
7 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 is provided in section 7.1. Sections 7.2 and 7.3 report on the performance of breast cancer and mental health management respectively. Section 7.4 outlines the future directions for the chapter and jurisdictions' comments relating to all the health chapters are summarised in section 7.5. Definitions are listed in section 7.6.

Improvements to reporting of breast cancer detection and management include refining the reporting of participation rates for special needs groups in screening and cost per woman screened and presenting information on government funding of BreastScreen Australia.

Improvements to reporting of mental health management include:

- reporting estimates of State and Territory government expenditure on specialised mental health services that have been refined to exclude all components of Commonwealth Government spending;
- improved reporting of quality of care to reflect review against National Standards for Mental Health Services with such reviews being included in the accreditation processes for health facilities; and
- presentation of unit cost data for community based care.

Supporting tables

Supporting tables for chapter 7 are provided on the CD-ROM enclosed with the Report. The files are provided in Microsoft Excel 97 format as \Publications\Reports\2002\Attach7A.xls and in Adobe PDF format as \Publications\Reports\2002\Attach7A.pdf.

Supporting tables are identified in references throughout this chapter by an 'A' suffix (for example, table 7A.3 is table 3 in the electronic files). They may be subject to revision. The most up-to-date versions of these files can be found on the Review's web page (www.pc.gov.au/gsp/). Users without Internet access can contact the Secretariat to obtain up-to-date versions of these tables (see details on the inside front cover of the Report).

7.1 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. 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 subjects of public health programs designed to reduce the impact of the health problem (box 7.1). Public health programs require the participation of public hospital services, community health services and general practice services. (The public hospital and general practice components of the health care system are discussed in chapters 5 and 6 respectively.)

The Health preface of this Report outlines the complexities of reporting on the performance of the overall health system in meeting its objectives. This Report breaks the health system into smaller components and reports on their performance (see figure C.4 of the Health preface). Frameworks for public hospitals and general practitioners (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.

A longer term goal of the Review is to extend the health management framework to other health issues, such as the remaining National Health Priority Areas. The Commonwealth, State and Territory governments report a limited number of priority indicators encompassing the continuum of care (from prevention through to treatment, rehabilitation and palliation) for each area on a regular basis (AIHW 2000a). The first report on injury prevention and control was released in 1998, and reports for cardiovascular health, diabetes mellitus and mental health were released in 1999. National reports for the Cervical Screening Program and BreastScreen Australia were published in 1998, 1999 and 2000.

Box 7.1 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 and cervical cancer screening services); and
- provision of health services (for example, school dental services and drug and alcohol treatment services).

Promotion and protection activities are often 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 — GPs, public hospitals and community health services. General practitioners 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

(Continued on next page)

Box 7.1 (Continued)

(dietitians, community nurses, psychologists and so on). This multidisciplinary approach makes it difficult to attribute health outcomes to a particular service or provider.

Source: AIHW (1998a); Fry (1994) and NPHP (1997).

7.2 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 7.2).¹ 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 the size and grade of *ductal carcinoma in situ* (non-invasive tumours residing in the ducts of the breast).

Box 7.2 Some common health terms used in breast cancer management

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 as per 100 000 persons).

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

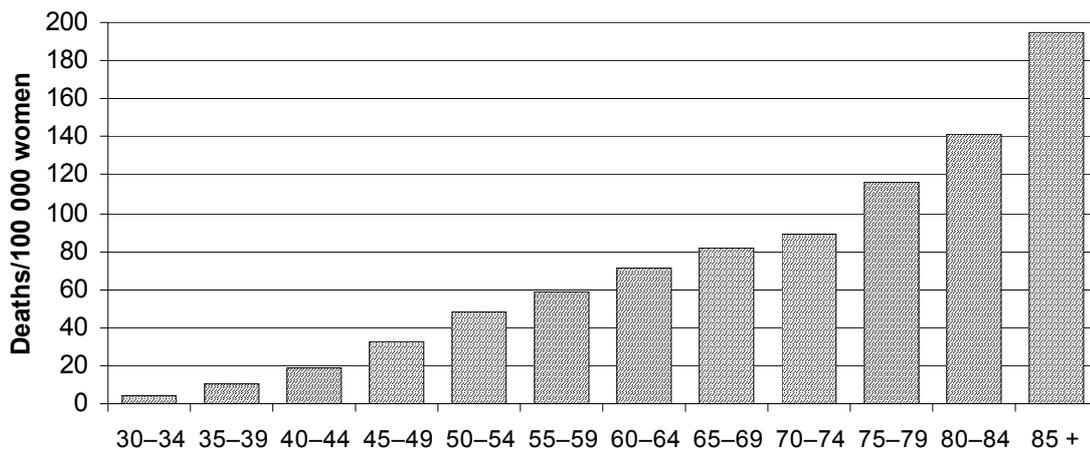
prevalence: the number of cases of a disease present in a population at a given time (point prevalence) or during a given period (period prevalence).

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

¹ Breast cancer in males is very rare and is not examined in this Report.

Breast cancer was responsible for 2542 female deaths in 1998 and 2505 female deaths in 1999, making it the most frequent cause of death from cancer for females (ABS 2000). The strong relationship between age and the mortality rate from breast cancer is shown for the period 1995–98 in figure 7.1. Whereas women aged 40–44 years have a mortality rate of 19.1 per 100 000 women, women aged 75–79 have a mortality rate of 115.7 per 100 000 women.

Figure 7.1 **Mortality rates from breast cancer by age group, 1995–98**



Source: AIHW 2000b; table 7A.19.

Incidence and prevalence

Breast cancer was the most common cancer affecting Australian women, with 10 665 new cases diagnosed in 1998 (AIHW 2000b). 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 each year increased between 1992 and 1998 from 7976 to 10 665 (table 7.1). 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).

Table 7.1 New cases of breast cancer diagnosed (number)^a

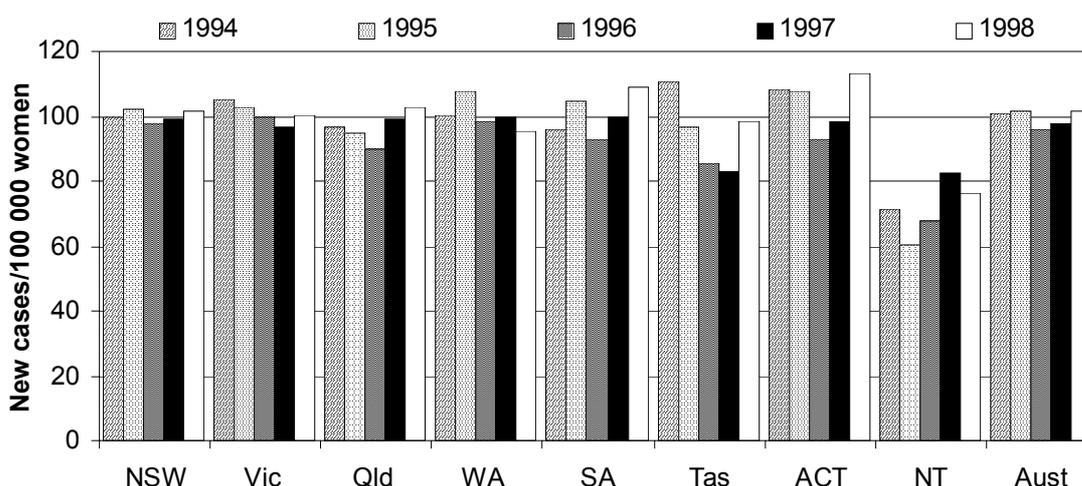
	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
1992	2 712	2 054	1 357	751	765	204	100	33	7 976
1993	3 053	2 173	1 544	779	794	244	115	29	8 731
1994	3 338	2 605	1 593	846	821	288	141	45	9 677
1995	3 489	2 595	1 621	942	909	255	150	32	9 993
1996	3 417	2 565	1 586	886	823	228	133	46	9 684
1997	3 530	2 560	1 787	923	893	230	141	53	10 117
1998	3 690	2 694	1 903	909	984	271	170	44	10 665

^a 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.

Source: AIHW unpublished data; table 7A.1.

Age standardised incidence rates of breast cancer are presented in figure 7.2. (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 (table 7A.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).

Figure 7.2 Age standardised incidence rates of breast cancer, women of all ages^{a, b}

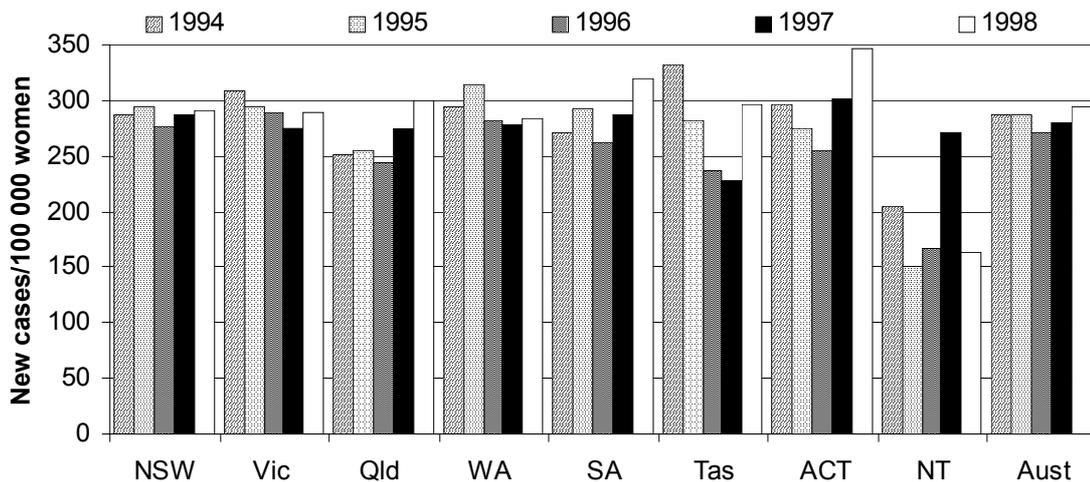


^a Incidence refers to the number of new cases of breast cancer expressed per 100 000 women. ^b Rates are age standardised to the Australian 1991 population standard.

Source: AIHW (unpublished 1998; 1999 and 2000); table 7A.2.

Incidence rates of breast cancer for women aged 50–69 years are shown in figure 7.3. In 1998, incidence rates were highest in the ACT (345.5 per 100 000 women) and lowest in the NT (164.1 per 100 000 women).

Figure 7.3 Incidence rates of breast cancer, women aged 50–69 years^{a, b}



^a Incidence refers to the number of new cases of breast cancer, expressed per 100 000 women. ^b Rates are age standardised to the Australian 1991 population standard.

Source: AIHW (unpublished); table 7A.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).

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.

The focus of breast cancer control is on screening to enable early detection and intervention as this increases the probability of survival. 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 1999). Cancers detected early may be treated more conservatively and these women generally have a higher likelihood of survival.

BreastScreen Australia, a joint Commonwealth–State program, undertakes nationwide breast cancer screening. BreastScreen Australia targets women aged 50–69 years. Some international evidence would suggest that for this age group, organised systematic population based mammographic screening every two years can reduce deaths from breast cancer. 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 generally encompass x-ray screening and assessment services up to the point of diagnosis and referral for treatment. Some jurisdictions, however, do not offer open biopsies (table 7A.5).

Estimates of government expenditure on breast cancer screening by jurisdiction are presented in the attachment (table 7A.6) and estimates of expenditure on screening per person in each jurisdiction are presented in figure 7.4. The jurisdictional estimates include Commonwealth, State and Territory government expenditure.

According to the Australian Institute of Health and Welfare (AIHW 2001c), \$90.8 million was spent by governments on breast cancer screening in 1998-99. Differences across jurisdictions will in part reflect variation in the proportion of women in the target age group for breast cancer screening. Differences across jurisdictions may also, however, reflect data deficiencies and collection methods, as well as the nature of the services and their relative efficiency. The data should therefore be viewed with care.

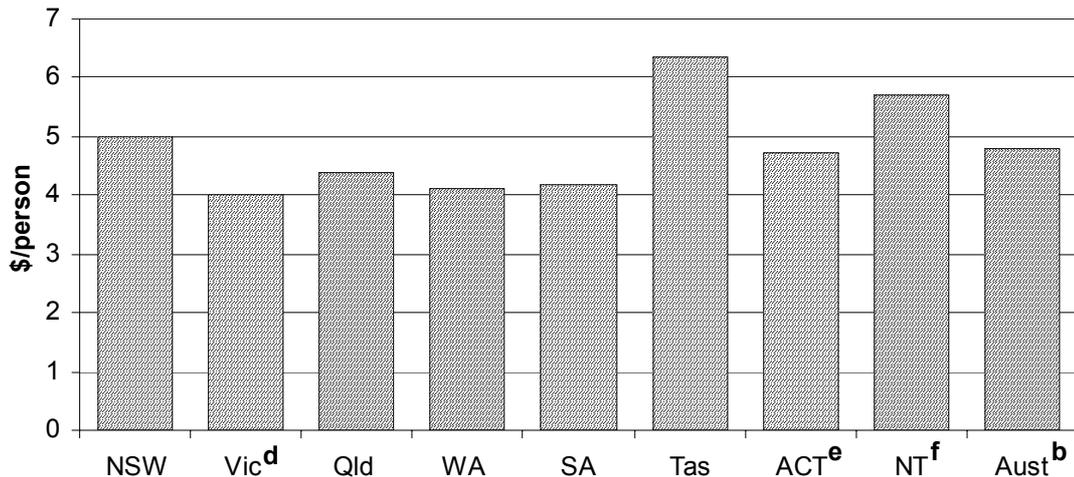
The number of women aged 40 years and over screened by BreastScreen Australia services between 1996 and 2000 and the number of screens performed over the same time period provides an indication of the size of the BreastScreen Australia program (table 7.2).

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 follow-up. Relevant clinical disciplines include surgery, plastic and reconstructive surgery, pathology, radiation and medical oncology, nursing, diagnostic radiology, radiography, physiotherapy, allied health and psychological and psychiatric services. Post-acute services include a range of further treatments, such as radiotherapy and chemotherapy (most of which take place on a same day or outpatient basis) and a range of follow-up and palliative care services (DHS 1999).

Inpatient separations in public hospitals for selected breast cancer related diagnosis related groups (DRGs) in 1999-2000 are presented in table 7.3. 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.

Figure 7.4 Public health expenditure on breast cancer screening, 1998-99^{a, c, g}



^a 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 (PHOFA). ^b The Australian total includes Commonwealth direct project expenditure, statistical and other program support, population health non-grant program costs and running costs. ^c Medicare funding for radiographic breast examinations is excluded as it is not considered public health expenditure. ^d Victorian data include depreciation. ^e ACT data include expenditure on BreastScreen ACT and the Cancer Registry. ^f NT data 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. ^g The data should be viewed with care because of data deficiencies and 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.

Source: AIHW (2001c); table 7A.6.

Table 7.2 Number of women screened and number of screens performed by BreastScreen Australia^a

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
1999								
Women	273 995	171 366	na	59 993	64 194	19 382	12 256	na
Screens	274 289	171 390	153 931	60 015	64 199	19 381	12 256	na
2000								
Women	277 400	177 232	na	65 581	65 494	na	11 438	na
Screens	277 597	177 237	na	65 630	65 497	21 341	11 439	na

^a First and subsequent screening rounds, women aged 40 years and over. **na** Not available.

Source: BreastScreen Australia; table 7A.7 and table 7A.8.

