance;
- Privacy and confidentiality;
- Prevention and mental health promotion;
- Cultural awareness;
- Integration;
- Service development;
- Documentation; and
- Delivery of care.

*Source:* DHA (2002).

It should be noted that external accreditation agencies, such as the Australian Council on Healthcare Standards, undertake accreditation processes in relation to a parent health organisation (for example, a hospital) which may cover a number of specialist services, including mental health services. Therefore, 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 implementation of the National Standards for Mental Health Services. Assessment of a service against the national standards must be specifically requested and involves a separate review process. Data in table 11.7 relate to 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 separately 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, mid-term review).

The extent to which reviews were completed varied across jurisdictions at June 2002. At June 2002, reviews were completed in all the ACT specialist mental health organisations and no reviews were completed in the NT (table 11.7).

**Table 11.7 Specialised public mental health services reviewed against the National Standards for Mental Health Services (per cent)<sup>a</sup>**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
<i>December 2000</i>									
Review commenced	38.6	28.0	100.0	–	14.9	–	100.0	–	39.7
Review completed	9.9	28.0	4.2	–	–	–	100.0	–	12.3
<i>June 2001</i>									
Review commenced	65.7	28.0	100.0	–	14.9	–	100.0	–	49.0
Review completed	15.9	28.0	7.6	–	–	–	100.0	–	15.0
<i>June 2002</i>									
Review commenced	79.5	42.9	100.0	59.4	14.9	11.1	100.0	100.0	65.0
Review completed	18.8	38.5	85.6	15.6	14.9	2.8	100.0	–	35.0

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

Source: DHA (unpublished), based on State and Territory progress reports submitted under the reporting requirements of Information Development Agreements; table 11A.39.

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## *Appropriateness*

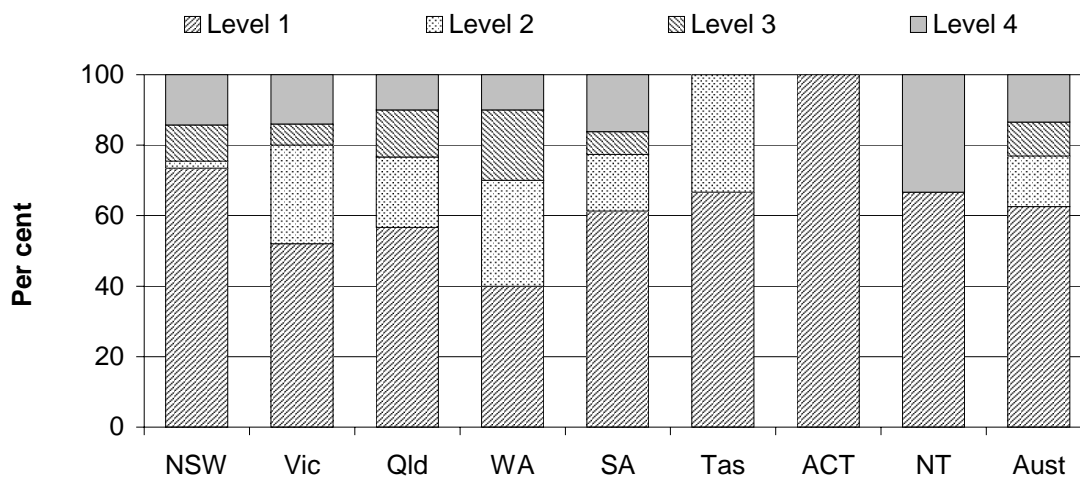
### *Consumer and carer participation in decision making*

An indicator of appropriateness is consumer and carer participation in decision making. Public sector mental health service organisations are asked each year to describe the arrangements provided to allow consumers and carers to contribute to local service planning and delivery. Responses 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 broadly based committees; and
- level 4 — other/no arrangements.

In 2001, the ACT had the highest proportion of organisations with a level 1 rating (100 per cent). (The ACT data are for three organisations.) WA had the lowest (40 per cent). The NT had the highest proportion of organisations reporting no consumer and carer involvement in decision making (level 4) (33 per cent of three organisations), although the proportion of organisations in the NT with a level 1 rating (67 per cent), was higher than that for Australia as a whole (63 per cent) (figure 11.26).

Figure 11.26 Organisations with consumer and carer participation in decision making, 2001<sup>a, b, c, d</sup>



<sup>a</sup> 2001 data are preliminary only; final validation is ongoing prior to publication in the *National Mental Health Report 2003*. <sup>b</sup> NSW advised that the government has no authority to require consumer participation in services delivered through the primary care program. <sup>c</sup> Victoria advised its model of consumer consultants fits poorly with the AHCA categories. Victoria has paid consumer consultants working in mental health services. Many agencies report this in the 'other' category, which has a low ranking and according to Victoria, does not reflect the active role played by consumer consultants in service operation. <sup>d</sup> WA advised that NSMHS 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: DHA NSMHS database (unpublished); table 11A.40.

### *Services provided in the appropriate setting*

The NMHS advocates the development of local, comprehensive mental health service systems. The services must be capable of responding to the individual needs of people with mental disorders and of providing continuity of care, so that consumers can move between services as their needs change. Under the directions set by the Strategy, structural reform of mental health services has resulted in:

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

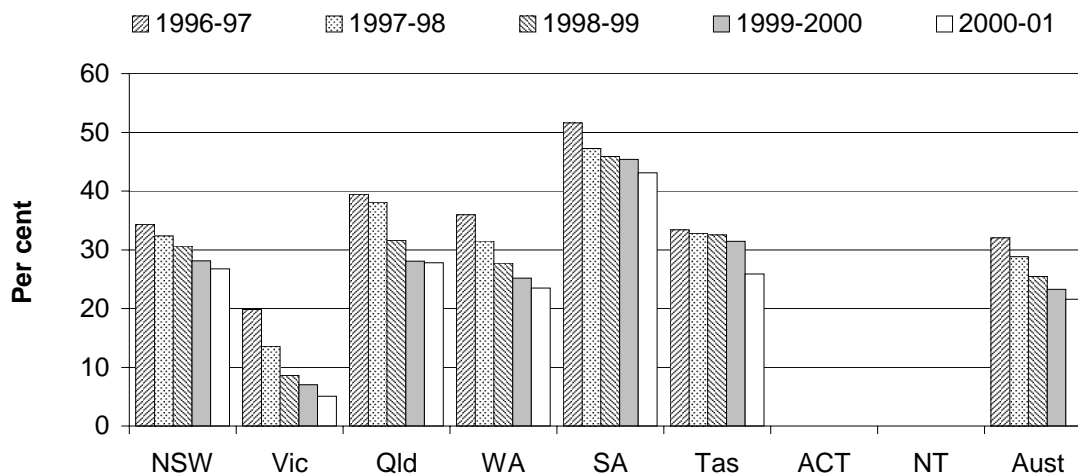
By encouraging treatment of patients in community settings and public (non-psychiatric) hospitals rather than in stand-alone psychiatric hospitals — that is, to

substitute the service settings — more appropriate treatment options can be provided.

As mentioned earlier, data in the Report relating to public mental health services are drawn from the NSMHS. It should be noted that NSMHS data for 2000-01 are preliminary, as validation has not yet been completed. There are a number of anomalies yet to be resolved. For example, SA has found some anomalies with its staffing and expenditure data since the NSMHS data were included in this Report. Final validation is ongoing prior to publication in the *National Mental Health Report 2003*. Data for 2000-01 should, therefore, be treated with care.

Figure 11.27 shows recurrent expenditure on stand-alone psychiatric hospitals as a proportion of total spending on mental health services. This indicator has changed from previous years, where recurrent expenditure on psychiatric hospitals was expressed as a proportion of recurrent spending on inpatient services. The new indicator is a broad measure of progress towards establishing an ‘appropriate service mix’ and provides a better basis for comparisons between jurisdictions. In 2000-01, the proportion was highest in SA (43.1 per cent) and lowest in Victoria (5.1 per cent). (As noted earlier, the ACT and the NT have no psychiatric hospitals.)

