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## 5 General practice

General practice plays a major role in the delivery of health services, and it is an essential part of endeavours to improve health outcomes in the wider health care system in Australia. General practitioners (GPs) are at the interface of primary health care and other parts of the health system.<sup>1</sup>

Descriptive information about services that are provided in general practice is contained in section 5.1. Policy developments in general practice are discussed in section 5.2, a framework of performance indicators is presented in section 5.3, and key results are discussed in section 5.4. Future directions for reporting are covered in section 5.5. The chapter concludes with jurisdiction comments.

General practice is now discussed in this chapter (whereas last year it was included in a broader health delivery mechanisms chapter). Improvements in data collection have enabled new data on appropriateness, quality, access and equity and unit cost to be reported for the first time in the general practice framework. Two new performance indicators have been added to the framework: ‘notification of selected childhood diseases’ under outcomes, and ‘the proportion of practices registered for accreditation’ under quality.

### 5.1 Profile of general practice

General practice is an integral part of the Australian health system. For most Australians, general practice is the first point of contact with the health care system. GPs are central to patient management for the health care system, through their care of individual patients, referrals to consultants, allied health professionals and community health services, and referrals for hospital admission. They fulfil a broad range of medical functions, such as diagnosing and treating illness (both chronic and acute) and providing care from preventative through to palliative. GPs play a central role in managing the care of their patients by providing continuity of care and acting as a gatekeeper for other health care services (DHFS 1996). They may also be involved in teaching and research.

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<sup>1</sup> Some data sources use the term nonspecialist medical practitioners instead of GPs.

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The pivotal role of GPs in providing continuity of care of patients with chronic conditions has been recently highlighted in the Interim National Evaluation Summary of the Australian Coordinated Care Trial (DHAC 1999f). Some common terms relating to general practice are defined in box 5.1.

**Box 5.1 Some common health terms**

**Consultations:** the different types of services provided by GPs (also called encounters).

**Divisions of general practice:** local networks of GPs operating within a defined geographic area.

**Full time workload equivalent:** a method for calculating the number of medical practitioners based on the number of claims processed by Medicare in a given period.

**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 with one specific population such as women's health and Indigenous health.

**General practitioner:** a doctor who provides primary, continuing, comprehensive whole-person care for individuals, families and the community. For the purpose of this report, all non-specialist medical practitioners are included under this definition.

**Primary care:** essential health care based on practical, scientifically sound and socially acceptable methods made universally accessible to individuals and families in the community.

**Problems managed:** the descriptions of any disease, complaint or ill-defined condition managed by the GP at a consultation or encounter.

**Reasons for consultation:** the expressed demand of the patient for care as perceived and recorded by the GP.

**Recognised general practitioner:** a vocationally registered GP, a Fellow of the Royal Australian College of General Practitioners or equivalent, or a GP registrar in a training placement.

**Unreferred attendances:** GP services, emergency attendances after hours, other prolonged attendances, group therapy and acupuncture. All attendances for specialist services are excluded as these must be 'referred' to receive Medicare reimbursement.

**Vocational registration:** a formal training program that promotes quality in general practice. Vocationally registered GPs are registered separately from other nonspecialist practitioners for Medicare purposes, and receive higher Medicare benefits for services.

*Source:* (DHFS 1996).

The services provided by GPs comprise the largest source of primary health care in Australia. Primary health care generally refers to non-institutional health care

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services. It is often the first point of contact for people seeking health advice, assistance with a health problem and/or support for living with chronic illness or disability. Other examples of primary health care include:

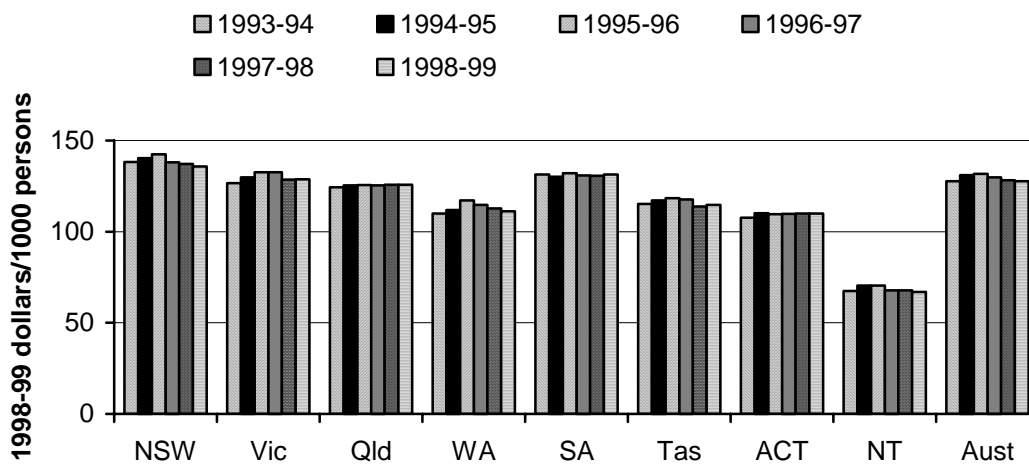
- services provided by pharmacists in community pharmacies;
- services provided by community health centres;
- services provided by alternative/complementary health practitioners;
- therapy and treatment services such as counselling, allied health services and community nursing in non-institutional settings or in the home; and
- preventative strategies such as health promotion, early identification, early prevention and information services delivered by a range of service providers.

Most GPs are private practitioners whose services are largely funded by the Commonwealth Government through the Medicare Benefits Schedule. The volume and mix of patient services determines the total cost of GP services funded under Medicare.

State and Territory governments also provide limited funding for GP health care services (for example, doctors are employed to provide visiting medical and other primary health care services in rural and remote areas). State and Territory governments are also responsible for registering and licensing GPs in their jurisdiction. For example, the Tasmanian Government has formed partnerships with some rural local governments to provide incentive payments to attract GPs, recruited through River Medical Service, to rural areas. A recently agreed Rural Doctors Agreement also provides payments to GPs for community primary care services, travel costs to distant localities, ongoing education and for professional development.

Consulting a GP was the second most common health related action of Australians in 1995, after use of medications (ABS 1997). In 1998-99, people consulted a general practitioner on average 5.4 times per head of population (DHAC 1999d). The cost to the Commonwealth Government for all unreferral attendances or consultations to GPs was approximately \$2.4 billion in 1998-99. This equated to expenditure of \$128 per 1000 population in 1998-99, compared to \$128 in 1993-94 and \$132 in 1995-96 (figure 5.1). Approximately 79 per cent of all unreferral attendances provided by GPs in 1998-99 were bulk billed. Patients who are privately billed may pay a co-payment, depending on whether the GP charges more than the Medicare Benefits Schedule rebate. Unreferral attendances accounted for 35.9 per cent of all medical services funded under Medicare (DHAC 1999d).

Figure 5.1 Commonwealth Government real expenditure on unreferral consultations



Source: table 5A.29.

The total number of GPs billing Medicare in Australia has steadily increased since the introduction of Medicare in 1984, from 16 948 to 24 176 in 1998-99 (DHAC 1999a). The average annual growth rate since 1984-85 has been 2.6 per cent. The total number of full time workload equivalent, GPs increased by 2178 throughout Australia between 1991-92 and 1998-99. This represented an average annual growth rate of 2.1 per cent.

Australia has limited data collections on the activities of GPs. Medicare statistics have been the sole source of routinely collected national data. The deficiency in national health information on general practice was highlighted in the 1995 National Health Information Development Plan, which identified the need to develop and collect standardised information on primary and other non-institutional health care encounters (*Britt et al.*). In response, the Australian Institute of Health and Welfare and the University of Sydney cooperated on the Bettering the Evaluation and Care of Health (BEACH) study (box 5.2).

Data from the first summary report, covering the period April 1998 to March 1999, indicate that the most common reasons patients gave for visiting a GP were to obtain a prescription (8.2 per 100 consultations), receive treatment for coughs (6.2 per 100 consultations) or to receive a cardiac check-up (5.2 per 100 consultations) (table 5A.8). The main problems managed were hypertension (8.3 per 100 consultations), upper respiratory tract infection (6.8 per 100 consultations) and immunisation (5.2 per 100 consultations) (table 5.1).