Table 7.3 Separations for selected DRGs related to breast cancer, public hospitals, 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 ^b disorders (age>69 W CC)	0.13	0.13	0.06	0.03	0.06	0.01	—	—	0.40
Malignant breast ^{a,b} 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 ^a 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
Total separations in public hospitals	1 245.81	1 003.61	707.91	360.39	360.02	75.95	60.66	57.84	3 872.20

^a W/O CC = 'without complications and comorbidities'. ^b W CC = 'with complications and comorbidities'. — Nil or close to zero. AR-DRG version 4.1.

Source: AIHW (2001b); table 7A.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 2001.² 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 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 2001-02 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 were previously reported by symptom status. In the 2002 Report, stratification of reporting by symptom status has been temporarily discontinued until symptom status can be more accurately defined.

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 7.3).

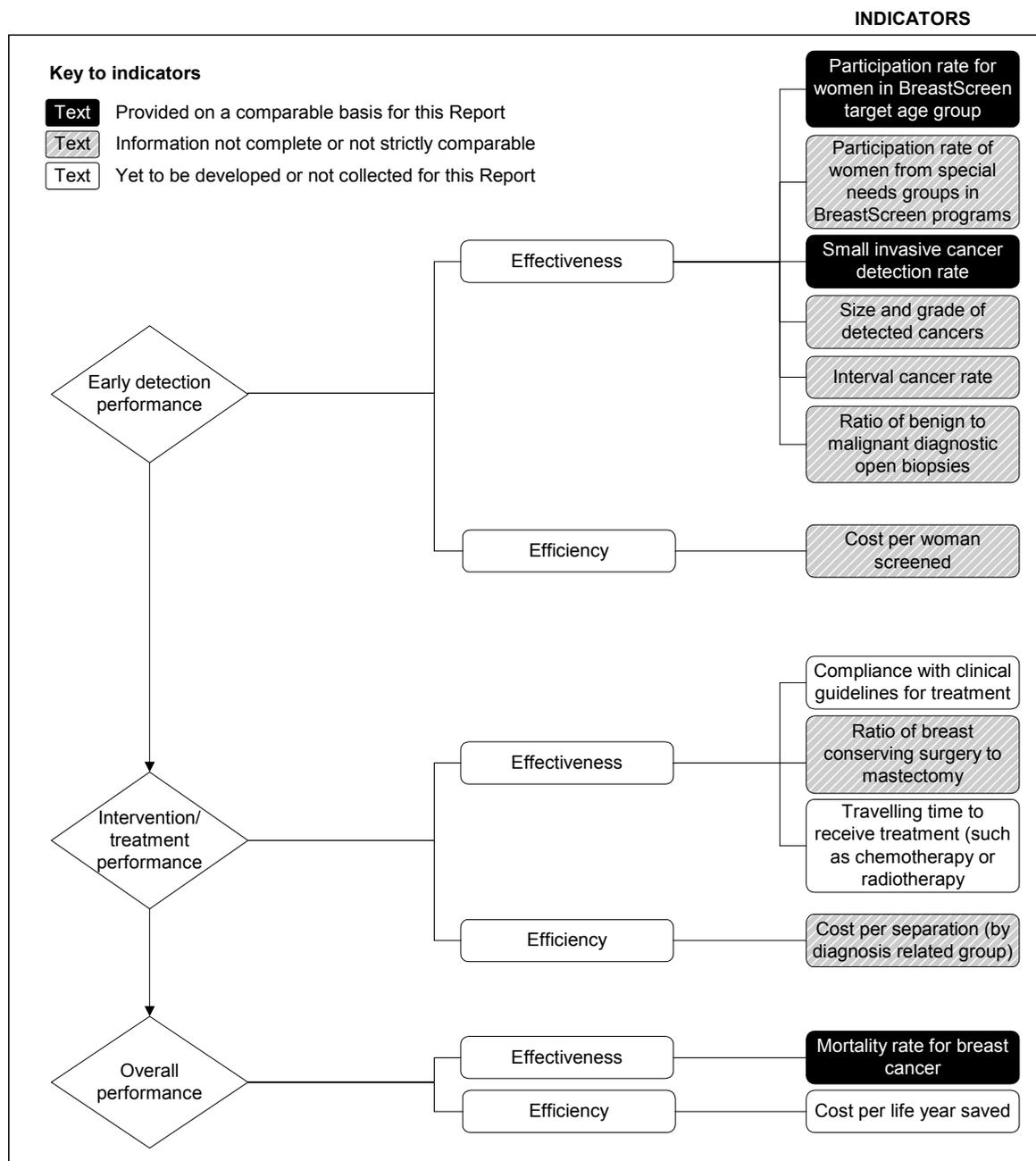
Box 7.3 Objective for breast cancer detection and management

The objective for breast cancer management is to reduce incidence of, and mortality from, breast cancer and to improve the quality and duration of life of women with breast cancer or at heightened risk of breast cancer in a manner that is equitable and efficient (Commonwealth Department of Human Services and Health 1994).

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 (figure 7.5). A similar approach is adopted for emergency management services (see chapter 11).

² 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.

Figure 7.5 Performance indicators for breast cancer detection and management



Key performance indicator results

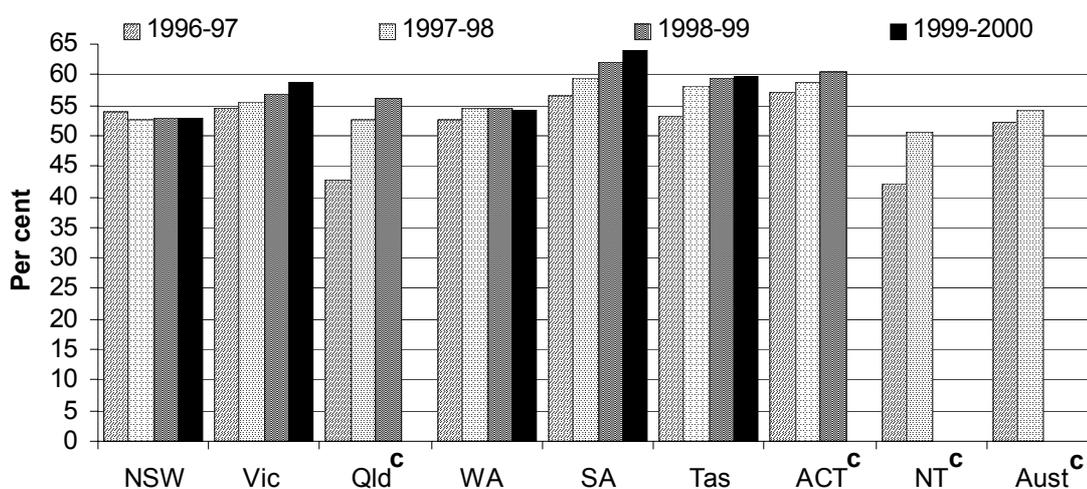
As mentioned, as there are significant amounts of data relating to breast cancer screening, this is the focus of reporting. Data relating to the management and treatment of breast cancer are less readily available and it is a priority of the Review to extend reporting in this area.

Early detection

Participation rate of women in the target age group

The aim of BreastScreen Australia is to screen 70 per cent of women aged 50–69 years at regular two-year intervals, where screening services have been established for five years or more. The participation of women in the target age group in breast cancer screening is an indicator of the effectiveness of breast cancer screening programs. Data for 1999–2000 are not available for the ACT, the NT and Queensland (figure 7.6). In 1999–2000, the participation rate for women aged 50–69 was highest in SA (64.0 per cent) and lowest in NSW (52.8 per cent). It should be noted that data for 1996–97 and 1997–98 were sourced from the AIHW and more recent data were sourced from jurisdiction governments. There may be differences in methodology between the two different sources that cause a break in the time series.

Figure 7.6 Participation rates of women aged 50–69 years in BreastScreen Australia screening programs^{a, b, d}



^a The participation rate is the number of women resident in the catchment area screened during the reference period, divided by the number of women resident in the catchment area during the reference period based on ABS ERP data. 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 population, accessibility and the location of other services. It is uniquely defined for each service based on postcode or statistical local area (SLA). Reference period is 24 months. ^b Crude rates. ^c 1999–2000 data were not available for Queensland, 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. ^d Data for 1996–97 and 1997–98 are sourced from the AIHW and data for 1998–99 and 1999–2000 are sourced from jurisdiction governments. There may be differences in methodology between the two sources that cause a break in the time series.

Sources: State and Territory governments (unpublished); AIHW (1998a and 2000b); table 7A.10.

Under the national accreditation requirements of the BreastScreen Australia program, at least 60 per cent of the women screened need to be in the target age group (50–69 years). According to BreastScreen Australia, this target was achieved in all jurisdictions in 1997-98, with approximately two thirds of women screened in the target age group. The remaining third comprised 20 per cent aged 40–49 years and 10 per cent aged 70 years or more (AIHW 2000b). This target was also achieved by all jurisdictions in 1999 (except the NT where data were not available) (table 7A.7).

Participation rates of women from special needs groups in BreastScreen Australia programs

The participation rate of women from special needs groups (that is, Indigenous women, women from non-English speaking backgrounds 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 7.4. The data are not age standardised. Differences across jurisdictions in the collection of Indigenous, non-English speaking background and rural/remote status make comparisons difficult. Care needs to be taken in comparing data across jurisdictions.

In most jurisdictions, it appears that participation rates for Indigenous women aged 50–69 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 non-metropolitan areas appear higher (in general) than the rates for women in metropolitan areas. The rates for women from non-English speaking backgrounds aged 50–69 are higher than for the total female population aged 50–69 in Victoria, Queensland, and WA and lower in other States.

Table 7.4 Participation rates of women aged 50–69 years from selected communities in BreastScreen Australia screening programs (per cent)^{a, b}

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Indigenous ^c								
1998-99	35.1	na	54.4	42.7	43.0	42.5	52.0	na
1999-2000	37.8	na	na	43.5	48.0	43.6	49.0	na
NESB ^d								
1998-99	46.7	57.2	65.6	56.0	57.7	33.8	59.0	na
1999-2000	47.7	60.9	na	58.3	60.3	32.1	59.0	na
Metropolitan or capital city ^e								
1998-99	52.1	55.8	53.5	51.4	60.3	58.6	61.0	na
1999-2000	51.3	56.4	na	51.5	62.8	60.7	60.0	na
Rural and remote or rest of state ^f								
1998-99	57.3	63.7	59.8	63.8	68.2	58.6	..	na
1999-2000	57.0	65.6	na	62.5	67.5	60.3	..	na
Total aged 50–69								
1998-99	52.8	56.9	56.1	54.5	62.1	59.3	60.5	na
1999-2000	52.8	58.9	na	54.3	64.0	59.9	na	na

^a First and subsequent rounds ^b Crude rates. ^c Indigenous is defined as women who have self identified as being Aboriginal or Torres Strait Islander. ^d NESB is defined as persons who speak a language other than English at home. ^e '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). ^f 'Rural and remote' includes 'large rural centre' (statistical local areas (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 7A.10 and 7A.11.

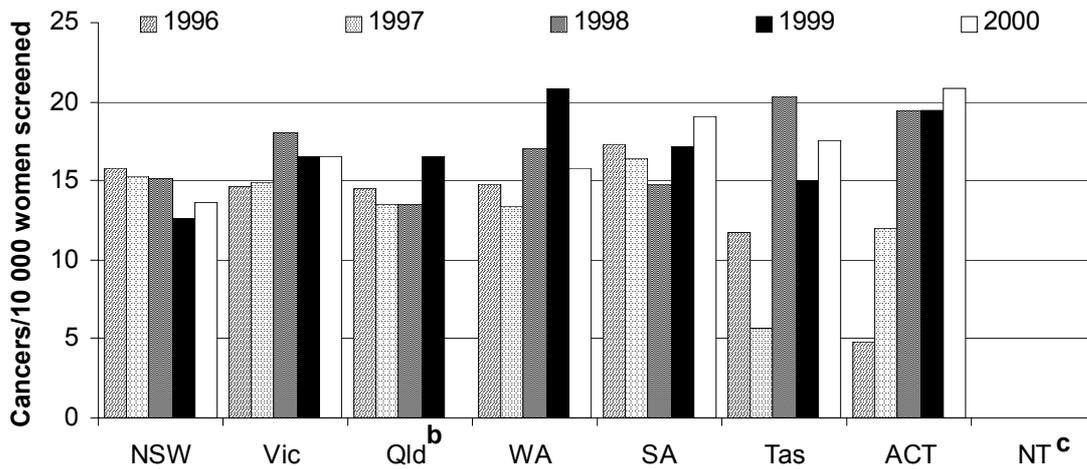
Small invasive cancer detection rate

The small invasive cancer detection rate is an important indicator of the effectiveness of breast cancer screening programs. The BreastScreen Australia National Accreditation Requirements Standard is that more than eight invasive cancers per 10 000 women screened have a diameter of 10 millimetres or less. Small cancers (those with a diameter less than or equal to 10 millimetres) 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).

For women aged 50–69 years screened by BreastScreen Australia in 1999, the small invasive cancer detection rate (per 10 000 women screened) was highest in WA (20.8) and lowest in NSW (12.6). In 2000, the highest rate was in the ACT (20.8)

and the lowest in NSW (13.6). Data for 2000 were not available for Queensland (figure 7.7).

Figure 7.7 **Small diameter cancer detection rate, for women aged 50–69 years, all rounds of screening^a**



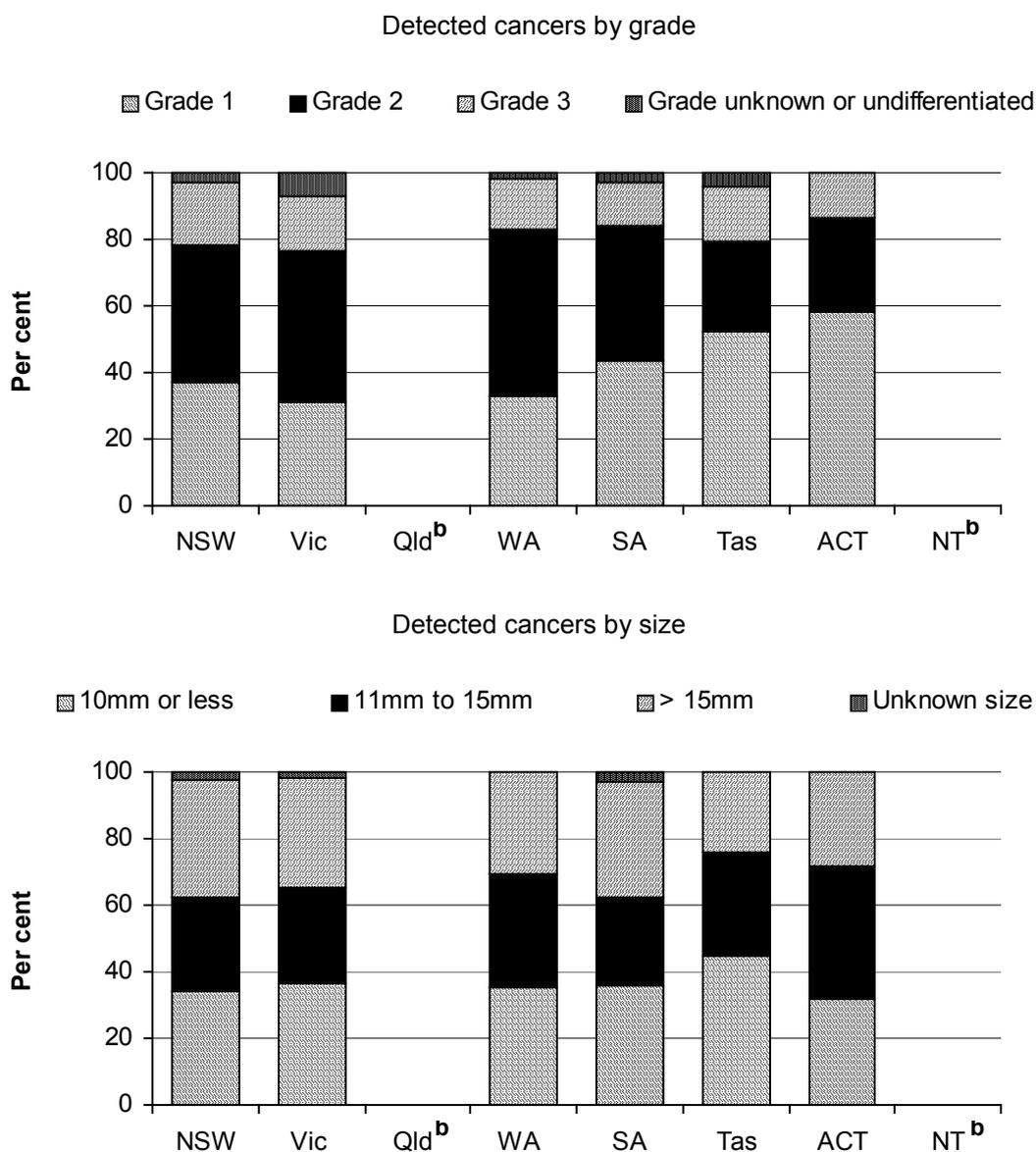
^a Crude rates. ^b Queensland data for 2000 not available. ^c NT data not available.