**Figure 11.27 Recurrent expenditure on stand-alone psychiatric hospitals as a proportion of total spending on mental health services<sup>a, b</sup>**



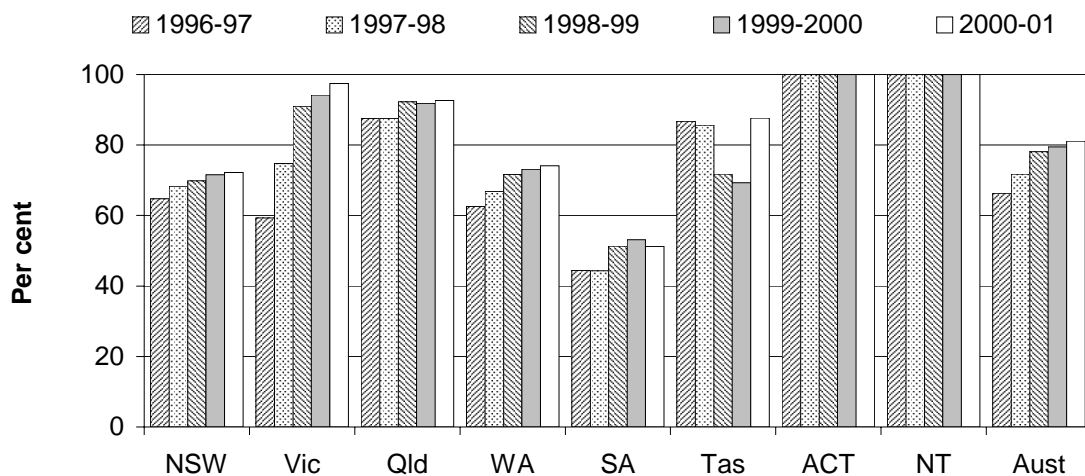
<sup>a</sup> 2000-01 data are preliminary only; final validation is ongoing prior to publication in the *National Mental Health Report 2003*. <sup>b</sup> The ACT and the NT do not have public psychiatric hospitals.

Source: DHA NSMHS database (unpublished); table 11A.41.

Figure 11.28 shows acute patient days in public acute hospitals as a proportion of total acute inpatient bed days in public acute and psychiatric hospitals. This indicator has changed from previous years. Previously, patient days in public (non-

psychiatric) hospitals were divided by total inpatient bed days. The change reflects the objectives of the NMHS to mainstream acute inpatient services. Again, it needs to be noted that the ACT and the NT do not have psychiatric hospitals. In 2000-01, aside from the Territories, the highest proportion of acute patient days in public acute hospitals was in Victoria (97.4 per cent) and the lowest in SA (51.2 per cent).

**Figure 11.28 Acute patient days in public acute hospitals as a proportion of total acute inpatient bed days in public acute and psychiatric hospitals<sup>a</sup>**



<sup>a</sup> 2000-01 data are preliminary only; final validation is ongoing prior to publication in the *National Mental Health Report 2003*.

Source: DHA NSMHS database (unpublished); table 11A.41.

## Outcomes

### *Mortality due to suicide*

Evidence indicates that people with a mental disorder are at a higher risk of suicide than the general population (although it is worth noting that they are also at a higher risk of death from other causes, such as cardiovascular disease).

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 a range of other government departments and NGOs and other special interest groups. Therefore,

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any impact on suicide will be as a result of a coordinated response across a range of collaborating agencies, including police, education, housing, justice, and community services.

In addition, there are many factors outside the control of mental health services that 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 increased risk of suicidal behaviour. Other factors can also influence suicide rates, such as economic growth rates that affect unemployment rates and social disadvantage. Often the risk of suicidal behaviour can be increased by a combination of these factors.

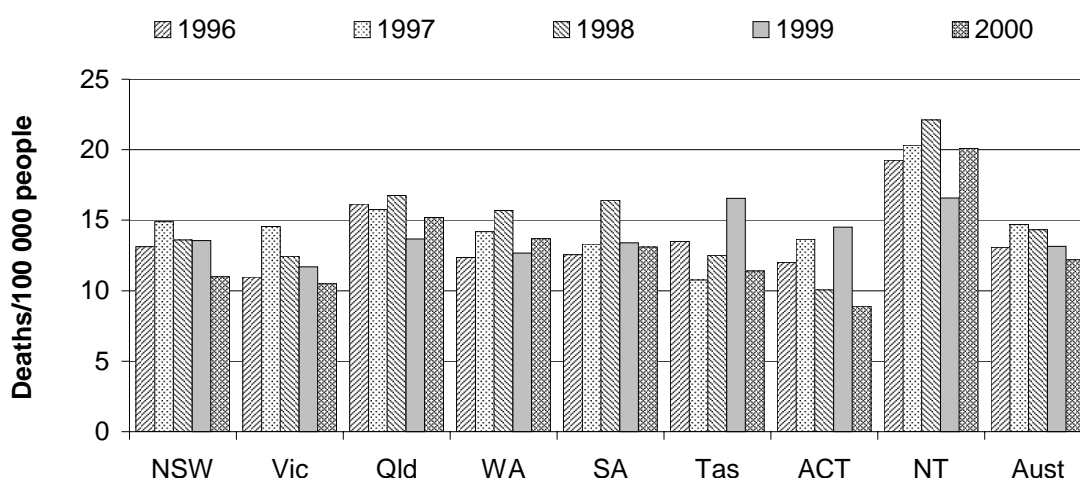
It needs to be noted that not all of those who commit suicide are patients of mental health services. An improved indicator would be restricted to suicide by patients of mental health services.

In 2000, 2363 deaths by suicide were recorded in Australia — equivalent to 12.2 deaths per 100 000 people. The national rate has fallen each year since 1997. The rate for males was around four times that for females in 2000 — a ratio that was constant over the 10 years to 2000 (table 11A.42). The NT had the highest suicide rate in 2000 (20.1 suicides per 100 000 people). The ACT had the lowest rate (8.9) (figure 11.29).

In 1999 and 2000, suicide was the second leading cause of death for people aged 15–24 years after transport accidents (ABS 2001) — 338 people in this age group died as a result of suicide. This represented 20.3 per cent of deaths in this age group — equivalent to a rate of 12.5 deaths per 100 000 people aged 15–24 years. The NT recorded the highest suicide rate (22.3 deaths per 100 000 people aged 15–24 years), while both Victoria and the ACT recorded the lowest (9.7 deaths) (table 11A.44). Suicide was the leading cause of death for 25–34 year olds in 1999 and 2000 (22.8 per cent of deaths in this age group resulted from suicide) (ABS 2001).

The suicide rate per 100 000 people in 2000 was generally higher in rural areas than in capital cities or other urban areas (table 11A.45). In 2000, Australia-wide, there were 15.4 suicides per 100 000 people in rural areas compared with 10.8 suicides in capital cities and 13.8 in other urban centres (figure 11.30).