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**Box 5.2 Bettering the evaluation and care of health: the BEACH study of GP activity**

The BEACH study began in April 1998 and the first summary report was released in October 1999. The study will provide a continuing source of data to describe GP activity and inform improvements in primary health care service provision.

The BEACH program has three primary aims:

- to provide reliable and valid data about GP–patient encounters;
- to establish an ongoing database for GP–patient encounter information; and
- to assess patient risk factors and health states and their effect on health service activity.

A random sample of 1000 recognised GPs from across Australia was selected. Each provided information on 100 consecutive encounters or consultations. Data were collected on GP characteristics, patient characteristics, patient reasons for the encounter, and problems managed. Data were also collected on whether the problem was work related, what management action was taken (such as drugs prescribed, counselling, referral to a specialist and admission to a hospital), and population risk factors (such as smoking status, alcohol consumption and exercise level).

Source: Britt et al. (1999).

**Table 5.1 Top 10 health problems managed by GPs, April 1998 to March 1999**

<i>Problem<sup>a</sup></i>	<i>Number</i>	<i>% of total problems</i>	<i>Rate per 100 encounters<sup>b</sup></i>
Hypertension*	8 042	5.71	8.30
Upper respiratory infection, acute	6 623	4.70	6.83
Immunisation, all*	5 025	3.57	5.19
Depression*	3 367	2.39	3.47
Acute bronchitis/bronchiolitis	3 185	2.26	3.29
Asthma	3 079	2.19	3.18
Back complaint*	2 816	2.00	2.91
Diabetes – unspecified*	2 473	1.76	2.55
Lipid disorder	2 393	1.70	2.47
Osteoarthritis*	2 118	1.50	2.19

<sup>a</sup> Problem is classified along individual International Classification of Primary Care (ICPC) unless denoted by an \*, which indicates a grouping of multiple individual ICPC problems under a broader heading. <sup>b</sup> More than one problem can be managed per encounter or consultation.

Source: table 5A.10.

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## 5.2 Policy developments in general practice

There have been a number of initiatives by the Commonwealth and State and Territory governments to improve the effectiveness of service delivery in general practice. Consistent with international developments, the Commonwealth Government and the Royal Australian College of General Practitioners sought to define, measure and improve general practice with the introduction of vocational registration in 1989. The basic goal of vocational registration was to raise the standards of care in general practice, and to establish general practice as a speciality in its own right. The following strategies were employed:

- registration of GPs for Medicare purposes separately from other nonspecialist practitioners;
- provision of higher Medicare benefits for services provided by vocationally registered GPs;
- restriction of new registrations to GPs with formal qualifications; and
- mandatory and ongoing participation in quality assurance and continuing education to maintain registration.

The General Practice Strategy was developed jointly by the Australian Medical Association, the Royal Australian College of General Practitioners (RACGP) and the Commonwealth Government in 1991. It provided a framework which sought to enable general practice to improve the quality of care for patients. Among the initiatives of the strategy was the establishment of the Divisions and Project Grants Program. The main aim of this program was to improve health outcomes for patients by encouraging GPs to work more closely together, and to establish links with other health professionals to improve the quality of health service delivery at the local level. As part of the Divisions and Projects Grants Program, Divisions of General Practice were established in 1992-93. These divisions are local networks of GPs operating within a defined geographic area. In 1999, 123 divisions were established throughout Australia, each serving a median population of 160 000 (a range of 40 000 to 490 000) per division.

The Rural Incentives Program is another initiative which was initially funded by the Commonwealth Government under the General Practice Strategy. The aim of the program is to encourage the recruitment and relocation of GPs to rural and remote areas. It consists of a number of components designed to secure short term and long term changes in the rural GP workforce. The Rural Incentives Program is now managed at the State level through Rural Workforce Agencies.