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

Size and grade of detected cancers

The size and grade of detected invasive cancers are also indicators of the effectiveness of the breast cancer screening program. The tumour grade describes the degree of similarity of cancer cells to normal cells. The degree of differentiation of the cancer determines the disease prognosis. Women with low grade (grade 1, well differentiated) cancers have a better prognosis than those with high grade cancers. Figure 7.8 presents the proportion of cancers by size and grade for 2000. The source of data is BreastScreen Australia and covers only clients of BreastScreen Australia. Not all invasive cancers are included.

Figure 7.8 **Detected invasive cancers by grade and size as a proportion of total detected invasive cancers^a**



^a Non-breast malignancies not counted. ^b NT and Queensland data not available.

Source: State and Territory governments (unpublished); table 7A.13.

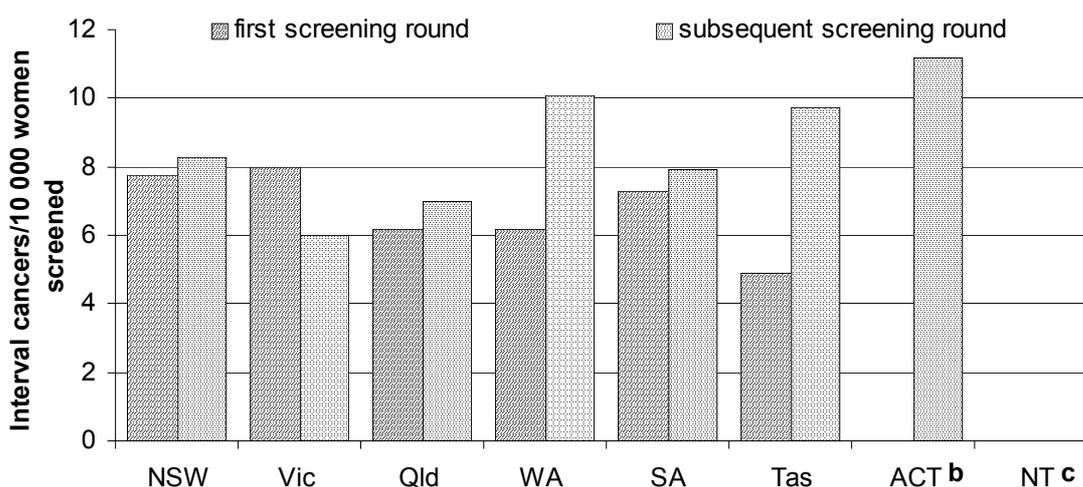
Interval cancer rate

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 sensitivity and the efficiency of breast cancer screening. A high rate may indicate that not all breast cancers were detected during screening.

There is a time lag in obtaining data for this indicator as BreastScreen Australia data must be matched with that of Cancer Registries. Hence, the latest data available are for 1997. More recent data are included in the attachment but are preliminary only (table 7A.15). As discussed in the Policy developments section, data this year are not stratified by symptom status and include both symptomatic and asymptomatic women.

In 1997 for women aged 50–69 years, during the 12 month period after the first screening round, interval cancer rates were highest in Victoria (8.0 per 10 000 women screened) and lowest in the ACT (zero per 10 000 women screened). During the 12 month period after the subsequent screening round, interval cancer rates were highest in the ACT (11.2) and lowest in Victoria (6.0) (figure 7.9).

Figure 7.9 Interval cancer rate, asymptomatic and symptomatic, women aged 50–69 years, 1997^a



^a Rates are expressed as number of invasive cancers per 10 000 women screened. ^b Rate for the first screening round for the ACT was zero. ^c NT data not available.

Source: State and Territory governments (unpublished); table 7A.14

Ratio of benign to malignant diagnostic open biopsies

As the emphasis of breast cancer screening is on detecting small malignant cancers, a low ratio of benign to malignant diagnostic open biopsies indicates effectiveness in detecting malignant cancers while minimising the need for invasive procedures.³ The ratio summarises the results for all women who underwent an open surgical procedure (biopsy) relating to their screening visit in the reference year. The benign

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

to malignant diagnostic open biopsy ratio expresses the number of benign open biopsies compared to all malignancies detected. The intent is to measure the ratio of women who had unnecessary surgery because a diagnosis was not obtained during the assessment process. It is a measure of the effectiveness of the assessment process in obtaining a diagnosis. The BreastScreen Australia National Accreditation Requirements stipulate a benign to malignant open surgical procedure ratio of less than 2:1 for first round screening and of 1:1 for subsequent screening rounds.

In 2000, the ratio of benign to malignant diagnostic open biopsies for women aged 50–69 years in:

- NSW for the first screening round was 0.68 and the subsequent round was 0.44;
- WA for the first screening round was 0.28 and the subsequent round was 0.17;
- SA for the first screening round was 0.19 and the subsequent round was 0.04;
- Tasmania for the first screening round was 0.80 and the subsequent round was 0.30; and
- the ACT for the first screening round was zero and the subsequent round was 0.50 (table 7A.15).

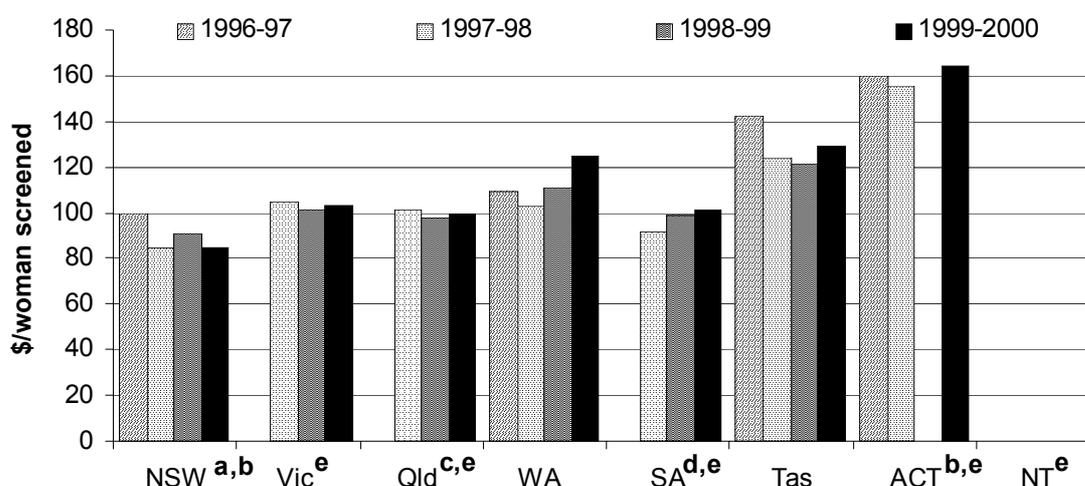
Data for 2000 were not available for Victoria, Queensland or the NT.

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 management.

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. Care needs to be taken when making comparisons across jurisdictions. Estimates of costs in each jurisdiction are presented in figure 7.10. In 1999-2000, unit costs appeared to be highest in the ACT and lowest in NSW.

Figure 7.10 Cost per woman screened, BreastScreen Australia services



^a NSW data do not include subsidies. ^b NSW and the ACT were the only states to include a user cost of capital. ^c Qld data do not include depreciation. ^d SA data calculated on accrual not cash basis. ^e NT data not available. ACT data not available for 1998-99. Victorian, Queensland and SA data not available for 1996-97.

Source: State and Territory governments; table 7A.16

Intervention/treatment

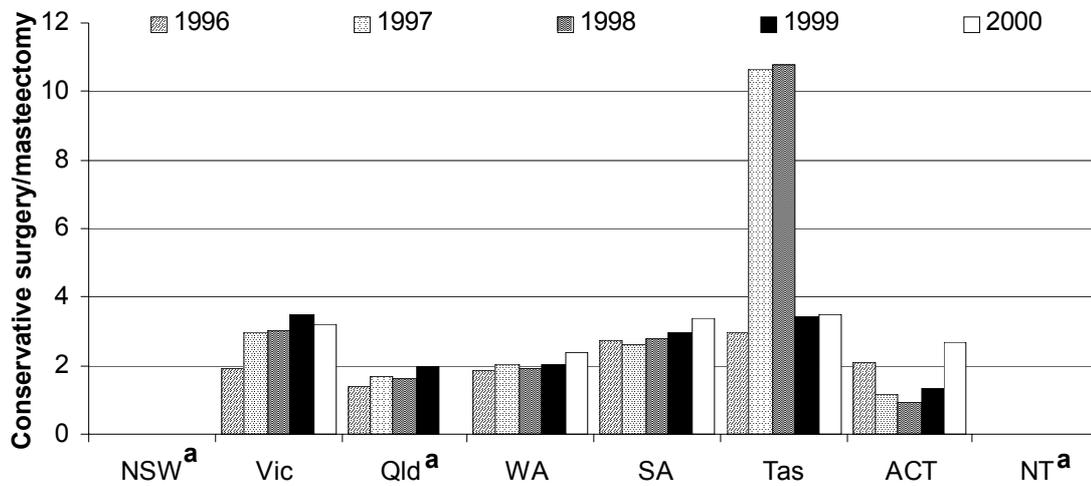
Ratio of conservative surgery to mastectomy

A high ratio of conservative 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 hence represent only a portion of the total possible treatment information available. Further, BreastScreen Australia mainly diagnoses small cancers that can be treated conservatively, so at present, the data do not provide a good indication of general clinical practice relating to breast cancer. It is a priority for the Review to improve the data for this indicator in future.

Based on BreastScreen Australia data, in 2000, the ratio was highest in Tasmania (3.50:1) (figure 7.11). Data for 2000 for NSW, Qld and the NT were not available.

Figure 7.11 Ratio of conservative surgery to mastectomy



^a Data for NSW and NT, and for Queensland for 2000 not available.

Source: State and Territory governments; table 7A.17

Cost per separation by diagnosis related group (DRG)

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 7.5 provides a summary of costs for selected breast cancer DRGs. The average cost of major procedures for malignant breast conditions across Australia was \$4166 in 1999-2000. Minor procedures for malignant breast conditions cost on average \$2099 in Australia. Table 7A.18 also summarises the average length of stay in public hospitals associated with each DRG. It should be noted that the data are derived from a sample of hospitals in each jurisdiction that is not necessarily representative and that often comprises larger rather than smaller hospitals.

Table 7.5 Selected breast and other cancer AR-DRGs, public sector, population estimated, 1999-00 (dollars)^{a, b, c, d, e}

AR-DRGs	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
J06A Major procedures for malignant breast conditions	4 098	4 538	3 990	4 428	3 446	3 604	3 805	5 868	4 166
J07A Minor procedures for malignant breast conditions	2 122	2 033	2 245	1 992	2 014	2 347	1 635	*	2 099
J10Z Skin, subcutaneous tissue and plastic breast procedures	1 811	1 616	1 391	2 021	1 793	1 755	1 994	2 696	1 690
J11Z Other skin, subcutaneous tissue and breast procedures	1 487	1 297	900	1 804	1 085	1 534	1 847	2 019	1 259
J62A Malignant breast disorders age>69 W CC	4 390	2 849	5 166	3 241	3 980	7 689	*	–	3 932
J62B Malignant breast disorders (age<70 W CC) or (age>69 W/O CC)	3 060	1 304	1 389	2 855	1 809	2 286	944	*	1 895
J62C Malignant breast disorders age<70 W/O CC	1 015	650	793	976	1 390	1 539	420	*	869
R63Z Chemotherapy	604	482	515	527	547	1 179	383	546	532

^a Average cost is affected by a number of factors, some of which are admission practices, sample size, remoteness and the type of hospitals contributing to the collection. Approximately 60 per cent of the separations in NSW are from tertiary referral hospitals, which have higher infrastructure and operational costs. For example, the large disparity between NSW and Victoria for J62B indicate practice differences or episode definition differences and not necessarily differences in efficiency. ^b Population estimates derived by National Hospital Cost Data Collection (NHCDC) from NHCDC sample data. Samples are not necessarily representative of all hospitals in each jurisdiction. ^c *=Asterisks have been included in the case of small numbers to protect confidentiality ^d W/O CC='without complications and comorbidities'. ^e W CC='with complications and comorbidities'.

– Nil or rounded to zero.

Source: DHAC, National Hospital Cost Data Collection, Round 4; table 7A.18.

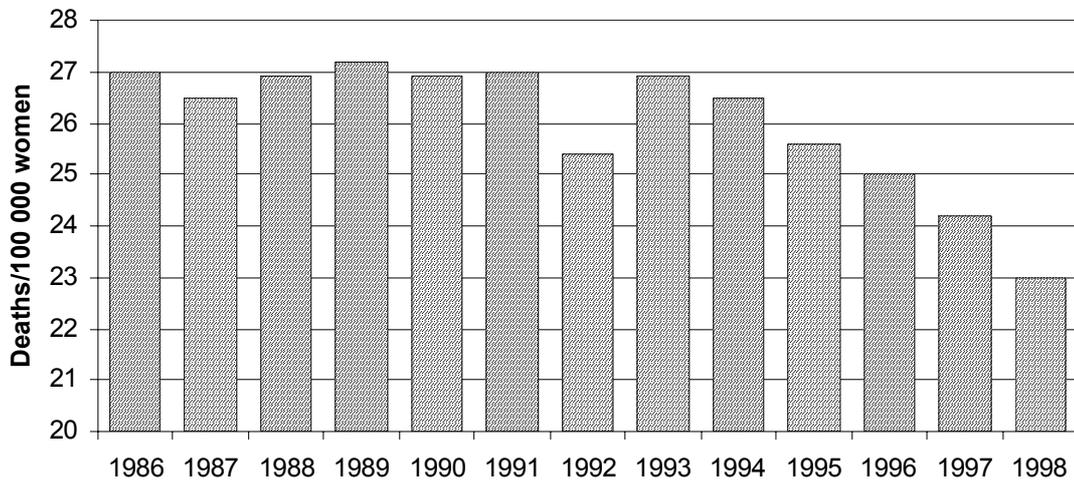
Overall performance

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 23.0 in 1998.