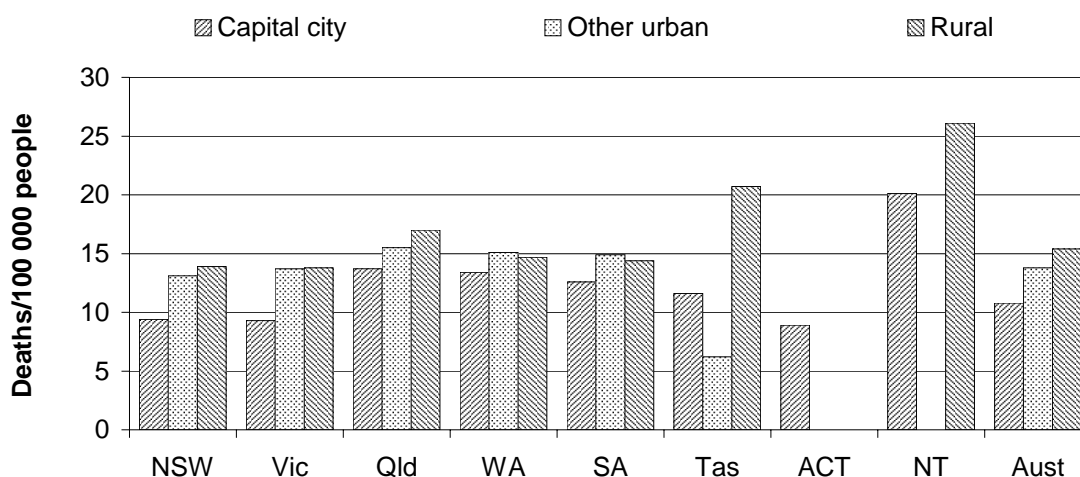
Figure 11.29 Suicide deaths per 100 000 people<sup>a, b, c</sup>



<sup>a</sup> By year of registration. Year-to-year variation can be influenced by coronial workloads. <sup>b</sup> Age-standardised death rate to the mid-year 1991 population. <sup>c</sup> Low populations can result in small variations in the number of suicides appearing as large changes in rates (which are not statistically significant).

Source: ABS (2001); table 11A.43.

Figure 11.30 Suicide deaths by area per 100 000 people, 1999<sup>a, b, c, d, e</sup>



<sup>a</sup> Other urban = centres with more than 20 000 population. <sup>b</sup> Age-standardised death rate to the mid-year 1991 population. <sup>c</sup> By year of registration. Year-to-year variation can be influenced by coronial workloads. <sup>d</sup> Tasmania advised that the three criteria for these data tend to distort the Tasmanian picture due to the low level of urbanisation. <sup>e</sup> The ACT rates for rural were zero. The ACT did not have any 'other urban areas'. The NT rate for other urban was zero.

Source: ABS (2001); table 11A.45.

In 2000, the suicide rate for Indigenous people was considerably higher than the rate for the total population. Care needs to be taken when interpreting these data because data for Indigenous people are incomplete and data for some States are not

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considered of publishable standard.<sup>11</sup> Estimating the Indigenous population is difficult because the propensity for people to identify as Indigenous varies across jurisdictions and over time. In addition, Indigenous people are not always accurately identified in administrative collections, such as hospital records and birth and death registrations, due to variations in definitions, different data collection methods and failure to record Indigenous status. See the Health preface for a discussion of the quality of Indigenous mortality data collected by the ABS.

The 2000 Indigenous suicide rate in WA was 41.4 per 100 000 Indigenous people compared with around 13.7 per 100 000 for the total WA population. In the NT in 2000, the Indigenous suicide rate was 23.3 per 100 000 Indigenous people compared with 20.1 per 100 000 people for the total population (tables 11A.46 and 11A.43).

*Progress towards the introduction of routine consumer outcomes assessment by services*

This indicator is reported for the first time this year. There is currently no information on consumer outcomes, but jurisdictions are introducing a collection which will enable reporting in future (section 11.5). As a result, this is an interim indicator. The consumer outcomes measurement implementation strategy is summarised in box 11.7. The percentages of specialised mental health services that have introduced routine consumer outcome measurement are shown in table 11.8.

**Box 11.7 Summary of the consumer outcomes measurement implementation strategy**

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.
- National approach to data analysis, reporting and benchmarking.

Source: DHA (2002).

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<sup>11</sup> While the ABS considered data for Queensland, WA, SA and the NT to be of publishable standard, the trend figures for Indigenous suicides should still be interpreted with care because of the low number of suicides among Aboriginal people and uncertainty about the accuracy of Aboriginal population estimates.

**Table 11.8 Specialised mental health services that have introduced routine consumer outcome measurement (per cent)<sup>a</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld<sup>b</sup></i>	<i>WA<sup>c</sup></i>	<i>SA<sup>d</sup></i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
December 2000	–	–	–	–	–	–	–	–	–
June 2001	25.1	16.9	–	–	–	19.4	–	–	18.3
June 2002	88.3	16.9	–	–	–	16.7	–	–	34.0

<sup>a</sup> Data are based on reports from jurisdictions. Jurisdictions report at varying levels, reflecting differences in service structure; for example, data may be reported at area health service level or at hospital level, with each level containing a number of specialist mental health services. Data are therefore aggregated. National averages are weighted by the relative share of total mental health expenditure. See *National Mental Health Report 2002* for further details. <sup>b</sup> Queensland has renegotiated its National Mental Health Information Development Funding Agreement to more accurately reflect its capacity to report. Substantial technical and planning work is underway to introduce information system enhancements and design a workforce training strategy to implement routine outcomes measurement. Queensland should be able to report a small number of sites by June 2003. <sup>c</sup> The three major components of the WA Mental Health Information Development Plan (including the development and rollout of the new Mental Health Clinical Information System, the Clinical Training Program and the Business Process Re-engineering) are on target as per agreement with the Commonwealth Department of Health and Ageing. The development of the new information system is on schedule. The system will be rolled-out to all public mental health services in WA between January and June 2003. The Clinical Training Program commenced in October 2002 and will continue until September 2003. The training focuses on the integration of consumer outcome assessment using the nationally agreed tools in day to day clinical practice. The Business Process Engineering is concerned with changes to mental health services at a local level to ensure that benefits of the implementation of routine assessment of consumer outcomes are fully realised. <sup>d</sup> SA has not yet started collecting these data. – Nil or rounded to zero.

Source: DHA (unpublished), based on State and Territory progress reports submitted under the reporting requirements of Information Development Agreements; table 11A.48.

### *Efficiency*

Data in the Report relating to public mental health services are drawn from the NSMHS. As previously mentioned, NSMHS data for 2000-01 are preliminary, as validation has not yet been completed and there are a number of anomalies yet to be resolved. Final validation is ongoing prior to publication in the *National Mental Health Report 2003*. Data for 2000-01 should therefore be treated with care.

### *Cost per inpatient bed day*

A proxy indicator of efficiency is the level of government inputs per unit of output (unit cost). The most suitable indicator for mental health services would be to adjust the number of separations by the type and complexity of cases to develop a cost per casemix-adjusted separation similar to that presented for public hospitals (chapter 9). The current method for adjusting inpatient separations (AR-DRGs), however, does not account for the full range or complexity of mental health services provided. Until an appropriate casemix classification has been developed and introduced, average inpatient day costs will be used as an indicator of efficiency. These data needs to be used with care when making comparisons.

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All States and Territories have committed to collecting and reporting casemix-related data based on the Mental Health Classification and Service Costs model, and intend to refine the classification for routine adoption across all service settings. Through this process, it is expected that casemix-adjusted comparisons between jurisdictions will be possible in future years.

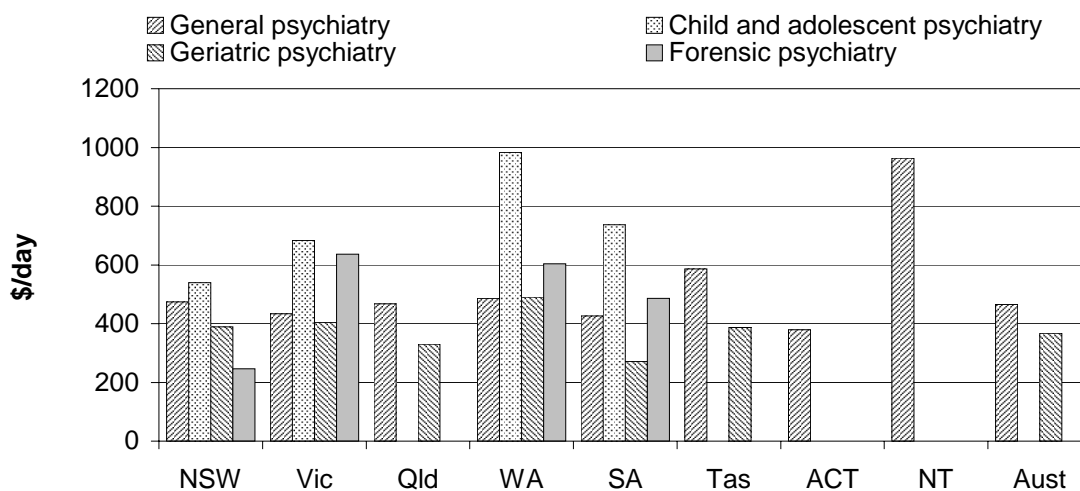
The cost per inpatient bed day is affected by factors such as differences in the client mix and average length of stay. The client mix in inpatient settings may differ — for example, some jurisdictions treat a higher proportion of less complex patients in inpatient settings rather than in the community.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

This year, real inpatient costs per day are reported 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 11.31 and 11.32. Changes over time reflect in part institutional change in accordance with the NMHS.