In 1998, the General Practice Strategy Review Group recommended that a Practice Incentive Program replace the Better Practice Program which had been established

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in 1994. The aim of the Better Practice Program was to recognise and remunerate those GPs who provide comprehensive, quality care and who were working towards acquiring the Royal Australian College of General Practitioners entry standards for general practice. As part of the Practice Incentives Program, the Commonwealth Department of Health and Aged Care implemented a targeted incentives program in 1998. This program includes the General Practice Immunisation Incentives and the Quality Prescribing Incentive. The former program provides payments to encourage GPs to obtain high immunisation coverage levels for children in their care, and the latter program assists GPs to keep abreast of information on the quality use of medicines. Further targeted incentive programs are being developed.

In November 1999, the Council of the RACGP announced support for a major initiative to tackle the acute shortage of GPs in rural Australia. The Council has commissioned a feasibility study to explore the provision of a further 100 training places for registrars in rural Australia. The proposed new training places would be additional to the current annual 400 places. The feasibility study will address the need to ensure that trainees remain in rural areas for a reasonable number of years. It will also address the issue of lifestyle, which has been a major contributing factor to GPs moving away from rural practice (RACGP 1999).

State and Territory governments have developed different ways of encouraging and incorporating the involvement of GPs in policy and decision making. In 1999, NSW Health released a General Practice Discussion Paper which explored ways in which the State and general practice could work together in a more coherent and integrated manner. The General Practitioner Advisory Committee (GPAC) — a peak body to coordinate and improve consultation between NSW Health and GPs — has broad representation, including rural and urban divisions and academic departments of general practice. It advises on issues relating to NSW health policy or practice that would improve coordination of primary care and other levels of care for the NSW community. GPs are also represented on various policy and practice committees across NSW Health.

In Victoria, a General Practice Unit has been established to improve the links between GPs, divisions of general practice and the Department of Human Services. GP input into State health policy is encouraged, and GP representatives from GP divisions in Victoria are reimbursed for their time in making this contribution. Initiatives are also underway through the Victorian Divisions of General Practice to establish a statewide database of GPs' contact information. It is anticipated that this will improve the transfer of information between hospitals and GPs.

In Queensland, a General Practitioner Advisory Committee (GPAC) was established in 1998 to address similar issues. Membership includes the State and Commonwealth Governments, peak GP organisations, academic departments of

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general practice and consumers. The committee is focussing on delivering improved health service delivery by addressing a number of issues. The focus of these issues is on integration, workforce, information management/technology, public health, chronic and complex care, standards training and clinical guidelines.

In Tasmania, the Health Department has established a General Practice Liaison Unit in the Community Health and Rural Division. In the ACT, the Department of Health and Community Care links with general practitioners mainly through the ACT Division of General Practice.

In the NT, a General Practice Forum meets every two months to provide a framework within which GPs and Territory Health Services can jointly address strategic planning and policy issues related to the delivery of health services. Both NT Divisions of General Practice are represented, as well as the Royal Australian College of General Practitioners (RACGP), the NT Remote Workforce Agency and the Australian Medical Association. There are also staff dedicated to GP issues in the Aboriginal and Community Health Policy Division of Territory Health Services. The Royal Darwin Hospital has established a GP liaison position (shared by two local GPs) to facilitate communication between hospital personnel and general practitioners. Important barriers to good practice are being identified, and strategies are being implemented.

### **5.3 Framework of performance indicators**

The framework of performance indicators is based on the shared government objective for general practice, which reflects the primary care role of GPs (box 5.3).

**Box 5.3 Governments' objectives for general practice**

General practice aims to promote the health of Australians by:

- acting as a main point of entry to the health care system;
  - providing health care which promotes changes in lifestyle behaviour and prevents possible illness;
  - coordinating and integrating health care services on behalf of clients; and
  - providing continuity of care,
- in an equitable and efficient manner.

The performance indicator framework aims to inform analysis of the effectiveness and efficiency of policies targetted at the primary health care services of general



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practice (figure 5.2). The framework is based on research conducted in Australia and the United Kingdom to develop performance indicators for primary care aspects of general practice services. The framework will change over time as better indicators are developed and as the focus and objectives for general practice change.

Effectiveness indicators relate to four broad categories: outcomes, appropriateness, quality, and access and equity. The outcome indicators focus on disease prevention — that is, immunisation coverage, notification of selected childhood diseases (which is a new indicator) and cervical cancer screening rates.