The decline appears to have been strong and consistent from 1994 onwards (figure 7.12).

Figure 7.12 Age standardised mortality rate, all ages^a

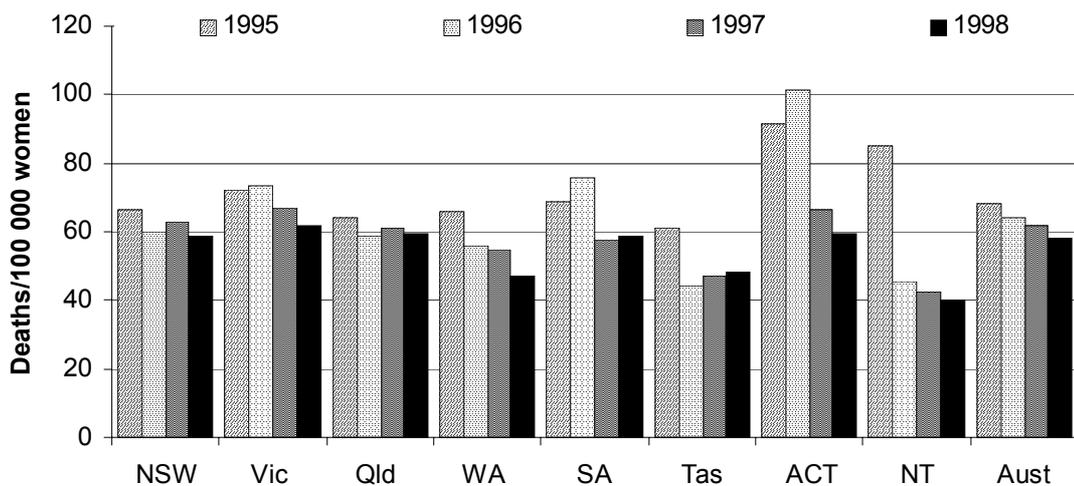


^a Age standardised to the Australian population at 30 June 1991.

Source: AIHW (2000b).

The mortality rate for Australian women aged 50–69 years between 1995 and 1998 was highest on average in the ACT and lowest on average in Tasmania (figure 7.13).

Figure 7.13 Mortality rate from breast cancer, women aged 50–69 years



Source: AIHW unpublished data; table 7A.20.

7.3 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, Vos and Stevenson 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).

In 1995, the Commonwealth Department of Health and Family Services initiated the National Survey of Mental Health and Wellbeing, comprising:

- a survey of a nationally representative sample of 10 000 adults aged 18 and over focussing on common mental disorders;
- a survey of mental disorders among children and adolescents aged 4–17 years; and
- a study of low prevalence disorders.

The survey of adults (undertaken in 1997 by the Australian Bureau of Statistics (ABS)) suggested that almost one in five suffered from one or more mental disorders during the 12 months before the survey was conducted (ABS 1998). The Survey did not attempt to cover all mental disorders. Of the disorders that were covered, people were most likely to report anxiety disorders (54.5 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 7A.21).⁴ Females most

⁴ An anxiety disorder is represented by feelings of tension, distress or nervousness. 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.

commonly experienced anxiety disorders. By contrast, males most commonly experienced substance abuse.

The survey found that — of those adults with the mental disorders covered — 38.0 per cent contacted a health service for their problem. General practitioners were the main mental health service providers, seeing 29.4 per cent of patients with a mental disorder (table 7A.22). Less than 1 per cent of people with the types of mental disorder covered by the ABS survey were admitted to hospital (ABS 1998). It should be noted, however, that most government services provide care for disorders other than those included in the ABS survey. In particular, substance use disorders are generally not treated by Australian mental health services except where they co-occur with a primary mental disorder. In most jurisdictions, alcohol and drug problems are treated separately.

Results from the child and adolescent component of the National Survey of Mental Health and Wellbeing were released in October 2000. 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. It found that 14 per cent of Australian children and adolescents have mental health problems. This is similar to rates identified in earlier adult surveys and in international surveys. The survey also found that young people with mental health problems are most likely to seek help from family doctors, school based counsellors and paediatricians, with only one out of every four accessing specialist services.

The University of Western Australia coordinated the epidemiological and clinical study of low-prevalence disorders (such as schizophrenia and mood disorders with psychotic features). The study found that, in urban areas in Australia, four to seven adults per 1000 have psychotic disorders — depending on the catchment area. People with schizophrenia and schizoaffective disorders accounted for over 60 per cent of people with disorders covered by the study.

Some common terms used in mental health management are outlined in box 7.4.

Survey participants in some cases reported more than one disorder, so percentages do not add to 100.

Box 7.4 **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: services that provide beds in the community, staffed by mental health professionals. These services are designed for people with significant disability and dependency needs and are aimed at replacing many of the functions traditionally performed by long stay psychiatric hospitals. They include residential services established as specialised psychogeriatric nursing homes for older people with mental illness, or dementia with severe behavioural disturbance, as well as community care units and hostels.⁵

inpatient services: psychiatric hospitals or specialist psychiatric units located within public (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: a disruption in the interactions between the individual, the group and the environment, producing a diminished state of mental health.

(Continued next page)

⁵ Note that this definition has changed from last year's Report. Data for community residential services in the 2001 *Report on Government Services* included only those services staffed on a 24 hour basis. For this Report, the definition includes residential services employing on-site staff for at least some part of the day.

Box 7.4 (Continued)

mental health promotion: focuses on improving environments (social, physical, economic) that affect mental health and on enhancing the coping capacity of communities as well as individuals.

non-government organisations: not-for-profit services funded by governments to provide support services for people with a psychiatric disability arising from a mental illness. These services include a wide range of accommodation, rehabilitation, recreational, social support and advocacy programs.

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: A facility or unit dedicated to the treatment, rehabilitation or community support of people with a mental disorder or psychiatric illness or disability.

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.

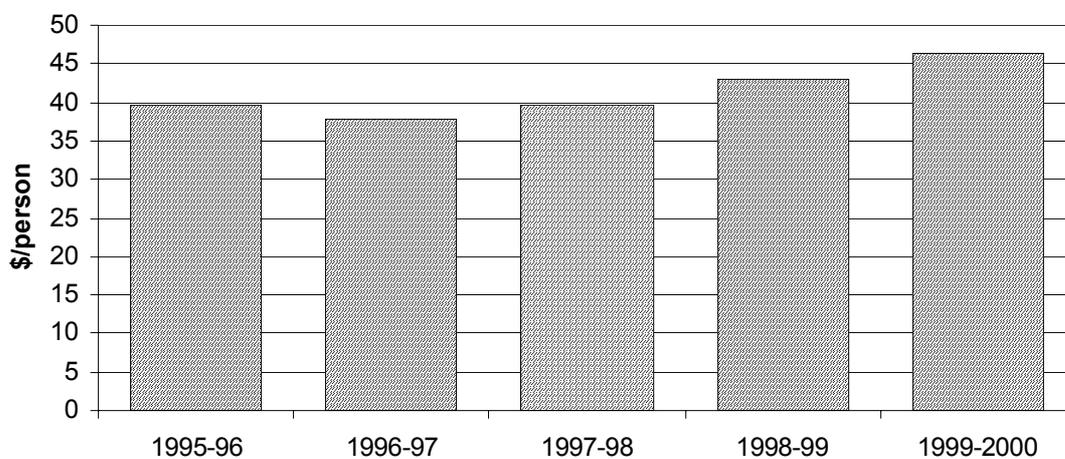
In addition, a number of health services provide care to mental health patients in a ‘non-specialist’ health setting — for example, GPs, public hospitals’ emergency departments and outpatients, public hospitals’ general wards (as opposed to specialist psychiatric wards) and nursing homes. The performance of these non-specialist service providers is examined more closely in chapter 5 (Public hospitals), chapter 6 (General practice) and chapter 12 (Aged care services).

State and Territory governments are the primary sources of both funding and service delivery for mental health services. The Commonwealth directly funds some health services for people with mental disorders through the Medicare Benefits Schedule, Pharmaceutical Benefits Scheme and the Department of Veterans’ Affairs programs. In addition, the Commonwealth has provided grants to State and Territory governments for mental health service reform under the Australian Health Care Agreements. The Commonwealth also funds other services for people with mental disorders, such as emergency relief, employment, accommodation, income support, rehabilitation and other disability services. These latter services are not discussed in this Report.

Funding

Public real recurrent spending of around \$2.3 billion was allocated to mental health services in 1998-99.⁶ State and Territory governments made the largest contribution — \$1.5 billion or 65.2 per cent. The Commonwealth Government spent \$809 million. Real Commonwealth spending per person in 1998-1999 was \$43, increasing to \$46 in 1999-2000 (figure 7.14).

Figure 7.14 **Commonwealth recurrent spending per person, (1999-2000 dollars)^a**



^a Preliminary data, final validation ongoing prior to publication in National Mental Health Report 2001.

Source: DHAC (unpublished); table 7A.23.

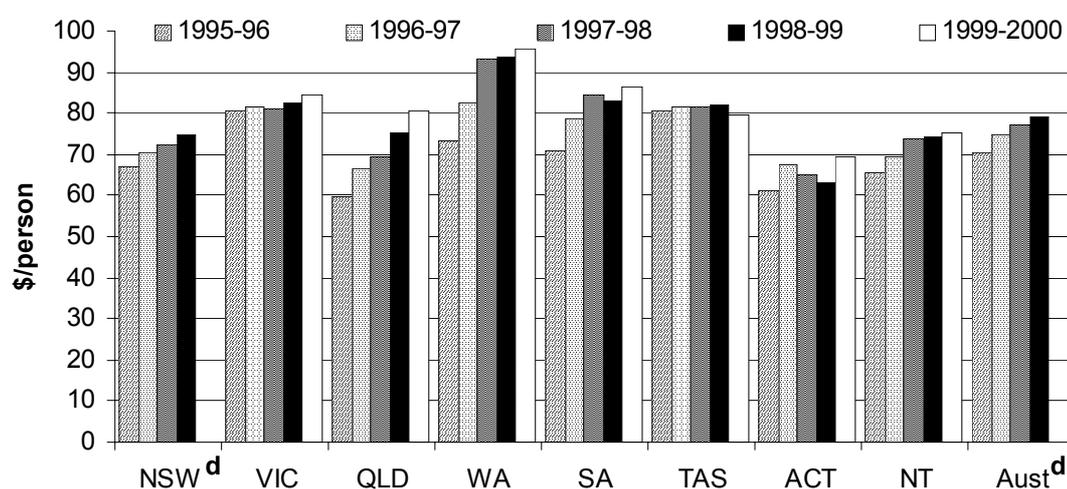
The largest component of Commonwealth expenditure on mental health services in 1999-2000 was expenditure under the Pharmaceutical Benefits Schedule for psychiatric medication (39.5 per cent). Medicare Benefits Schedule payments for consultant psychiatrists accounted for a further 21.8 per cent of Commonwealth expenditure on mental health services, followed by expenditure for mental health care by GPs (16.9 per cent). The Department of Veterans' Affairs (9.7 per cent), the National Mental Health Strategy (NMHS) (7.1 per cent), private hospital insurance premium rebates, research and other time limited program and project support accounted for the residual (table 7A.23).

Real State and Territory government spending per person has increased over time (figure 7.15). In 1999-2000, WA spent the most (\$96 per person) and the ACT spent the least (\$69). Data for 1999-2000 for NSW were not available for this Report. It

⁶ Real 1998-99 data are reported (1999-2000 prices) as NSW data for 1999-2000 were not available for this Report. A total for 1999-2000 is therefore not available.

should be noted that, while Commonwealth funding provided under the NMHS and through the Department of Veterans' Affairs has been excluded from the estimates presented in figure 7.15, revenue from other sources (including patient fees and reimbursement by third party compensation insurers) and 'other Commonwealth funds' are included. State and Territory government expenditure estimates excluding revenue from other sources and other Commonwealth funds are presented in the attachment (table 7A.24). 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.

Figure 7.15 **State and Territory government recurrent spending per person (1999-2000 dollars)^{a, b, c}**

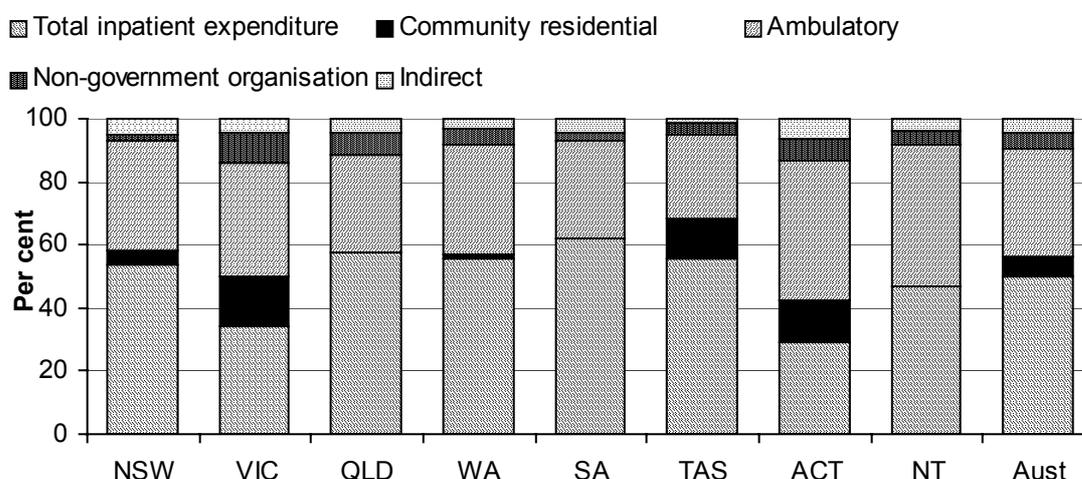


^a Preliminary data, final validation ongoing prior to publication in National Mental Health Report 2001.
^b Estimates of State and Territory government spending include revenue from other sources (including patient fees and reimbursement by third party compensation insurers), and 'other Commonwealth funds' but exclude Commonwealth funding provided under the NMHS Funds and through the Department of Veterans' Affairs.
^c Depreciation excluded for all years. ^d Data for 1999-2000 for NSW (and therefore Australia) were not available for this Report.

Source: DHAC, National Survey of Mental Health Services Database, (unpublished); table 7A.24.

Figure 7.16 shows how Commonwealth, State and Territory government spending was distributed across the range of mental health services in 1998-1999. Data for 1999-2000 for NSW were not available for this Report. Across Australia, 50.1 per cent of recurrent expenditure was allocated to hospital based services (including both psychiatric hospitals and psychiatric units in public (non-psychiatric) hospitals) — highest in SA (61.9 per cent) and lowest in the ACT (29.2 per cent). Ambulatory services comprised 34.1 per cent of recurrent expenditure on mental health services overall — highest in the NT (45.0 per cent) and lowest in Tasmania (27.0 per cent).

Figure 7.16 Recurrent expenditure by service category, 1998-1999^{a, b, c}



^a Preliminary data, final validation ongoing prior to publication in National Mental Health Report 2001.

^b Includes all spending regardless of source of funds. ^c Depreciation excluded.