In terms of inpatient program type in 2000-01, average general psychiatry patient day costs were highest in the NT (\$964) and lowest in the ACT (\$380). Average patient day child and adolescent psychiatry costs were highest in WA (\$983) and lowest in NSW (\$539). Geriatric psychiatry costs were highest in WA (\$490) and lowest in SA (\$272). Forensic psychiatry costs were highest in Victoria (\$636) and lowest in NSW (\$246) (figure 11.31).

Average recurrent cost per inpatient bed day by inpatient program type has been converted to 1999-2000 dollars using State and Territory deflators for government final consumption expenditure on hospital and clinical services. Average costs converted to 1999-2000 dollars using a national deflator for final consumption expenditure by governments on hospital/nursing home care are reported in table 11A.63. The deflators are included in tables 11A.74 and 11A.75.

Figure 11.31 **Average cost (recurrent) per inpatient bed day, public hospitals, by inpatient program type, 2000-01 (1999-2000 dollars)<sup>a, b, c, d, e, f</sup>**



<sup>a</sup> 2000-01 data are preliminary only; final validation is ongoing prior to publication in the *National Mental Health Report 2003*. <sup>b</sup> Depreciation excluded. <sup>c</sup> Costs are not adjusted for differences in the complexity of cases across jurisdictions and may reflect differences in the rate of institutional change (that is, the mainstreaming of mental health services). <sup>d</sup> Constant price expenditure expressed in 1999-2000 prices, using Government Final Consumption Expenditure on Hospital and Clinical Services as deflator. Deflator is reported in table 11A.74. <sup>e</sup> In 2000-01, child and adolescent psychiatry and forensic 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 and forensic psychiatry within the general psychiatry category. <sup>f</sup> Queensland data for forensic psychiatry along with child and adolescent psychiatry not provided.

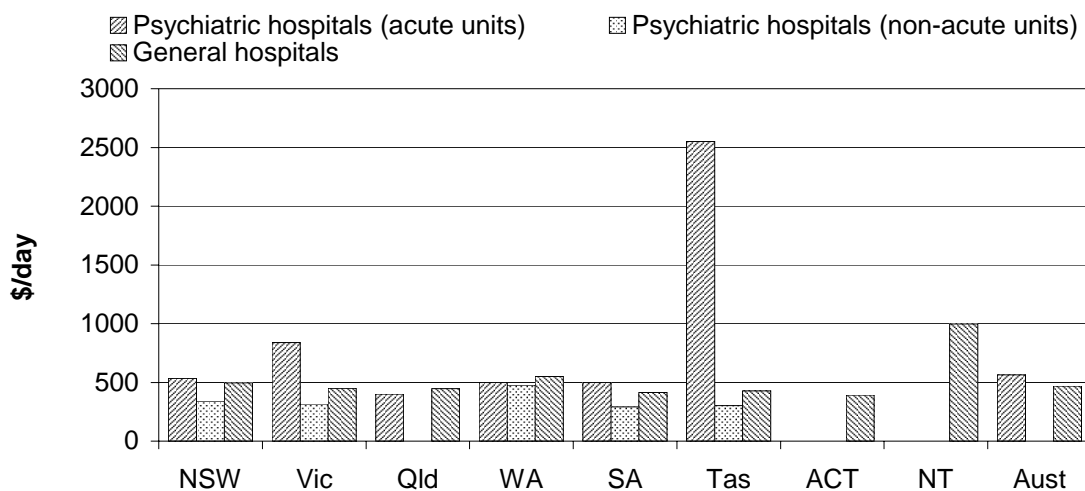
Source: DHA NSMHS database (unpublished); table 11A.49.

In terms of hospital type in 2000-01, average patient day costs in psychiatric hospitals (acute units) were highest in Tasmania (\$2550) and lowest in Queensland (\$402). Average costs in psychiatric hospitals (non-acute units) were highest in WA (\$476) and lowest in SA (\$292). The ACT and the NT do not have psychiatric hospitals. Average costs in general hospitals were highest in the NT (\$997) and lowest in the ACT (\$392) (figure 11.32).

Institutional downsizing and structural reform are important considerations when interpreting interjurisdictional differences. For example, Tasmania's high unit costs for public psychiatric hospitals are a direct effect of the downsizing and eventual closure of the jurisdiction's only stand-alone psychiatric hospital.

Average recurrent cost per inpatient bed day by hospital type has been converted to 1999-2000 dollars using State and Territory deflators for government final consumption expenditure on hospital and clinical services. Average costs converted to 1999-2000 dollars using a national deflator for final consumption expenditure by governments on hospital/nursing home care are reported in table 11A.64.

Figure 11.32 **Average cost (recurrent) per inpatient bed day, public hospitals, by hospital type, 2000-01 (1999-2000 dollars)<sup>a, b, c, d, e, f, g, h</sup>**



<sup>a</sup> 2000-01 data are preliminary only; final validation is ongoing prior to publication in the *National Mental Health Report 2003*. <sup>b</sup> Depreciation excluded. <sup>c</sup> Costs are not adjusted for differences in the complexity of cases across jurisdictions and may reflect differences in the rate of institutional change (that is, the mainstreaming of mental health services). <sup>d</sup> Constant price expenditure expressed in 1999-2000 prices, using Government Final Consumption Expenditure on Hospital and Clinical Services as deflator. Deflator is reported in table 11A.74. <sup>e</sup> Mainstreaming has occurred at different rates in different jurisdictions. Victoria advised that the data for psychiatric hospitals comprises mainly forensic services, since nearly all general psychiatric treatment occurs in mainstreamed units in general acute hospitals. This means that the client profile and service costs are very different from those of a jurisdiction where general psychiatric treatment still occurs mostly in psychiatric hospitals. <sup>f</sup> The ACT and the NT do not have psychiatric hospitals. <sup>g</sup> Tasmania advised that the last stages of the closure of the Royal Derwent Hospital resulted in anomalous data; that is, infrastructure expenditure spread over very few beds. <sup>h</sup> Queensland data for psychiatric hospitals (non acute units) not provided.

Source: DHA NSMHS database (unpublished); table 11A.50.

### *Average costs for community residential patient care*

The average cost to government (recurrent) per patient day for community residential services is presented in table 11.9. It is likely that these data are also affected by institutional changes occurring as a result of the NMHS. In addition, differences across jurisdictions in the types of patients admitted to community residential care will affect average costs in these facilities. The definition of community residential services changed between 1998-99 and 1999-2000 and this is reflected in table 11.9. Prior to 1999-2000, community residential was defined as 24-hour staffed residential units in community settings (external to the campus of a public hospital or psychiatric institution) and funded by government. 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.

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This year average cost to government (recurrent) per patient day for community residential services are reported for both care of adults and care of older people. The distinction is made to reflect the differing unit costs of treating the two groups.