The level of immunisation coverage has been included in the framework because GPs see 93 per cent of children in the age group of 0–6 years seven times per year on average (DHAC 1999c). General practitioners are encouraged through the Practice Incentive Program to obtain high immunisation coverage levels. The aim of the program is to ensure that for 90 per cent of GPs, 90 per cent of the children attending their practice are fully immunised (DHAC 1999c). They are in an ideal position to monitor the immunisation status of all children in their care but are not solely responsible, given the varying roles of other providers.

Similarly, the notification rate of selected childhood diseases (measles, whooping cough and *Haemophilus influenzae* type B) has been included because the activities of GPs can influence the level of these diseases. The debilitating effects of these diseases can be long term or even life threatening. The complications from measles, for example, can be very dangerous, and pneumonia occurs in one in 25 cases. Approximately one child in every 2000 who contracts measles will develop inflammation of the brain. More deaths in Australia have been caused by measles in the past 15 years than by diphtheria, whooping cough, tetanus and polio combined (DHAC 1999c). As part of the Immunise Australia Seven Point Plan, Australia has embarked on a strategy to eliminate measles.

The appropriateness indicators focus on four aspects: acute illness management; chronic illness management; gatekeeping to secondary care; and prescription and diagnosis. Acute illness management is measured by standardised hospital separation rates for some short term illnesses for which hospital admission is generally avoidable: severe ear/nose/throat infection, cellulitis, kidney/urinary tract infection and gastroenteritis. Separation rates significantly greater than the average for these illnesses may demonstrate issues of primary care delivery that need to be further explored.

Two indicators measure GP performance in chronic illness management: prescribing rates for mental illness (though benchmark rates have yet to be defined) and standardised hospital separation rates for some chronic illnesses. The prescribing rates for mental illness have been included in the framework because of

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concerns over the reliance of GPs on anti-depressants and benzodiazepines in the treatment of mental disorders. Major programs, such as the Pharmaceutical Education Program (Commonwealth Department of Human Services and Health, 1995) are aimed at promoting alternative management approaches to anxiety and depression (RACGP 1999c). The National Health System in the UK also has recommended, as part of the “high level performance indicators” that the “volume of “benzodiazepines” be used as an indicator of effective delivery of services by GPs for mental disorders.

People suffering asthma, diabetes and epilepsy sometimes require hospitalisation for acute episodes of illness, but ongoing management of these chronic conditions is a prime responsibility of GPs. High levels of separations for these conditions may indicate the need for improvement in GP management of these patients, and self management.

Standardised separation rates for conditions often not requiring hospitalisation - for example, myringotomy (insertion of grommets) and tonsillectomy - are indicators of the GP’s role as the gatekeeper to secondary care services. High separation rates for myringotomy and tonsillectomy may indicate inappropriate care by GPs, because conditions requiring these treatments often can be managed at the primary care level. Data on both this indicator is being reported for the first time this year.

Per person benefits paid by the Commonwealth Government for pharmaceuticals, pathology tests and diagnostic imaging, ordered by GPs, are indicators of the appropriateness of prescribing and diagnosis. High levels of benefits for pharmaceuticals may indicate inappropriate prescribing habits and over reliance on this method of treatment by GPs. Similarly, high levels of benefits for pathology tests and diagnostic imaging may also indicate inappropriate use of high technology equipment, used in the care of patients by GPs. Data on both these indicators is being reported for the first time this year.

The quality of general practice services is reflected by the proportion of full time workload equivalent GPs with vocational registration, patient satisfaction and the proportion of practices with electronic information management systems. A new indicator of quality in this year’s report is the proportion of practices that are registered for accreditation.

Vocational registration of GPs has been included as a quality indicator because it establishes the framework within which other quality initiatives have occurred in general practice. It defines general practice as a distinct discipline within medicine, and emphasises the importance of formal training and the development of professional accountability through mandatory improvement (DHFS 1996). Data on this indicator is being reported for the first time this year.