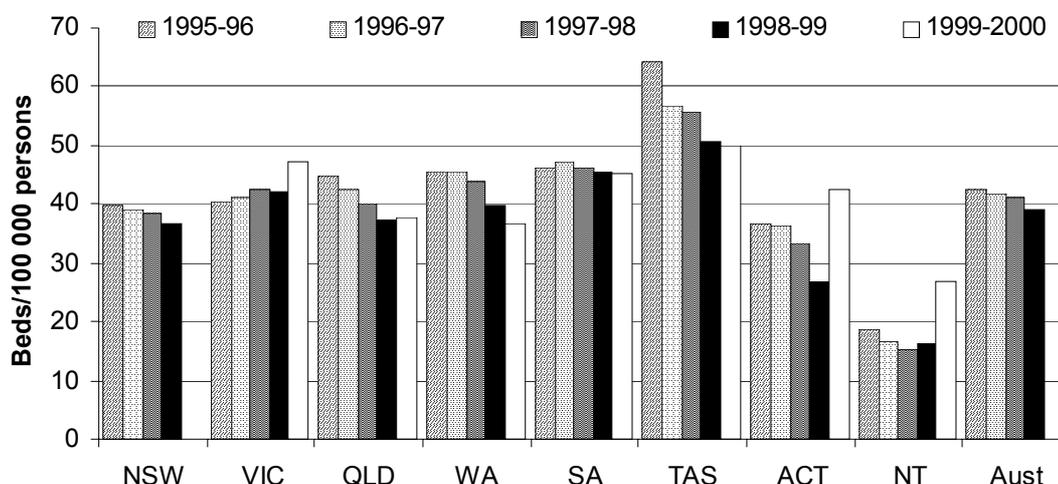
Source: DHAC, National Survey of Mental Health Services Database, (unpublished); table 7A.26.

Size and scope of sector

Available beds

Available beds are those that are immediately available for use by patients as required. Available beds per 100 000 people for public hospitals and community residential facilities combined are presented in figure 7.17. It should be noted that there was a definitional change for community residential facilities in 1999-2000 causing a break in the series. In 1998-99, Tasmania had the highest number of beds per 100 000 people (50.7) and the NT had the lowest (16.2). Between 1996-97 and 1998-99, the number of available beds per 100 000 people across psychiatric hospitals, public (non-psychiatric) hospitals and community residential facilities has fallen. In 1999-2000, the number of available beds per 100 000 people was highest in Tasmania (50.0) and lowest in the NT (26.8). Data for 1999-2000 for NSW were not available for this Report.

Figure 7.17 Available mental health beds^{a, b, c, d}



^a Preliminary data, final validation ongoing prior to publication in National Mental Health Report 2001.

^b Available beds as at 30 June. ^c Includes beds in public hospitals and publicly funded 24 hour staffed community residential units. ^d 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.

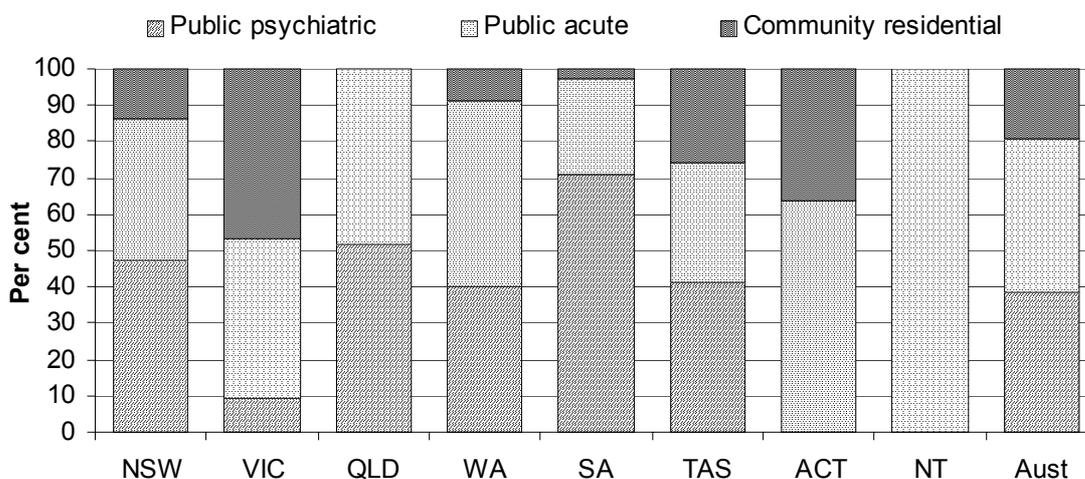
Source: DHAC, National Survey of Mental Health Services Database, (unpublished); table 7A.27.

Available beds by service category are presented for 1998-99 in figure 7.18 as NSW data for 1999-2000 were not available for this Report. These data show the differences in service mix across States and Territories. South Australia had the highest proportion of beds in public psychiatric hospitals (71.0 per cent) and Victoria the lowest (9.6 per cent). The ACT and the NT do not have public psychiatric hospitals. Victoria had the highest proportion of beds in community residential services staffed on a 24 hour basis (46.5 per cent) and SA the lowest (3.0 per cent). Queensland and the NT did not have these types of community residential services in 1999 (although in Queensland's case this is subject to discussion of definitions – see table 7.8).

Staff

In 2000, WA had the most full time equivalent staff per 100 000 people in specialist mental health services (126.7) and the NT had the least staff per 100 000 people (85.1) (figure 7.19). Data for 1999-2000 for NSW were not available for this Report.

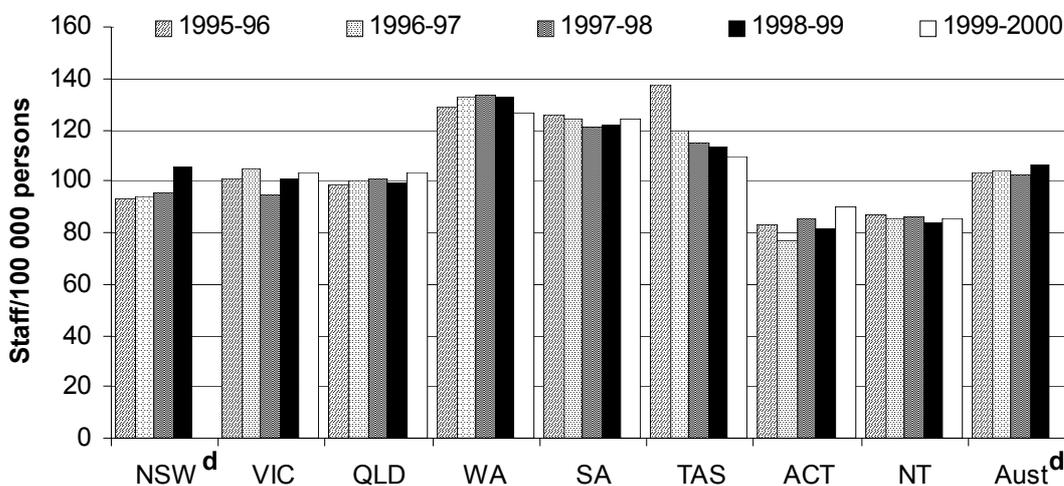
Figure 7.18 Available mental health beds by service category, 1998-99^{a, b, c}



^a Preliminary data, final validation ongoing prior to publication in National Mental Health Report 2001. ^b Available beds as at 30 June 1999. ^c Community residential are 24 hour staffed units funded by governments.

Source: DHAC, National Survey of Mental Health Services Database, (unpublished); table 7A.27.

Figure 7.19 Full time equivalent staff per 100 000 persons^{a, b, c}



^a Preliminary data, final validation ongoing prior to publication in National Mental Health Report 2001. ^b Full time equivalent includes all health professional and non direct-care occupational categories. ^c 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. The impact of this is to transfer a significant number of staff previously included but not enumerated under the NGO category. ^d Data for 1999-2000 for NSW (and therefore Australia) were not available for this Report.

Source: DHAC, National Survey of Mental Health Services Database, (unpublished); table 7A.28.

Nursing staff comprise the largest full time equivalent component of health care professionals employed in mental health services. Across Australia in 1998-99, there were 53.7 nurses per 100 000 people working in specialised mental health services, compared with 17.8 allied health care staff per 100 000 persons (occupational therapists, social workers, psychologists and other allied health staff) and 8.9 medical staff per 100 000 persons (psychiatrists and other medical officers) (table 7A.29).

Services provided

Estimating activity across the specialised mental health services sector is problematic. Data for 'patient days' are provided here (figure 7.20) but show only part of the picture.⁷ Hospital inpatient days and community residential patient days are included in figure 7.20, 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 (NMDS). While data are presented to 1999-2000, it is important to note that there was a definitional change for community residential facilities in 1999-2000 causing a break in the time series. In 1999-2000, patient days per 1000 people were highest in Tasmania (149.5) and lowest in the NT (79.7). Data for 1999-2000 for NSW were not available for this Report.

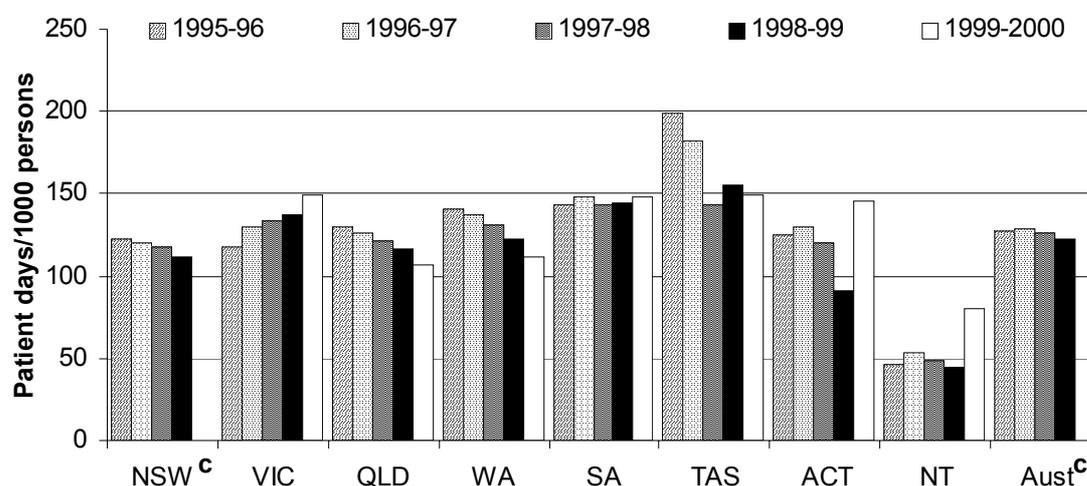
In public psychiatric hospitals in 1998-99, there were 19 326 acute separations with specialised psychiatric care and 1 259 511 patient days (AIHW 2001a). In public (non-psychiatric) hospitals in that year, there were 85 055 acute separations with specialised psychiatric care and 924 586 patient days related to mental disorders. Schizophrenia disorders accounted for a marked proportion of patient days related to mental disorders in public hospitals (49.9 per cent of patient days related to mental disorders in public psychiatric hospitals and 36.6 per cent in public [non-psychiatric] hospitals and in 1998-99) (table 7A.31).

There is a very limited amount of 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. In 1998-99, however, separations involving at least one day of specialised psychiatric care per 1000 people for Indigenous patients were relatively similar to the rates for the total

⁷ Under the National Survey of Mental health Services, 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.

population, although patient days per 1000 Indigenous people and psychiatric care days per 1000 Indigenous people appeared markedly higher (table 7.6).

Figure 7.20 Mental health patient days^{a, b}



^a Preliminary data, final validation ongoing prior to publication in National Mental Health Report 2001. ^b Patient days included for public psychiatric hospitals, public (non-psychiatric) hospitals and 24 hour staffed community residential care. ^c Data for 1999-2000 for NSW (and therefore Australia) were not available for this Report.

Source: DHAC, National Survey of Mental Health Services Database, (unpublished); table 7A.30.

Table 7.6 Specialised psychiatric care by Indigenous status, Australia 1998-99^{a, b}

	Separations per 1000 ^c	Patient days per 1 000 people ^d	Psychiatric care days per 1000 people ^c	Average length of stay (overnight)	Psychiatric care days per overnight separation
Indigenous people	9.0	221.2	210.7	24.3	23.1
Total population	8.9	136.5	115.4	25.8	21.7

^a The completeness of data on Indigenous status varies, hence these data should be used with care. ^b Specialised psychiatric care refers to separations in which at least one day of specialised psychiatric care was received. ^c Rates are indirectly age-standardised based on December 1998 Estimated Resident Population and the December 1998 Indigenous population projections. ^d Does not include psychiatric care days from WA public (non-psychiatric) or private hospitals. The total is therefore an underestimate of total psychiatric care days.

Source: Australian Institute of Health and Welfare 2001a; table 7A.32.

Policy developments

The NMHS (1993–2003) — agreed by Commonwealth, State and Territory health ministers — places the locus of care in the community, advocating a fundamental shift in the service balance away from the historical reliance on separate psychiatric hospitals 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 Strategy 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.

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 Medicare Agreements (subsequently the Australian Health Care Agreements). 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 to 1998) outlined agreed strategies for implementing the Policy. The Second Plan (1998 to 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 7.4).

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. The mental illness indicators in this Report focus on reforms to service delivery introduced under the first National Mental Health Plan. However, the Second Plan places emphasis on 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. 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 7.5) as 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 (figure 7.21). It covers a number of service delivery types (institutional and community based services) and indicators of system-wide performance. Improving the framework is a priority for the Review and the Australian Health Ministers' Advisory Council National Mental Health Working Group.

The prevalence of mental disorders in the general population and the mortality rate from suicide (both indicators of outcomes of mental health services) reflect two goals of the NMHS — to promote the mental health of the Australian community, and where possible, to prevent the development of mental health problems. The quality of life indicator, which has still to be developed, provides some information on the ability of mental health services to reduce the effect of mental illness on individuals, families and the community. It is important to note that these outcome indicators may be influenced by a range of factors in addition to mental health care services; for example, social and disability support, education and employment are all likely to have an effect on the prevalence of mental illness and the number of deaths from suicide.