The estimates in table 11.9 suggest that for general adult units in 2000-01, the average cost to government per patient day for 24-hour staffed community residential services Australia-wide was \$221 — highest in Tasmania (\$349) and lowest in SA (\$86). Within the NT, 24-hour staffed residential services were not available in 2000-01. For non 24-hour staffed community residential units, the average cost to government per patient day Australia-wide was \$86 — highest in Victoria (\$127) and lowest in the ACT (\$46). Non 24-hour staffed residential services were not available within WA, SA and Tasmania in 2000-01. The previous caveat for the apparent absence of community residential beds in Queensland also applies to the data in table 11.9, in particular data prior to 2000-01 reflects the NSMHS definition.

In 2000-01, for jurisdictions that had community-based aged care units, the average cost to government per patient day for 24-hour staffed community residential services Australia-wide was \$211. For non 24-hour staffed community residential units, the average cost to government per patient day Australia-wide was \$132.

Average cost to government (recurrent) per patient day for community residential services has been converted to 1999-2000 dollars using State and Territory deflators for government final consumption expenditure on hospital and clinical services. Average costs converted to 1999-2000 dollars using a national deflator for final consumption expenditure by governments on hospital/nursing home care are reported in table 11A.65.

#### *Average costs for ambulatory (non-admitted) services*

Estimates of average costs for non-admitted patients are presented as an indicator of efficiency. The provision of ambulatory treatment, rehabilitation and support to non-inpatients and post-acute care is an important component of service provision and it is a priority for the Review to continue improving reporting in this area. Unit costs (dollars per treated patient in the community) for 2000-01 are presented for all States and Territories in the points below.

**Table 11.9 Average cost to government (recurrent) per patient day for community residential services (1999-2000 dollars)<sup>a, b, c, d</sup>**

	NSW	Vic Qld <sup>e, f</sup>	WA	SA <sup>g</sup>	Tas <sup>h</sup>	ACT	NT <sup>e</sup>	Aust
<i>General adult units</i>								
1998-99								
24-hour staffed units	252.86	230.42	..	209.67	93.39	244.80	226.58	.. 230.48
1999-2000								
24-hour staffed units	199.28	228.53	774.36	265.62	96.67	233.56	218.27	.. 220.62
Non 24-hour staffed units	61.14	123.19	..	..	..	..	47.77	62.83 85.87
2000-01								
24-hour staffed units	155.33	250.36	..	279.61	86.18	349.06	305.15	.. 220.58
Non 24-hour staffed units	52.89	127.26	..	..	..	..	46.46	73.93 86.45
<i>Aged care units</i>								
1998-99								
24-hour staffed units	199.69	198.02	..	..	..	282.94	..	.. 201.98
1999-2000								
24-hour staffed units	237.75	186.29	..	..	..	277.12	..	.. 199.16
Non 24-hour staffed units	110.14	..	..	..	..	..	..	.. 110.14
2000-01								
24-hour staffed units	234.60	206.56	..	..	..	213.57	..	.. 210.91
Non 24-hour staffed units	118.60	138.36	..	..	..	..	..	.. 131.57

<sup>a</sup> 2000-01 data are preliminary only; final validation is ongoing prior to publication in the *National Mental Health Report 2003*. <sup>b</sup> Depreciation included, variably handled by jurisdictions. <sup>c</sup> Costs are not adjusted for differences in the complexity of cases across jurisdictions and may reflect differences in the rate of institutional change (that is, the mainstreaming of mental health services). <sup>d</sup> Constant price expenditure expressed in 1999-2000 prices, using Government Final Consumption Expenditure on Hospital and Clinical Services as deflator. Deflator is reported in table 11A.74. <sup>e</sup> Prior to 1999-2000, community residential was defined as 24 hour staffed residential units in community settings (external to the campus of a public hospital or psychiatric institution) and funded by government. 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. <sup>f</sup> According to the NSMHS, Queensland data for 1999-2000 were affected by the establishment of a single, new unit late in the year, however, there is some inconsistency with the classification of this service type and at this point reporting against residential community care is not supported by Queensland Health. Further work needs to be undertaken to clarify reporting of these data in the future. <sup>g</sup> SA does not have any community residential services which are aged care units. <sup>h</sup> Tasmanian services include both acute and rehabilitation units which have higher unit costs than extended care units. In 2001 additional new units were established with establishment costs included in recurrent expenditure for that year. .. Not applicable.

Source: DHA NSMHS database (unpublished); table 11A.51.

The data currently reported for this indicator are unreliable and comparisons across jurisdictions are not possible for several reasons. First, a marked proportion of

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services did not report. Second, the absence of unique patient identifiers in many jurisdictions means that clients who happen to attend 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 States is relatively low compared with other jurisdictions. Third, differences across jurisdictions in the complexity of cases treated, the service options available for treatment and admission practices also reduce comparability of data between States and Territories. Lastly, cost components such as depreciation are not measured consistently across jurisdictions.

- NSW reported unit costs for ambulatory care of \$850, with 26.7 per cent of services not reporting (table 11A.52).
- Victoria reported unit costs for ambulatory care of \$2125, with 1.6 per cent of services not reporting (table 11A.53).
- Queensland reported unit costs for ambulatory care of \$1177, with all services reporting (table 11A.54).
- WA reported unit costs for ambulatory care of \$1358, with 2.3 per cent of services not reporting (table 11A.55).
- SA reported unit costs for ambulatory care of \$988, with 25.3 per cent of services not reporting (table 11A.56).
- Tasmania reported unit costs for ambulatory care of \$1611, with all services reporting (table 11A.57).
- The ACT reported unit costs for ambulatory care of \$1011, with 14.3 per cent of services not reporting (table 11A.58).
- The NT reported unit costs for ambulatory care of \$1236, with all services reporting (table 11A.59).

Average costs for ambulatory (non-admitted) services have been converted to 1999-2000 dollars using State and Territory deflators for government final consumption expenditure on hospital and clinical services. Average costs converted to 1999-2000 dollars using a national deflator for final consumption expenditure by governments on hospital/nursing home care are reported in tables 11A.66 to 11A.73.

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## 11.5 Future directions in performance reporting

### Breast cancer

Key challenges for improving reporting of health management performance of breast cancer include:

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

#### *Expanding the scope of reporting*

Existing performance data for breast cancer management places relatively more emphasis on the performance of State and Territory BreastScreen Australia programs than on the treatment and ongoing management of breast cancer. This is in large part due to the relative availability of breast cancer screening data across jurisdictions. It is the aim of the Review to expand reporting in future to incorporate treatment and clinical outcomes data.

The possibility of matching data from hospital registers with BreastScreen Australia data will be investigated. This could broaden the emphasis of the chapter from breast screening towards overall breast cancer management. The indicator ‘ratio of conservative surgery to mastectomy’ is an example of a currently reported indicator where data matching could occur to improve the accuracy and completeness of reporting.

#### *Developing indicators of outcomes*

A number of international studies have found evidence that screening has been associated with a reduction in breast cancer mortality (for example, Alexander *et al.* (1999) and Moss *et al.* (1999) for the UK), although there is some doubt about breast self examination (Moss *et al.* 1999). Neither of these particular studies, however, used economic evaluation tools. At present, there are no Australian studies of this nature, however, a study for BreastScreen Australia estimating the cost per life year saved of breast screening is being designed and is not anticipated to commence until at least the end of 2003.

The NAC Monitoring and Evaluation Working Group has developed an Evaluation Plan and Monitoring Plan that will facilitate reporting of outcomes in future.

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### *Improving data and the measurement of existing indicators*

Victoria is developing a set of clinical performance indicators for breast cancer management as part of a comprehensive approach to quality improvement through performance monitoring and reporting. The work involves the development of indicators, a minimum dataset, and an appropriate framework for reporting to hospitals, government and the public. The project has been commissioned by BreastCare Victoria (Department of Human Services), and is being undertaken by a team from BreastScreen Victoria Inc. A strongly collaborative approach is being adopted in the development and field testing of the indicators, in order to maximise participation and ownership of the project among key stakeholders. Involvement of consumers is also a key feature of the method.