Box 7.5 Objectives for mental health service delivery

Key objectives include to:

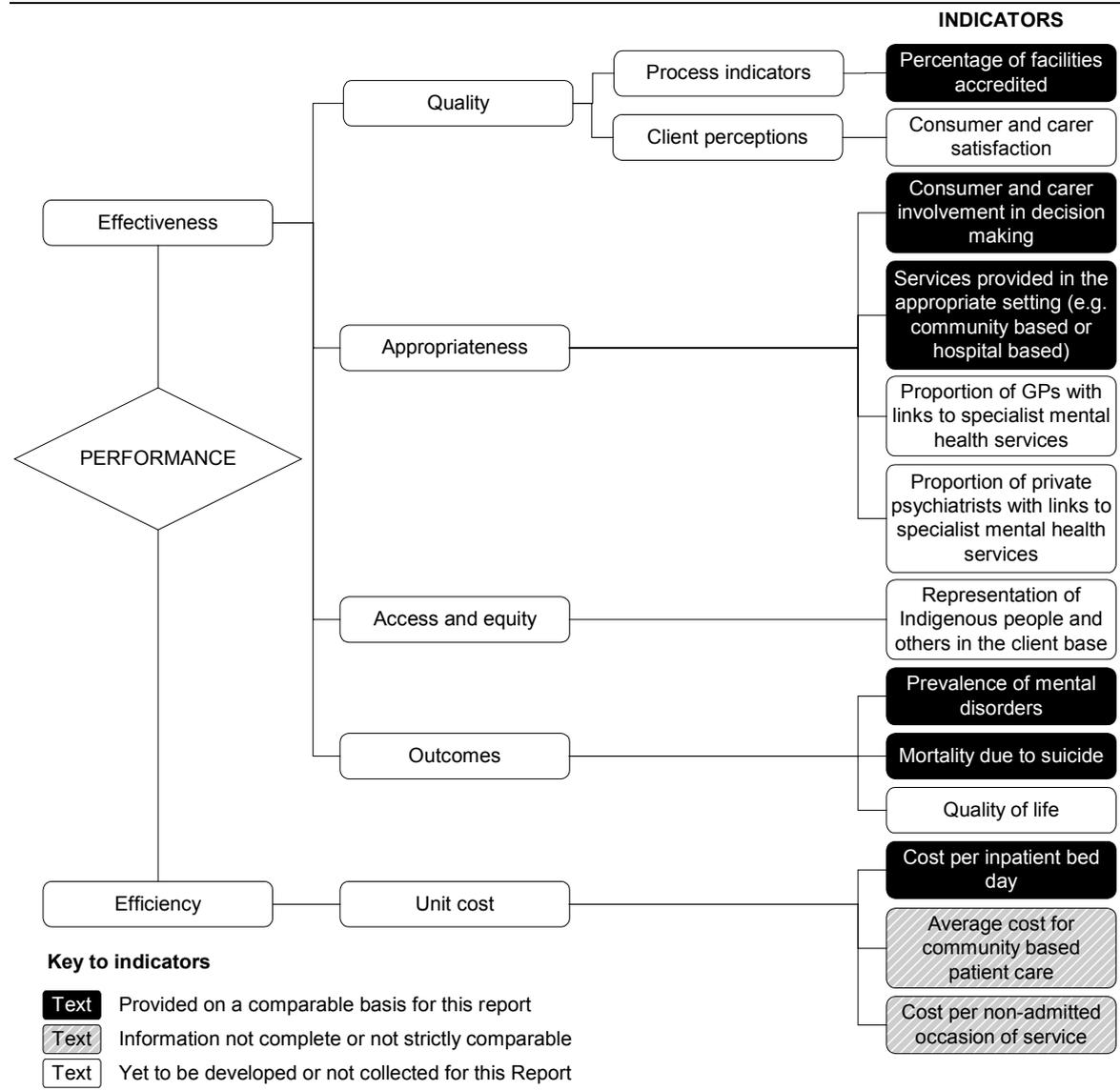
- improve the effectiveness and quality of service delivery and outcomes;
- promote, where appropriate, community awareness of mental health problems;
- prevent, where possible, the development of mental health problems and mental disorders;
- undertake, where appropriate, early intervention of mental 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 proportion of facilities delivering mental health services to people with a mental health problem that are accredited is used as a process indicator of quality. Consumer and carer involvement in decision making is an appropriateness indicator that reflects the NMHS's aim to assure the rights of people with mental disorders, and to focus on improving the outcomes for consumers.

A number of other effectiveness indicators are included in the framework. For example, the extent to which mental health services are offered as part of mainstream health care services, consumer and carer satisfaction and access and equity (the representation in the client base of special needs groups, such as Indigenous people and those from culturally and linguistically diverse backgrounds, and people in rural and remote areas). The efficiency of mental health services is indicated by the cost per bed day for inpatient services and the cost per non-admitted occasion of service for outpatient and community based services.

Figure 7.21 Performance indicators for mental health management



Key performance indicator results

Quality

Percentage of facilities accredited

The percentage of facilities that have been accredited is used as a process indicator of quality. Reporting for this indicator is significantly improved this year and reflects accreditation against the National Standards for Mental Health Services. 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 not yet accredited are necessarily of poorer quality.

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. Accreditation of a parent organisation does not currently require a mental health service to be separately assessed against the National Standards for Mental Health Services. Assessment against the Mental Health Standards must be requested and involves a separate review process. Data reported this year reflect the percentage of specialised public mental health services that have participated in or are currently participating in an external review by an external accreditation agency, against the Mental Health Standards. Reviews may take place in conjunction with, or separately to, overall accreditation of a parent organisation. Review against the Mental Health Standards will, in some cases and in some jurisdictions, be delayed until an appropriate point is reached within the overarching accreditation cycle (for example, midterm review). An accreditation model is yet to be developed for non-government organisations.

In 2001, reviews were completed in all ACT specialist mental health organisations, and no reviews were completed in Victoria (table 7.7).

Table 7.7 Specialised public mental health services reviewed against the National Standards for Mental Health Services (per cent)^a

	<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>
2000									
Review commenced	29	–	96	–	30	39	100	–	33
Review completed	9	–	25	–	–	3	81	–	9
2001									
Review commenced	55	–	100	11	99	52	100	100	49
Review completed	15	–	39	–	16	3	100	–	16

^a “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: DHAC (unpublished); table 7A.33.

Appropriateness

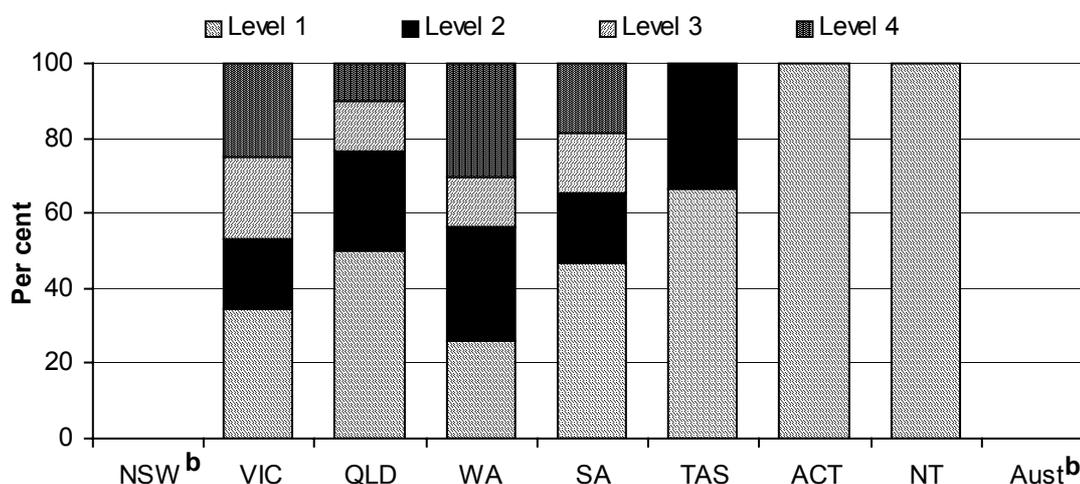
Consumer and carer participation in decision making

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 1999–2000, the ACT and the NT had the highest proportion of organisations with a level 1 rating (100 per cent) (figure 7.22). (The ACT data are for three organisations and the NT are for seven.) Western Australia had the highest proportion of organisations reporting no consumer and carer involvement in decision making (level 4) (30 per cent of 23 organisations). Data for 1999–2000 for NSW were not available for this Report.

Figure 7.22 Organisations with consumer and carer participation in decision making, 2000^a



^a Preliminary data, final validation ongoing prior to publication in National Mental Health Report 2001. ^b Data for 1999-2000 for NSW (and therefore Australia) were not available for this Report.

Source: DHAC, National Survey of Mental Health Services Database, (unpublished); table 7A.34.

Services provided in the appropriate setting

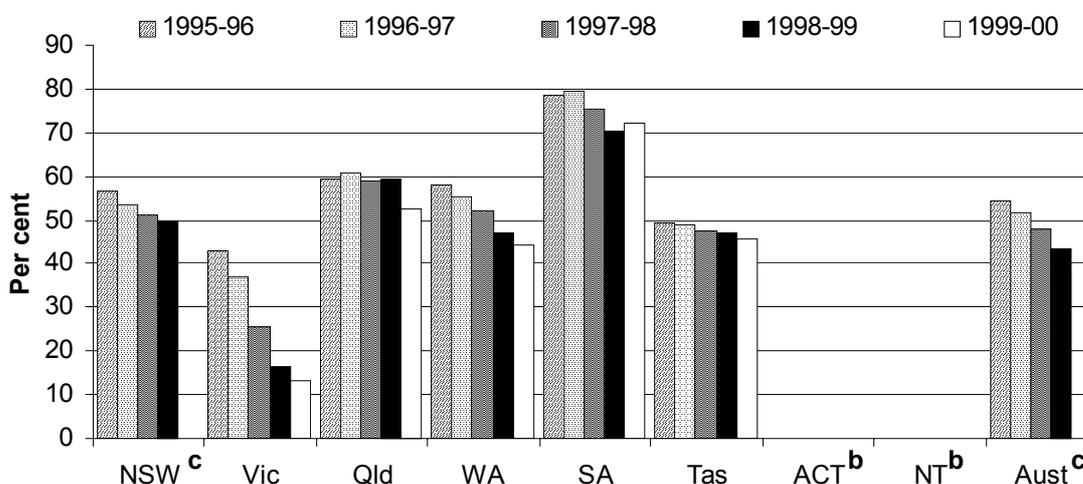
The NMHS advocates the development of local, comprehensive mental health service systems. The services must be capable of responding to the individual needs of people with mental disorders and of providing continuity of care, so that consumers can move between services as their needs change. Under the 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.

Figure 7.23 shows the proportion of recurrent expenditure on psychiatric hospitals, as a proportion of spending on inpatient services. (As noted earlier, the ACT and the NT have no psychiatric hospitals.) In 1999-2000, the proportion was highest in SA (72.0 per cent) and lowest in Victoria (13.3 per cent). Data for 1999-2000 for NSW were not available for this Report.

Figure 7.23 Recurrent expenditure on psychiatric hospitals as a proportion of recurrent spending on inpatient services^a



^a Preliminary data, final validation ongoing prior to publication in National Mental Health Report 2001. ^b The ACT and the NT do not have public psychiatric hospitals. ^c Data for 1999-2000 for NSW (and therefore Australia) were not available for this Report.

Source: DHAC, National Survey of Mental Health Services Database, (unpublished); table 7A.35.

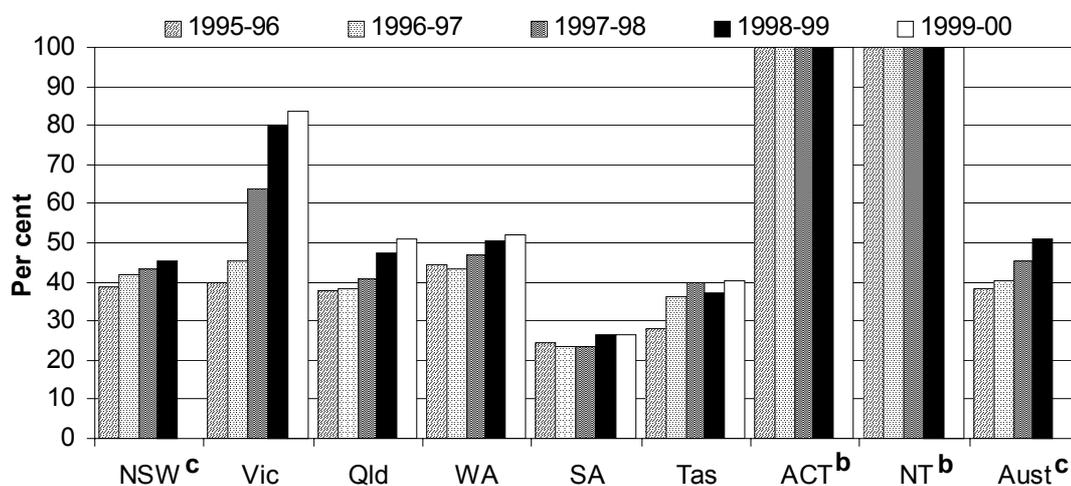
Similarly, figure 7.24 shows that Australia-wide, mental health bed days in general public hospitals as a proportion of all inpatient bed days has increased. Again, it should be noted that the ACT and the NT do not have psychiatric hospitals. In 1999-2000, aside from the Territories, the highest proportion of bed days in public (non-psychiatric) hospitals was in Victoria (83.9 per cent) and the lowest in SA (26.7 per cent). Data for 1999-2000 for NSW were not available for this Report.

Outcomes

Prevalence of mental disorders

Outcome indicators for mental health management include the prevalence of mental illness in the community and deaths from suicide among adults. The most recent national data on prevalence of mental disorders among adults is provided by the ABS (1998) Mental Health and Wellbeing Survey discussed earlier and in the 2001 Report. Data from this Survey are presented by jurisdiction in the attachment table 7A.36 and by age and geographic location at tables 7A.37 and 7A.38. As noted previously, the Survey did not cover all mental disorders.

Figure 7.24 Patient days in public (non-psychiatric) hospitals as a proportion of total inpatient bed days^a



^a Preliminary data, final validation ongoing prior to publication in National Mental Health Report 2001. ^b The ACT and the NT do not have public psychiatric hospitals. ^c Data for 1999-2000 for NSW and therefore Australia were not available for this Report.

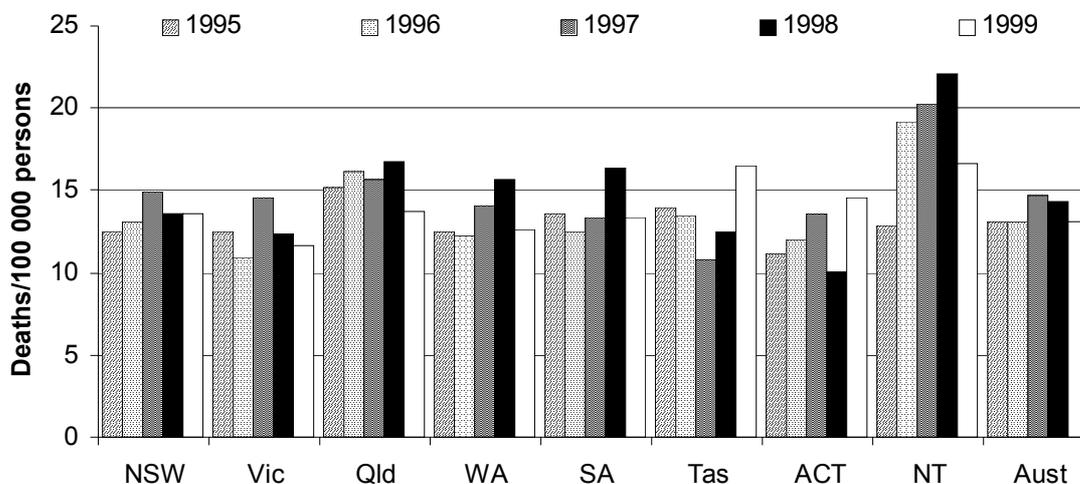
Source: DHAC, National Survey of Mental Health Services Database, (unpublished); table 7A.35.

There are no government plans at this point to undertake another stand-alone mental health survey estimating the prevalence of mental disorders. A mental health component, however, will be included in the periodic general health surveys conducted by the ABS. Separate data for NSW (1996) and SA (1997) are available in the attachment (tables 7A.50 and 7A.51). The NSW data are broader than the ABS data, but are no more recent.

Mortality due to suicide

Evidence indicates that people with a mental disorder are at a higher risk of suicide than the general population. Nearly 2500 deaths from suicide were recorded in Australia in 1999 — equivalent to 13.1 deaths for every 100 000 people. The rate for males was around four times that for females in 1999 — a trend that was consistent over the 10 years to 1999 (table 7A.39). The NT and Tasmania had the highest suicide rate in 1999 (16.6). Victoria had the lowest rate (11.7) (figure 7.25).

Figure 7.25 Suicide deaths per 100 000 people



Source: ABS 2000; table 7A.40.

In 1999, suicide was the second leading cause of death for people aged 15–24 years after transport accidents (ABS 2000) — 380 people in this age group died as a result of suicide. In 1999, 20.3 per cent of deaths in this age group resulted from suicide — equivalent to a rate of 14.1 deaths per 100 000 people aged 15–24 years. This is the lowest rate since 1990. In 1999, the NT recorded the highest suicide rate in this age group (41.4 deaths per 100 000 people aged 15–24 years), while SA recorded the lowest (11.0 deaths per 100 000 people aged 15–24 years) (table 7A.41). Suicide was the leading cause of death for 25–34 year olds in 1999 (22.9 per cent of deaths in this age group resulted from suicide) (ABS 2000).

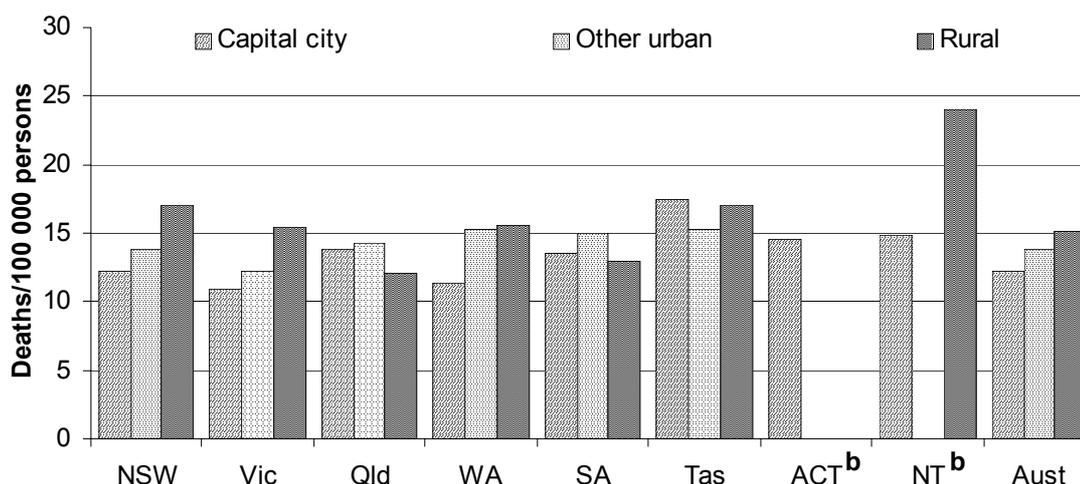
The suicide rate per 100 000 people in 1999 was higher in rural areas than in capital cities or other urban areas in all States except Queensland, South Australia and Tasmania (table 7A.42). In 1999, Australia-wide, there were 15.1 suicides per 100 000 people in rural areas compared with 12.3 suicides in capital cities and 13.8 in other urban centres (figure 7.26).

In 1999, 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 considered of publishable standard.⁸ In the NT in 1999, the Indigenous suicide rate was 30.8 per 100 000 Indigenous people compared with 16.6 per 100 000 people for the total population. In Queensland, the Indigenous suicide rate was 22.9 suicides

⁸ See the 'Health preface' for a discussion of the quality of Indigenous mortality data collected by the ABS. The ABS considered 1998 data for Queensland, WA, SA and the NT to be of publishable standard.

per 100 000 Indigenous people compared with around 13.7 suicides per 100 000 for the total population. In WA, the 1999 Indigenous suicide rate was 21.4 per 100 000 Indigenous people compared with around 12.7 per 100 000 for the total WA population (tables 7A.43 and 7A.40).

Figure 7.26 **Suicide deaths by area per 100 000 people, 1999^a**



^a Other Urban = centres with more than 20 000 population. ^b ACT rates for other urban and rural were zero. NT rate for other urban was zero.

Source: ABS 2000; table 7A.42.

Efficiency

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 5). The current method for adjusting inpatient separations (AR-DRGs), however, does not account for the full range 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. However, these data should be used cautiously in any comparative assessment.

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. Through this process, it is

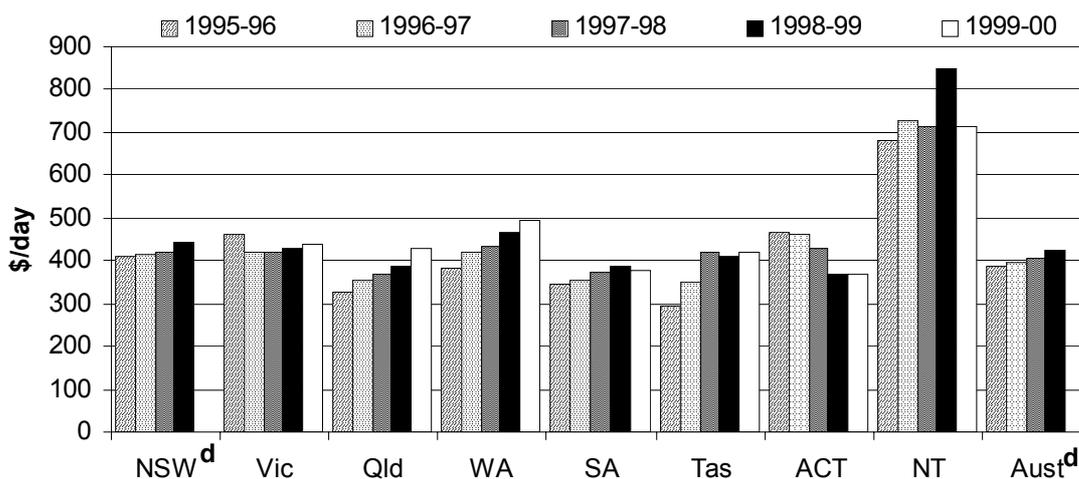
expected that casemix adjusted comparisons between jurisdictions will be possible in future years.

Comparability of costs is maximised when the full range of costs to government are counted for all jurisdictions. Where the full costs cannot be counted, comparability is achieved by estimating costs on a consistent basis.

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. Average length of stay varied across jurisdictions and hospital types (tables 7A.45 and 7A.46).

Real inpatient costs per day are presented in figure 7.27. Changes over time reflect in part institutional change in accordance with the NMHS. In 1999-2000, unit costs were highest in the NT (\$714 per day) and lowest in the ACT (\$371 per day). Data for 1999-2000 for NSW were not available for this Report. In 1998-99, unit costs Australia-wide were \$425 — again highest in the NT (\$847 per day) and lowest in the ACT (\$368 per day).

Figure 7.27 **Average cost (recurrent) per inpatient bed day, public hospitals, (1999-2000 dollars)^{a, b, c}**



^a Preliminary data, final validation ongoing prior to publication in National Mental Health Report 2001.

^b Depreciation excluded. ^c Costs are not adjusted for differences in the complexity of cases across jurisdictions and may reflect differences in the rate of institutional change (that is, the mainstreaming of mental health services). ^d Data for 1999-2000 for NSW (and therefore Australia) were not available for this Report.

Source: DHAC, National Survey of Mental Health Services Database, (unpublished); table 7A.47.

Average costs for community based patient care

The average cost to government (recurrent) per patient day for community residential services is presented in table 7.8. 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 7.8. 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.

The estimates in table 7.8 suggest that in 1998-99, the average cost to government per patient day for community residential services Australia-wide was \$209 — highest in Tasmania (\$264) and lowest in SA (\$91). In 1999-2000, according to the National Survey of Mental Health Services, Queensland data 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. Across the other jurisdictions, the highest cost per patient day was in WA (\$266) and the lowest in SA (\$97). Data for 1999-2000 for NSW were not available for this Report.

Table 7.8 Average cost to government (recurrent) per patient day for community residential services (current prices)^{a, b, c, d}

	NSW ^g	Vic	Qld ^{e, f}	WA	SA	Tas	ACT	NT ^e	Aust ^g
1998-99									
24 hour staffed units	\$217	\$204	..	\$207	\$91	\$264	\$222	..	\$209
1999-2000									
24 hour staffed units	na	\$201	\$779	\$266	\$97	\$263	\$218	..	na
Non 24 hour staffed units	na	\$123	\$48	\$63	na

^a Preliminary data, final validation ongoing prior to publication in National Mental Health Report 2001.

^b Depreciation included, variably handled by jurisdictions. ^c Costs are not adjusted for differences in the complexity of cases across jurisdictions and may reflect differences in the rate of institutional change (that is, the mainstreaming of mental health services). ^d 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. ^e 24 hour residential services not available in 1998-99 within NT and Queensland. ^f According to the National Survey of Mental Health Services, 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. ^g Data for 1999-2000 for NSW (and therefore Australia) were not available for this Report. **na** Not available .. Not applicable.

Source: DHAC, National Survey of Mental Health Services Database, (unpublished); table 7A.48.

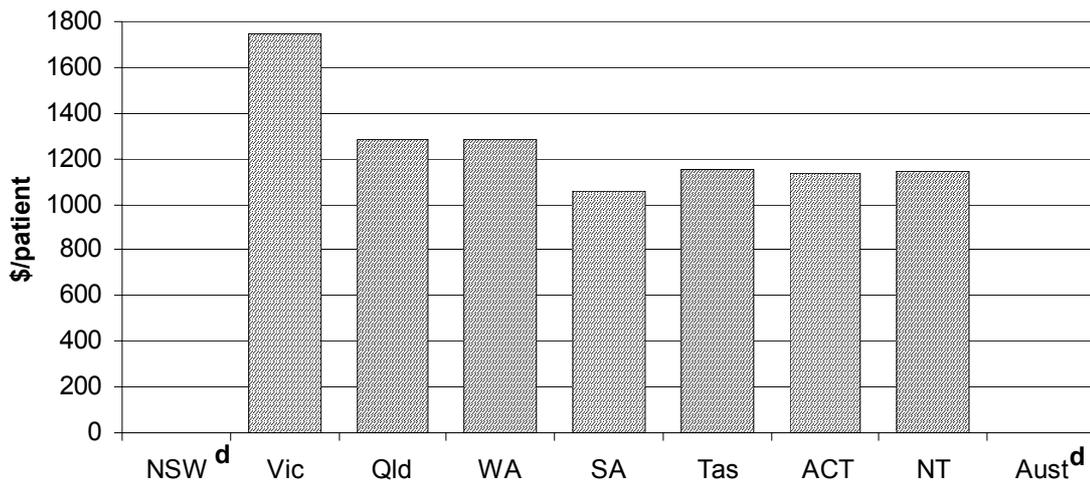
Average costs for ambulatory (non-admitted) services

Estimates of average costs for non-admitted patients are reported for the first time this year. These data should be treated with care as a marked proportion of patient data were missing (table 7A.49). In addition, the absence of unique patient identifiers in many jurisdictions creates overcounting of the number of patients treated, as clients who happen to attend mental health services other than their usual service may be counted twice. This may artificially reduce average costs. Victoria and WA have state-wide systems of unique identifiers, so the extent of overcounting in these states is relatively lower than in other jurisdictions. Further, differences in the complexity of cases treated, the service options available for treatment and admission practices across jurisdictions are not taken into account. Nevertheless, 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.

The data in figure 7.28 suggest that cost per treated patient in the community in 1999-2000 ranged from \$1747 in Victoria to \$1057 in SA. These costs should be viewed in the context of the proportion of missing data outlined in table 7A.49. The

apparent higher unit costs in Victoria may reflect the lower probability of overcounting of patients in that state compared with jurisdictions (other than WA) that do not have unique patient identifiers. Data for 1999-2000 for NSW were not available for this Report.

Figure 7.28 Average cost to government (recurrent) per treated patient in the community, 1999-2000^{a, b, c}



^a Preliminary data, final validation ongoing prior to publication in National Mental Health Report 2001.

^b Reporting of number of patients treated has a variable level of missing data across jurisdictions. In some jurisdictions, it is not possible to calculate the exact number of patients treated, so a best estimate is used. Additionally, the absence of unique patient identifiers in most jurisdictions creates overcounting of the number of patients treated, artificially reducing average costs. Victoria and WA have unique state-wide client identifier systems which limit double counting of clients who happen to attend mental health services other than their usual service. This may create the impression that unit costs in these states are apparently higher than those of other jurisdictions without unique patient identifiers. It should also be noted that differences in the complexity of cases treated, the service options available for treatment and admission practices across jurisdictions are not taken into account in these data. ^c Depreciation included, handled variably across jurisdictions. ^d Data for 1999-2000 for NSW (and therefore Australia) were not available for this Report.

Source: DHAC, National Survey of Mental Health Services Database, (unpublished); table 7A.49.

7.4 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;
- 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.

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 anticipated to commence in late 2002.

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

Improving data and the measurement of existing indicators

During 2000-01, the NAC completed a number of projects that affect the monitoring and evaluation of the BreastScreen Australia Program into the future. Key projects undertaken during this period include the development of the BreastScreen Australia Data Dictionary, and completion of the review of the BreastScreen Australia National Accreditation Requirements.

The BreastScreen Australia Data Dictionary has established definitions for each of the items contained in the BreastScreen Australia agreed Minimum Data Set (MDS) in a form consistent with the National Health Data Dictionary. Services collect and record data against each of the items in the MDS. The Data Dictionary, which was endorsed by the NAC in July 2001, will provide a rich source of data for monitoring the performance of BreastScreen Australia, improving comparability across jurisdictions in future reports.

The review of the National Accreditation Requirements, the current quality assurance standards for BreastScreen Australia screening and assessment services, was finalised in 2000 and the NAC endorsed the new National Accreditation

Standards in July 2001. The Standards establish a set of benchmarks against which performance can be measured and will become operational in July 2002, with implications for the 2003 Report.

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.

An NMDS covering inpatient and community services has been developed. Some data from the NMDS on admitted patient mental health care and community mental health care establishments are already available. Collection of patient level data for community mental health care services commenced 1 July 2000. These data are scheduled for publication in 2002.

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 Australian Health Care Agreements. Work by the Australian Health Ministers' Advisory Council National Mental Health Working Group will contribute to performance reporting in the medium to longer term.

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

7.5 Jurisdictions' comments

This section provides comments from each jurisdiction on the services covered in the health chapters and attachments 5A to 7A in the CD-ROM. Appendix A contains detailed statistics and short profiles on each State and Territory, which may assist in interpreting the performance indicators presented in the health chapters. The information covers aspects such as age profile, geographic distribution of the population, income levels, education levels, tenure of dwellings and cultural heritage (such as Indigenous status and ethnicity).

New South Wales Government comments

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Health is a significant area of expenditure for government. Public scrutiny of health system performance, through mechanisms such as the Report on Government Services, has an important role in stimulating improvements in cost effectiveness.

One of the approaches adopted in preparing the Report is to include data if it is available, with appropriate qualification, even where the data are imperfect. The rationale behind this approach is to establish a basis for further work on improving the comparability of the data. This year this approach has led to closer scrutiny of the quality and comparability of data across jurisdictions in the areas of waiting times for elective surgery and for emergency department services. These are two areas where the data continue to be incomparable, even after several years of publication in the Report. This is evident in the differences in the proportions of patients reported in each of the urgency categories in both indicators. NSW and other States have raised this issue with key national groups such as the Australian Health Ministers' Advisory Council (AHMAC) and national work on improving comparability in these areas is now progressing.

Problems of comparability persist in a number of other areas. One underlying problem is that there is systematic variation across jurisdictions in relation to the classification of non-surgical same day admissions. Some States tend to classify these patients as “admitted” patients whilst others tend to classify them as outpatients. This variation distorts a number of performance indicators. For example separation per capita is used as an indicator of “appropriateness”. It is clear from this indicator that some jurisdictions apply lower thresholds for treating some patients as admitted patients, which will show a higher per capita separation rate for these jurisdictions. This is particularly the case for same day non-surgical cases. Whilst there have been attempts to address this issue nationally, it appears from the results reported in this publication that national uniformity has not been achieved in the rules for admission. Further work is required in this area.