BreastScreen Victoria has conducted a comprehensive review of the national and international literature in this area, and the performance indicators being developed are based on a combination of internationally accepted best practice and consensus among stakeholders. Working groups have been convened to consider indicators across the clinical pathway, and potential indicators have been ranked according to agreed criteria, such as evidence base, burden of disease, content validity, data value, reliability and responsiveness. A draft set of indicators for field testing is being refined and the pilot sites recruited. A final recommended set of indicators should be available by August 2003.

### **Mental health**

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

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

As mentioned in the Policy developments section, 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 paucity of data.

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The Australian Council for Safety and Quality in Healthcare has recently been formed to establish a safety and quality agenda across health care in Australia. It is proposed that patient safety in mental health be addressed by strengthening the focus on safety and quality issues on the national mental health agenda. It is also proposed that specific indicators be developed to measure use of seclusion in acute psychiatric inpatient units, adverse drug events and suicide/attempted suicide.

*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. The Plan puts forward a number of information development strategies to strengthen the focus on consumer outcomes. These 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, broad adoption by service organisations of outcome measurement as an integral part of service delivery, and regular reporting by agencies of core measures.

In addition, all jurisdictions have undertaken to begin collecting unit record consumer outcomes data to further 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. Data on consumer outcomes and standards will be reported nationally to the Commonwealth progressively from 2001, although comprehensive coverage is not expected until 2003.

Commonwealth, State and Territory governments are also required to agree on indicators and performance targets under the AHCAs. 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 in future.

## **11.6 Jurisdictions' comments**

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

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## **New South Wales Government comments**

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The 2003 Report on Government Services continues to be a valuable source of data and comparisons on key areas of interest in publicly provided services. Many improvements have been made to the Report over time, but there are still areas requiring closer attention in future publications.

Comparability of data across jurisdictions remains a significant challenge. An increasing number of measures are drawn from a single source, such as the ABS and AIHW. However, there are still variable practices in the collection of data that make up these measures within and between jurisdictions. Whilst the Report aims to provide comparable data which reflect genuine issues of performance and/or gaps in services, many of the differences observed are due to data issues rather than service delivery variation. The Steering Committee for the Report maintains the principle that imperfect data should be reported, so as to draw attention to the issues to motivate data improvements. Whilst this has led to better standardisation in some areas, there are other areas where the progress has been limited. For example, the current Report includes an expanded set of measures that overcome the problems of the inconsistent assignment of patients to urgency category in this data. This expanded set reflects work undertaken by jurisdictions and the AIHW to develop more robust measures of performance for elective surgery waiting times. However, data by urgency category continue to be sought and published in the Report. Similar problems are encountered with measuring Emergency Department waiting times, given inconsistencies between clinicians, hospitals and jurisdictions in assignment of patients to triage categories, and further efforts are required to address this issue.

Where data collection is not routine, reported measures may be unrepresentative. In addition with indicators based on small numbers of events, random fluctuations may mean difference between jurisdictions lack statistical significance. Examples where these issues are of particular concern are hospital acquired infections and maternal and perinatal health. A further challenge for the report relates to changing models of care. In hospital services, concerted attempts are now being made in some States to move to treatment of patients on an outpatient basis rather than admitted patient basis. These trends have perverse impacts on a number of indicators.

Variations in how programs are organised pose other issues for comparability. For example, jurisdictions take a varied approach to whether certain services are classified under mental health programs, such as some drug and alcohol services, early intervention services for children, programs for people with brain injury, psycho-geriatric services, and community based psycho-social services. These variations impact on several measures presented in the Report.

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## Victorian Government comments

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Victoria continues to strongly support comparisons of overall performance and key performance indicators between jurisdictions and with the best practitioners worldwide. The current work of the Review towards the enhancement of its reporting frameworks to reflect inter-relationships between services such as public hospitals, general practice and aged care is particularly welcome. Many of the chronic conditions of ageing make it likely that an older person will come into contact with a succession of services. The use of ‘discrete’ frameworks and key performance indicators for general practice, acute health and aged care does not permit analysis of the extent to which people are receiving the most effective, least cost intervention at the right time.

It is acknowledged that many of the indicators in the health chapters of this Report need further development as they often highlight differences in state administrations, funding mechanisms and service provision rather than performance. However, they do provide a useful starting point for further analysis. For this reason the Review’s iterative approach to reporting, publishing imperfect data with caveats and then working to improve quality and comparability, is strongly supported.

A recent initiative to improve performance reporting at the State level is the development of a suite of indicators on ambulatory care sensitive conditions for which hospital admission rates may provide an indicator of the effectiveness of primary care. These indicators are based on a Victorian research study and are considered to be useful surveillance measures for commenting on aspects of accessibility to primary care prevention programs, as well as providing indicators of performance in relation to effectiveness of primary care programs in dealing with these conditions.

Encouragement is also given for individual service providers to benchmark at a much greater level of detail, and to achieve improvements at the organisational level. A current Victorian benchmarking project is seeking to bring about a commonality of financial information systems across public hospitals through the introduction of a common chart of accounts, a consistently applied financial methodology and consistency of cost allocations. This commonality will enable effective centralised monitoring of systemic cost movements and other key performance indicators (KPIs) across the industry. The system will provide hospitals with the ability to benchmark KPIs (financial/human resource/product cost) against each other.

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## Queensland Government comments

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Queensland Government continues its support of performance measurement and continuous improvement in public sector service delivery through its Managing for Outcomes Performance Management Framework. The Framework provides for the regular reporting of performance to the community, culminating in the annual Priorities in Progress whole-of-government report. The Charter of Social and Fiscal Responsibility requires that the Government reports progress against the stated Outcomes on an annual basis, also incorporating a summary of Outcome evaluations undertaken during the preceding year. In addition, agencies are required to prepare Ministerial Portfolio Statements, which summarise the achievements of the agency in the preceding year against agreed performance measures and strategic directions of the forthcoming year. Queensland Health's *Quality Improvement and Enhancement Program 1999-2004*, continues its implementation to guide improvements in the safety and quality of health care, with a particular emphasis on hospital-based care. A *Patient Satisfaction Survey* was conducted to investigate patient perceptions of the care and treatment provided by the 55 largest acute care public hospitals of Queensland. Patients included in the survey were those who had spent at least one night in a participating hospital. The patients surveyed reflected a satisfaction rate of 89%. The high proportion of patients that report being satisfied with their hospital stay is reassuring and indicates that hospitals are providing high quality care and treatment. A range of health outcomes plans have been implemented in the areas of coronary heart disease, injury, diabetes mellitus and asthma, while strong support for cancer research has continued. Future plans will target cancer and stroke. Queensland Health supports improved reporting of Indigenous health indicators by the Review of Commonwealth/State Service Provision and continues an active role in assisting with this task. Queensland Health is committed to improving health outcomes for Indigenous Queenslanders through partnerships with Aboriginal and Torres Strait Islander communities. The *Aboriginal and Torres Strait Islander Primary Care Initiative* is enhancing the Government's capacity to improve health outcomes focusing on child health, nutrition and chronic disease prevention. The appointment of additional Indigenous health and nutrition workers will further assist communities develop culturally appropriate health programs and implement strategies to address alcohol-related crime and violence, cancer screening, childhood growth and nutrition in mothers and children. Queensland Health is currently developing the *Strategic Policy Framework for Aboriginal and Torres Strait Islander People's Health 2002-2007*. The Queensland Health Framework is underpinned by the principles of the 1994 policy as well as the key action areas identified *National Strategic Policy Framework for Aboriginal and Torres Strait Islander Health: Framework for Action by Governments (June 2002)*. The Framework is also aligned with other key Queensland Health population based frameworks and will clarify for users the suggested action based on current and emerging strategic priorities.

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## Western Australian Government comments

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In 2002, the unified State public health system in WA consolidated the oversight of health into the care of the State Health Management Team (SHMT). In this model, the more traditional governance functions of a State health authority have become the responsibility of SHMT, an executive made up of the funder, the purchaser and the providers of public health services.