There are two important factors that impact on the comparability of figures presented in this Report. The first is that each State/Territory must first and foremost respond to local issues, and in this way, jurisdictions are likely to differ. However, the source of variation is a legitimate one. In this instance we should concentrate on describing the reasons for the differences. The second is that there are some areas where States/Territories should be similar, but the data are showing a different picture. One reason for this is that jurisdictions are genuinely different, in which case efforts should be focussed on discovering the reasons behind the variation and use this as an opportunity for improvement. A second reason is that the data collection process and application of definitions is not uniform. The latter is the type variation that we should endeavour to reduce over time.

NSW supports the approach of the Report, and welcomes the opportunity to do further work to improve the comparability of the indicators presented.

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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. In this context the establishment of the National Health Performance Committee is particularly welcome. The Committee has recently published a national performance measurement framework for the health system as a whole and this has provided a basis for a quality framework to be used by all Victorian public hospitals in reporting on the quality and safety of the services which they provide.

The Committee has also moved to establish a working relationship both with this Review and with other key bodies involved in national performance measurement such as the Australian Council for Safety and Quality in Health Care and the National Health Information Management Group.

The increased and broader emphasis on health care services in recent editions of this report is also welcome and reflects the level of government expenditure on these services. In particular, the development of a performance measurement framework for general practice, including indicators of quality, safety and evidence of best practice, is important in a funding environment where outcomes are rewarded and emphasis is placed on quality.

Victoria also welcomes 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. 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. The recognition of the need for separate unit cost measures for acute, psychiatric and sub-acute admitted patient services provides an example of this and highlights the need for continual development of even the most conceptually simple indicators. 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.

Encouragement should also be given for individual service providers to benchmark at a much greater level of detail, and to achieve improvements at the organisational level. Consideration could also be given to showing the distribution of key results (for example, quartiles) rather than only means to provide more discriminating benchmarking between jurisdictions.

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Queensland Government comments

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Queensland Health supports performance measurement and the continuous improvement in the delivery of health services. This commitment is demonstrated by achievements in a range of projects commenced under the Quality Improvement and Enhancement (QIEP) Program. These projects aim to improve service delivery through streamlining and standardising systems and improved use of information. Projects include a risk management project to standardise incident monitoring policy and systems, implementation of a state-wide patient satisfaction survey and a state-wide approach to clinical pathway development. A Measured Quality Program aims to report on hospital performance indicators in the areas of internal business, efficiency, patient satisfaction and system integration and change. Clinical indicators for a range of conditions and procedures are being developed in consultation with a network of clinicians.

Queensland Health's five year Information Management Strategic Plan sets the direction for continuous improvement and the effective and innovative use of information to ensure access to timely and high quality information required to support evidence based health services. Clinicians across Queensland Health facilities have 24 hour access to clinical information through the Clinicians Knowledge Network. The Clinical Benchmarking Project enables analysis and reporting of hospital cost, casemix data and other management information across major hospitals.

Queensland Health supports improved reporting of Indigenous health indicators by the Review of Commonwealth/State Service Provision and has taken an active role in assisting with this task. A strategic priority for Queensland Health is the provision of appropriate health services to Indigenous people and a range of activities are being undertaken in partnership with local communities to enhance the health of Indigenous communities. For example, strategies to address alcohol and drug issues, tobacco use, access to healthy foods in rural and remote areas, and access to Indigenous women's cervical screening services are well advanced. All Queensland Health employees are required to attend cultural awareness training and encouraged to participate in reconciliation learning circles to ensure the delivery of culturally appropriate and sensitive Indigenous health services.

Significant work is being undertaken to reduce elective surgery and emergency department waiting lists. The implementation of clinical best practice development projects across Queensland hospital emergency departments and a statewide emergency department benchmarking process aim to reduce waiting times and improve services in Queensland emergency departments.

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Western Australian Government comments

“ The year 2001 has seen a shift in the focus of health initiatives to reflect a growing appreciation of population health issues resulting in an increase in the overall sum of resources going to population health programs.

A number of special projects were completed and others commenced in the State. The Western Australian Aboriginal Coordinated Care trials concluded its first full year of operation with another round being considered by the national Coordinated Care Trials organisers. The renal program for 2002 saw the launch of dialysing facilities ('satellite' units) in two shopping centres in metropolitan Perth, the finalisation of plans for a satellite unit to be located in an Aboriginal Medical Service (AMS) establishment in the State's Northwest and general recognition of the renal dialysis innovations with commendations to the program for Innovation and Management Improvement at this years WA Premier's awards.

The Central Wait List Bureau (CWLb) presided over a process which brought the State's elective surgery waiting list numbers to its lowest levels since 1996. This result was assisted by a review of the lists, undertaken in collaboration with the General Practice Division of WA (GPDWA), who with their members, examined the continued validity of the waiting lists and related specialist referrals. The scope of the waiting list management program was extended to include patients awaiting appointments at hospital outpatient clinics, particularly, allied health type scheduled services.

In response to identified need and the changed focus of care, a number of service areas have received a funding boost this year. Rural specialist services, the patients assisted travel scheme (PATS), orthodontic treatment, care awaiting placement and step down facilities and strategies to manage elective services have all been provided extra funds. A number of capital works initiatives including major upgrades to a metropolitan peripheral hospital and a regional country facility, have also been confirmed in their bid for funding support.

Western Australia has undertaken extensive work using linked health record information for both epidemiological and economic analyses. The patterns of care utilisation by the elderly and by indigenous people, the recurrence of care for individuals over time and across hospital campuses, and, the iatrogenic patterns of disease re-occurrence among patients in certain diagnosis/treatment groups, are among the investigations that have been undertaken. In addition, budget deliberations have been informed by intensive analyses of health service activity and related financial information.

Western Australia's costs, particularly, recurrent cost per casemix adjusted separation, have been the subject of discussion and a preliminary set of revised figures are published in this report. There were errors identified in the figures initially submitted to the Australian Institute of Health and Welfare for use in their Australian Hospital Statistics Report 1999-2000 publication. Final revisions to these statistics are in progress and the results will be published on the Report's web page at about the same time as the release of this 2002 document.

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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.

Constraints within the human services operational environment include an increasing demand for human services outstripping available resources, 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. These alternative models of service delivery include rehabilitation in the home, hospital in the home, same day of admission surgery, telehealth linkages for renal review and the off-site location of clinics closer to their target populations.

Changing population demographics are a continuing challenge. The latter includes the challenge of influencing the continued lower life expectancy for indigenous people, high rates of poverty and associated high rates of ill health, especially for single parents, younger single people and families with children. Other challenges are to ensure that services are able to respond appropriately to an ageing population.

Health is central to the key outcomes the Human Services portfolio aims to achieve. These aims are to:

- enhance the quality of life for South Australians through government and community partnerships promoting health and wellbeing, the development of a sustainable community and quality living standards; and
- provide the care and support necessary for people to maintain and improve their health and wellbeing at a cost the community is willing to bear.

The Department strongly supports directions to improve reporting of GP services to population groups, especially indigenous people, and to improve reporting of effectiveness and efficiency indicators for indigenous, rural/remote and other population groups.

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Tasmanian Government comments

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The Tasmanian Government is committed to improving the health and wellbeing outcomes for individuals, families and communities. It acknowledges the value provided by the Report on Government Services in offering standards of comparison nationally and between jurisdictions. The information in the report is used by the Department of Health and Human Services in its own review of performance. As with other jurisdictions, a significant task for Tasmania is the ongoing development of information systems to ensure that reliable and meaningful data is collectable, accessible and appropriately maintained. Expanding data requirements for purposes such as this review are addressed by the Department the development of its information management capability.

In some areas of performance demographic and population differences together with data quality and definition issues make comparison with other jurisdictions of doubtful value. For example, the consistency and reliability of Indigenous population and service usage data varies considerably in Tasmania. Tasmania also has a larger private hospital sector than most other jurisdictions, meaning that some population-based data relating to activity in public hospitals appears disproportionately low. The effect of a comparatively large and growing aged population in Tasmania also translates into differences between it and most other jurisdictions in demand across a wide range of health and human services.

The Department has continued to develop and implement a performance framework based on the multi-dimensional model adopted by the National Health Performance Committee. As with the national framework, the development of meaningful and measurable indicators of performance will be an iterative process with improvement over time.

During the latter part of 2001 the Department worked on incorporating the community benchmarks set by Tasmania Together into the Framework. Tasmania Together is a twenty-year social, environmental and economic plan developed through extensive community consultation and with support from, but not influenced by, Government. Under the plan Government Agencies will be required to report annually to an independent body on performance against a range of outcome targets.

A range of initiatives have been developed and implemented over the year aimed at improving particular dimensions of health and human services system performance in Tasmania. For example the establishment of an internet-based community consultation mechanism, Interact, has improved 'access' by targeted groups and the wider community in providing comment on policy and service initiatives.

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Australian Capital Territory Government comments

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The ACT purchases hospital services on the basis of price, volume and quality and these are defined in service agreements between the Department of Health, Housing and Community Care and the two public hospitals.

Most national benchmarking studies examining the factors contributing to the costs of the public hospital system show that the ACT has a high cost system. There are a number of features specific to the ACT health care system that confound inter-jurisdictional comparisons.

The ACT public hospital system provides a near-comprehensive range of services. As a small jurisdiction the ACT is unable to exploit economies of scale, especially in costly specialist service areas. The system is dominated by a major tertiary referral hospital and both ACT sites are teaching hospitals. The cost structure of the ACT differs from jurisdictions with many hospitals of varying size and function.

The role of hospitals in the service continuum for a small jurisdiction may differ from that of large jurisdictions, with associated cost implications. In large jurisdictions the roles of acute hospitals and non-acute and/or community based services are clearly delineated. Such boundaries can blur in small systems and comparisons of cost of service provision limited to one sector of the service continuum disadvantages them.

The ACT services a region with limited options for down-transferring complex patients to other hospitals. Such episodes tend to be longer. The ACT cost of service delivery may be spread over fewer episodes than those in larger jurisdictions with effective hospital networks

The ACT has a comparatively stable workforce and staff may be on relatively high salary increments. ACT sites may also carry high superannuation costs as a carry-over from the period where many staff were members of the Commonwealth Public Service. Such costs are, in the short to medium term, difficult to influence.

ACT hospitals carry all costs for administration, insurance and workers compensation on site. This foregoes economies of scale which may occur in those jurisdictions where such services are centralised. The extent to which these costs in other jurisdictions are effectively attributed back to individual sites is unclear.

The ACT continues to support the comparative reporting of data across jurisdictions where it can provide meaningful indicators of the performance of the public hospital system. Care needs to be exercised in the interpretation of the comparative data because of factors such as the differences in state administration, funding models and service provision.

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Northern Territory Government comments

“ The Northern Territory Government provides and purchases a cluster of interdependent health and community services including: hospitals (acute care); community services (mental health, aged care, disability and family and children services); primary (community health); and public health (health development).

Health and community services accounted for 13 per cent of NT Government expenditure during 2000/2001.

There are five public hospitals in the NT. They are located in Darwin, Nhulunbuy, Katherine, Tennant Creek and Alice Springs with a combined total of 570 beds. One private hospital operates in Darwin. Hospitals are supported by a network of 98 community health centres throughout the Territory and close to 100 GP practices. The NT population is 190 000 scattered over the wide expanses of the Territory with almost 30 per cent of the populace Indigenous persons. Many more people travel through the Territory as tourists and use the health care system while in the area.

A small population, remote communities and the special health needs of a youthful and Indigenous populace present challenges in providing equivalent health services in the NT that are on offer in other jurisdictions. Higher costs and access difficulties confront service providers. Illustrative of this was the movement of 16 000 people intrastate and 2000 interstate for medical treatment. Services must be culturally appropriate requiring special training and interpreting assistance. With only one private hospital, demand on the public hospital system continues to rise.

Remoteness, special needs, diseconomies of scale, an environment ranging from desert to tropical require unique ways of providing health and community services. Successful coordinated trials have been the forerunner to the establishment of health zones. Features of these are: an emphasis on prevention and primary health care; involvement of local people in administering the zones; and increased resources by addressing access issues to Commonwealth Pharmaceutical and Medical Benefit Schemes due to limited numbers of GPs in remote communities.

The NT Government endorsed the Preventable Chronic Disease Strategy as an approach to healthier Territorians. The Strategy targets diabetes, high blood pressure, obstructive airways disease, heart disease and kidney disease as major diseases causing illness and disability. Breast screening, mental health programs, cooperative arrangements with GPs and maternal health feature prominently in this Strategy. In subsequent reports, NT data will reflect the best service buys and delivery of them through our health zones to reduce illness and disability.

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7.6 Definitions

Table 7.9 Terms

<i>Term</i>	<i>Definition</i>
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.
Affective disorders	A mood disturbance, includes 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 services	Services provided by hospitals to non-admitted patients.
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.
Bipolar disorder	A mood disorder characterised by a history of manic (or hypomanic) episodes usually alternated with depressive episodes.
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.
Co-located units	Psychiatric units in public (non-psychiatric) hospitals. Includes ambulatory services and specialised residential services.
Community health services	Health services for individuals and groups delivered in a community setting, rather than in hospitals or in private facilities.
Comorbidity	The simultaneous occurrence of two or more disorders such as depressive disorder with anxiety disorder, or depressive disorder with anorexia.
Consumer and carer involvement in decision making	Consumer and carer participation arrangements in public sector mental health service organisations according to the scoring hierarchy (levels 1–4) developed for monitoring State and Territory performance under Medicare Agreements Schedule F1 indicators
Cost per inpatient bed day	The average patient day cost according to the inpatient type
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
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.
Detection rate for small cancers	The rate of small (≤ 10 mm) invasive breast cancers detected per 10 000 women screened

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Table 7.9 (Continued)

<i>Term</i>	<i>Definition</i>
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.
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.
Generalised anxiety disorder	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.
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, over-familiarity and a decreased need for sleep were often present, but not to the extent that they led to severe disruption.
Invasive cancer	A tumour whose cells invade healthy or normal tissue.
Mental disorder	A diagnosable illness that significantly interferes with an individual's cognitive, emotional or social abilities.
Mental health problems	Diminished cognitive, emotional or social abilities but not to the extent that the criteria for a mental disorder are met.
Mental health promotion	Action to maximise mental health and wellbeing among populations and individuals.
Mortality rate from breast cancer	The age-specific and age-standardised mortality rates, expressed per 100 000 women in the population, who died as a result of breast cancer
Mortality rate from suicide	The percentage of the population who died as a result of suicide
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>
Panic disorder	Panic (anxiety) attacks that occurs suddenly and unpredictably. A panic attack is a discrete episode of intense fear or discomfort.
Participation rate	<p>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.</p> <p>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.</p>

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Table 7.9 (Continued)

<i>Term</i>	<i>Definition</i>
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 percentage of the population suffering from a disorder at a given point in 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	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.
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.
Screening	The performance of tests on apparently well people to detect a medical condition at an earlier stage than would otherwise be the case.
Size and grade of detected cancers	The percentage of invasive cancers detected classified according to tumour size and grade
Social phobia	A persistent, irrational fear of being the focus of attention, or fear of behaving in a way that would be embarrassing or humiliating.
Specialised residential services	Services provided in the community that are staffed by mental health professionals on a 24-hour basis.
Stand-alone hospitals	Psychiatric hospitals that are separated from the general health care system.
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.