Population health objectives remain a significant focus of much activity in WA health. Initiatives for the maintenance of good health and the prevention of illness received attention through a number of programs that encouraged the community to pursue good lifestyle habits. Prominent among these were the *Go for 2 & 5* and the *Take Thirty* campaigns that respectively promoted the virtues of healthy eating and regular exercise.

The State held a Diabetes Symposium in May 2002 which introduced a 3-level care continuum framework to support diabetes sufferers. The Symposium brought together for the first time, all stakeholders in the care of people with diabetes.

The Oral Health Centre of Western Australia (OHCWA) and the Centre for Remote and Rural Oral health (CRROH) commenced operations in 2002. OHCWA combines tertiary training for the oral health workforce with the provision of dental health services to the eligible community. CRROH encourages dental health workers to take-up rural and remote service, through apprenticeship and rostering techniques. Both OHCWA and CRROH are jointly auspiced by the Department of Health (DoH) and the University of Western Australia.

A number of initiatives in the Mental Health sector focused on the improvement and expansion of care and support to sufferers and families of people with psychiatric illness. For example, a number of policies were released to guide the delivery of mental health services to different age groups and to people from culturally and linguistically diverse backgrounds

A major inquiry (Douglas Inquiry) into obstetric and gynaecological services at King Edward Memorial Hospital 1990-2000 was completed in 2002. A number of the Inquiry report's recommendations are already being implemented.

The Western Australian Council of Safety and Quality of Health Care was established in 2002 to provide high level strategic advice to the Minister and the Director General. Specifically the Council is to advise the DoH on:

- monitoring and evaluating the standard of safety and quality of services;
- providing strategic direction for quality improvement in health; and
- providing an expert forum for safety and quality development in WA.

The tragedy of Bali has demonstrated the readiness of the health system to respond to immediate and unforeseen demands for complex health care. However, meeting these demands has had flow-on effects on capacity, particularly for undertaking elective care in the State's hospitals.

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## South Australian Government comments

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The Department of Human Services 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 and is actively undertaking further development of integrated and coordinated service provision across all three portfolio areas of health, housing and community services.

The SA Government has commissioned a comprehensive review of South Australia's health system including its interface with the private and non-government sectors. The aim of the Generational Health Review is to deliver a plan that provides effective strategies for health system reform, which ensures that all South Australians enjoy the best possible health and have access to high standards of health care.

Constraints within the human services operational environment include a steadily increasing demand for human services, ageing capital infrastructure, and new technologies setting higher expectations of medical science. Despite these pressures the SA public hospital system is still one of the most technically efficient (as measured by the cost per casemix-adjusted separation). SA has successfully implemented population based breast and cervix screening programs, and immunisation programs as well as exploring innovative methods of case management, continuity of care and chronic illness management for target population groups and alternative models for service delivery.

Due to the inclusion in this report of unvalidated data from the National Survey of Mental Health Services, total recurrent expenditure for SA on specialist mental health services is overstated for 2000-01 by about \$7 million. Also full time equivalent health professional direct care staff numbers in specialist mental health services are significantly overstated. There is a trend for these staff numbers to decrease.

Table 9.18 reports Emergency Department waiting times by triage category. For the first time South Australia included data from major country hospitals (previously the scope was limited to major metropolitan hospitals). Country hospitals incorrectly reported some data, resulting in lower than expected percentages for patients seen within triage category. The percentages for SA, excluding country hospitals, are:

1- Resuscitation:	99
2- Emergency:	68
3- Urgent:	57
4- Semi-urgent:	56
5- Non-urgent:	87
Total	49

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## Tasmanian Government comments

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Tasmania continues to support comparisons of performance against key indicators between jurisdictions. 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 overall performance under a framework based on that adopted by the National Health Performance Committee (NHPC). As with the frameworks used in this report and the NHPC framework, the development of meaningful and measurable indicators of performance is a continuous process of improvement over time.

During 2002 The Department has continued to embed the community benchmarks set by Tasmania *Together* into its performance monitoring system. Tasmania *Together* is a twenty-year social, environmental and economic plan for Tasmania developed through extensive community consultation. Under the plan Government Agencies are required to report annually to an independent body, the Tasmania *Together* Progress Board, on performance against a range of outcome targets.

As with other jurisdictions, Tasmania continues to face the challenges associated with increasing cost and demand pressures. The cost of maintaining and replacing essential technology and equipment together with difficulties in recruiting, training and retaining an appropriate workforce have a continuing impact on the capacity of the Department to deliver services to clients. Additionally, and as with other jurisdictions, growth in demand associated with an ageing population and increases in the prevalence of chronic disease and social conditions place a growing strain on the health and human services system. In particular, the burden of maintaining and supporting patients with chronic conditions through regular high cost intervention needs to be balanced against a greater investment and focus on lower cost preventative strategies.

Notwithstanding Tasmania's support for the objectives of this Report, it should be noted that there are significant issues affecting jurisdictional comparability under some indicators. Jurisdictional differences in funding arrangements, administration and clinical practice can reduce comparability of data. It is hoped that further planned work undertaken around indicators, such as those relating to elective surgery, will increase the relevance of inter-jurisdictional comparisons over time.

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## Australian Capital Territory Government comments

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The ACT provides a comprehensive range of health services to its residents, as well as to those living in surrounding regions of New South Wales. The ACT continues to support the comparative reporting of data across jurisdictions as a tool for supporting attempts to improve the health of its population and the cost efficiency of ACT Health Services. As in previous reports, however, readers should take care when comparing results for the ACT with those from other jurisdictions.

The ACT has a relatively small population, and comparisons of participation rates for selected services, especially for minority groups, are subject to substantial variation across time due to small numbers. A similar situation applies when comparing incidence, prevalence and mortality rates for selected conditions across jurisdictions.

Comparisons of costs for particular services across jurisdictions should also be read with caution. Accounting methods for costing services are subject to substantial variation. For example, the attribution of oncosts to services operating within a centralised administrative network can be difficult. This issue applies with public hospital costing, and may affect estimated costs for other services.

Regardless of accounting issues, readers of cost comparisons across jurisdictions should also be aware of cost drivers that may apply differentially across jurisdictions. Issues of note include: differences in the way jurisdictions structure their health systems; the presence of economies and diseconomies of scale; and, relative ability to attract qualified health workers.

The ACT Department of Health and Community Services has recently undergone a review. Along with some restructures, outcomes of this review include a move to step away from the use of a Purchaser-Provider model for hospital funding, and a more collegiate approach between the Department and health care providers. In the medium term, this may have impacts on key indicators for some ACT health services.

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### **Northern Territory Government comments**

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The Department of Health and Community Services operates five public hospitals located in the major population centres with a combined total of 569 beds. The hospitals form a network of general and specialist medical services providing primary screening, prevention, acute and chronic care services. A network of 98 community health centres and more than 100 GP practices support the hospitals. Almost 30 per cent of the populace is Indigenous persons many living in remote localities which create challenges to ensuring access to health services.

Demands on the public hospital system in the Territory differ markedly from most other parts of Australia due to a combination of factors, including remoteness, small and scattered population and the absence of alternative health care providers. Another demand on health services is the large number of tourists who use Territory health care while in the area

As a result, public hospitals in the Territory provide a range of acute and non acute services that would not usually be provided in other states. In addition, where specialised treatments and services are not available locally, referrals are arranged for patients between NT based hospitals or to interstate hospitals. These factors, as well as relatively higher costs for transport, fuel, labour and consumables add to the cost of providing hospital services when compared to those accessed by other Australians.

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## 11.7 Definitions

Table 11.10 Terms

<i>Term</i>	<i>Definition</i>
<b>General</b>	
AR-DRG v4.1 (Australian Revised 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 (DRGs) which represented 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); 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 suffering from a disorder or illness for the first time during a given period (often expressed as per 100 000 persons).
Separation	Separation is defined as the process whereby an admitted patient completes an episode of care.
<b>Breast cancer</b>	
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 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).
Cost per woman screened	The total cost of provision of breast screening services divided by the number of women screened. The total cost of provision of breast screening services 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 ( $\leq 15$ mm) invasive breast cancers detected per 10 000 women screened.
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.
Invasive cancer	A tumour whose cells invade healthy or normal tissue.

(Continued on next page)

**Table 11.10 (Continued)**

<i>Term</i>	<i>Definition</i>
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 died as a result of breast cancer, expressed per 100 000 women in the population.
Participation rate	The number of women resident in the catchment area screened divided by the number of women resident in the catchment area. If a woman is screened is more than once during the reference period, then only the first screen is counted. Expressed as a per cent. 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 post code or SLA.
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 would otherwise 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 attended such a service before.
Size of detected cancers	The percentage of invasive cancers detected classified according to tumour size.
Total mastectomy	Removal of the breast. This is also known as simple mastectomy.
<b>Mental health</b>	
Acute services	<p>These services 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 is focused on symptom reduction with a reasonable expectation of substantial improvement. In general, acute psychiatric services provide relatively short term treatment. Acute services may be:</p> <ul style="list-style-type: none"> <li>• focused 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; and</li> <li>• targeted at the general population, or be specialist in nature, targeted at specific clinical populations. The latter group include psychogeriatric, child and adolescent, and forensic psychiatry services.</li> </ul>

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**Table 11.10 (Continued)**

<i>Term</i>	<i>Definition</i>
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.
Anxiolytics	Tranquillisers; drugs that reduce anxiety.
Anxiety disorders	Feelings of tension, distress or nervousness. Includes agoraphobia, social phobia, panic disorder, generalised anxiety disorder, obsessive-compulsive disorder and post traumatic stress disorder.
Available beds	Refers to the number of available beds at 30 June. Available beds are those immediately available for use by admitted patients if required. They are immediately available for use if located in a suitable place of care with nursing or other auxiliary staff available within a reasonable period. Beds in wards which were temporarily closed due to factors such as renovations or strikes but which would normally be open and therefore available for admission of patients are generally included. 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 a 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.
Comorbidity	The simultaneous occurrence of two or more disorders such as depressive disorder with anxiety disorder, or depressive disorder with anorexia.

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**Table 11.10 (Continued)**

<i>Term</i>	<i>Definition</i>
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, which 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 is usually able to 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 principally targeting the general adult population (18–65 year range) but which may provide services to children, adolescents or the aged. General Psychiatry services therefore are those services that cannot be described as specialist child and adolescent, geriatric or forensic services.
Generalised anxiety disorder	General psychiatry inpatient services include hospital units in which the principal function is the provision of some form of specialised service to the general adult population (for example, inpatient psychotherapy) or which focus on specific clinical disorders within the adult population (for example, post-natal depression, anxiety disorders). Unrealistic or excessive anxiety and worry about two or more life circumstances for six months or more, during which the person had these concerns more days than not.
Geriatric psychiatry services	Services principally targeting people in the age group 65 years and over. Classification of services in this category requires a recognition by the regional or central funding authority of the special focus of the inpatient service on aged persons. This category does not include 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 or social abilities.

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Table 11.10 (Continued)

<i>Term</i>	<i>Definition</i>
Mental health	The capacity of individuals within groups and the environment to interact with one another in ways that promote subjective wellbeing, 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 that the criteria for a mental disorder are met.
Mental illness prevention	Interventions that occur before the initial onset of a disorder.
Mental health promotion	Activities designed to lead to improvement of the mental health functioning of persons through prevention, education and intervention activities and services.
Mortality rate from suicide	The percentage of the population who died 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 are focused on disability and the promotion of personal recovery. They are also characterised by an expectation of substantial improvement over the short to mid term. Patients treated by rehabilitation services usually have a relatively stable pattern of clinical symptoms. 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 is focused on preventing deterioration and reducing impairment. Improvement is only expected over a long time period.
Non-government organisations (NGOs)	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 NGO 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	<p>Obsessions: recurrent, persistent ideas, thoughts, images or impulses that intrude into the person’s consciousness against his/her will. The person experiences these as being senseless or repugnant, but is unable to ignore or suppress them.</p> <p>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.</p>
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.

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**Table 11.10 (Continued)**

<i>Term</i>	<i>Definition</i>
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.
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)	Records all days or part days that each 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: <ul style="list-style-type: none"> <li>• for a patient admitted and discharged on different days, only the day of admission is counted as a patient day;</li> <li>• admission and discharge on the same day is equal to one patient day;</li> <li>• leave days are not included when they involve an overnight absence; and</li> <li>• a patient day is recorded on the day of return from leave.</li> </ul>
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 which may include delusions, hallucinations, disorganised speech or behaviour, a flattening in emotions and a restriction 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.

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Table 11.10 (Continued)

<i>Term</i>	<i>Definition</i>
Specialised mental health services	<p>Services defined as those in which:</p> <ul style="list-style-type: none"> <li>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 being applicable regardless of the source of funds; and</li> <li>such activities are delivered from a service or facility which is readily identifiable as both specialised and serving a mental health function.</li> </ul>
Specialised residential services	<p>Services provided in the community that are staffed by mental health professionals on a 24-hour basis.</p>
Staffing categories (mental health)	<p><i>Medical officers:</i> 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.</p> <p><i>Other medical officers:</i> Medical officers employed or engaged by the organisation who are neither registered as psychiatrists within the State or Territory nor formal trainees within the Royal Australian and New Zealand College of Psychiatrists' Postgraduate Training Program.</p> <p><i>Psychiatrists and consultant psychiatrists:</i> Medical officers who are registered to practice psychiatry under the relevant State or Territory Medical Registration Board.</p> <p><i>Psychiatry registrars and trainees:</i> Medical officers who are formal trainees within the Royal Australian and New Zealand College of Psychiatrists' Postgraduate Training Program.</p> <p><i>Nursing staff:</i> All categories of registered nurses, enrolled nurses, student nurses or trainee/pupil nurses employed or engaged by the organisation.</p> <p><i>Registered nurses:</i> Persons with at least a three-year training certificate or tertiary qualification and certified as a registered nurse with the State or Territory registration board. This is a comprehensive category and includes general and specialist categories of registered nurses.</p> <p><i>Non registered nurses:</i> Enrolled nurses and student nurses not included in the previous category.</p> <p><i>Diagnostic and health professionals:</i> Qualified staff (other than qualified medical or nursing staff) 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 dietitians.</p> <p><i>Social workers:</i> Persons who have completed a course of recognised training and are eligible for membership of the Australian Association of Social Workers.</p> <p><i>Psychologists:</i> Persons who are registered as psychologists with the relevant State or Territory registration board.</p> <p><i>Occupational therapists:</i> Persons who have completed a course of recognised training and who are eligible for membership of the Australian Association of Occupational Therapists.</p> <p><i>Other personal care staff:</i> Attendants, assistants, home companions, family aides, ward helpers, wardsmen, orderlies, ward assistants and nursing assistants engaged primarily in the provision of personal care to patients or residents, who are not formally qualified or undergoing training in nursing or allied health professions.</p>

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Table 11.10 (Continued)

<i>Term</i>	<i>Definition</i>
Staffing categories (mental health) (Continued)	<p><i>Administrative and clerical staff:</i> Staff engaged in administrative and clerical duties. Medical, nursing, diagnostic and health professional and domestic staff wholly or partly involved in administrative and clerical duties are excluded, and should be counted under their appropriate occupational categories.</p> <p><i>Domestic and other staff:</i> Staff involved in the provision of food and cleaning services. This category also includes all staff not elsewhere included (for example, maintenance staff, tradespersons, gardening staff).</p>
Stand-alone hospitals	Beds within health establishments primarily devoted to the treatment and care of inpatients with psychiatric, mental or behavioural disorders, which 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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