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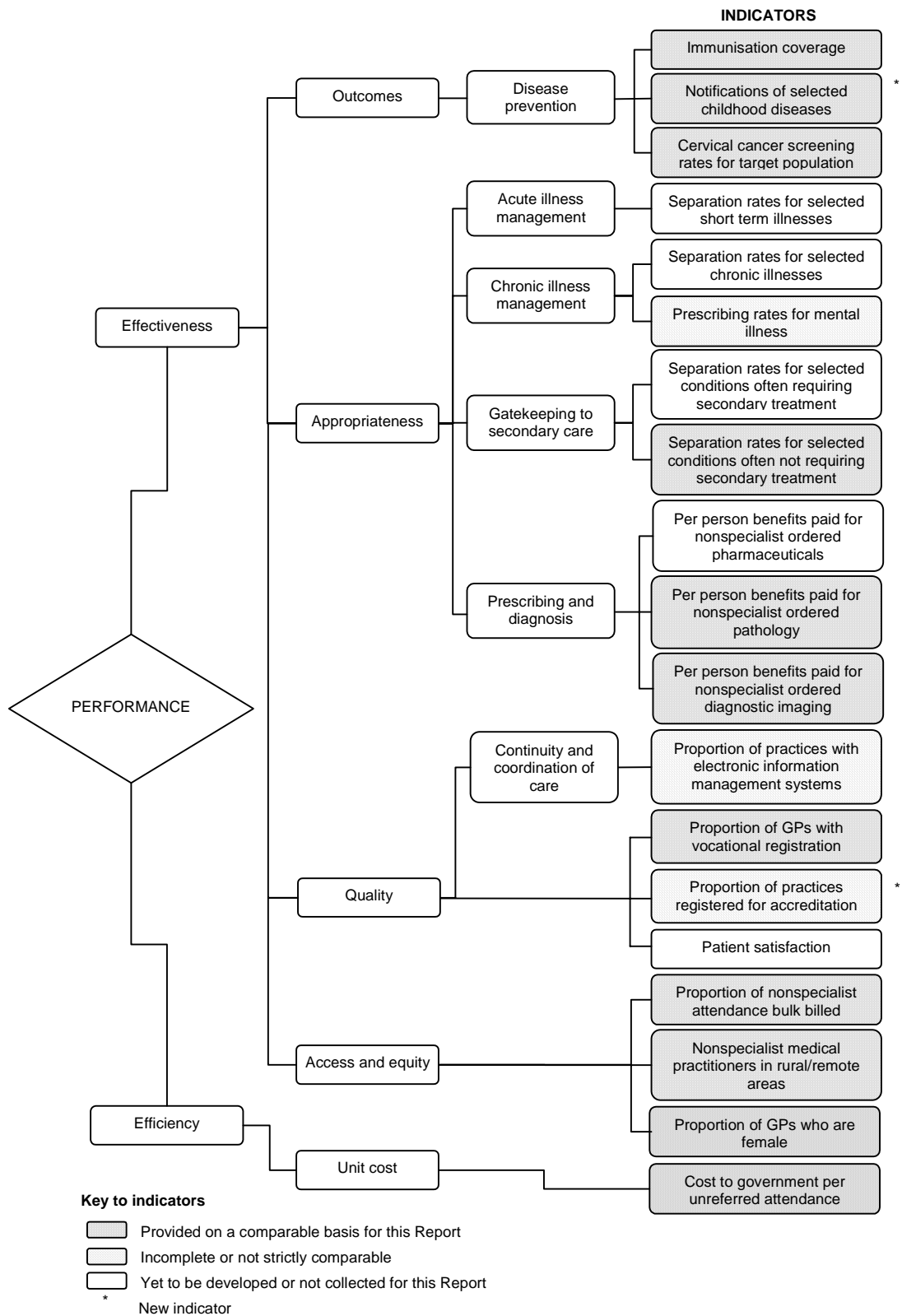
Levels of practice accreditation are also a measure of quality practice. The accreditation of practices has two major components: first, setting acceptable minimum standards for general practice and, second, establishing an effective and objective process for assessing practices against these standards.

The proportion of practices with electronic information management systems is included as a quality indicator because information management/technology is recognised as useful tool for helping GPs maintain the high quality of care provided to patients. The use of clinical software and the interchange of data between GPs and organisations (such as divisions of general practice, pathology laboratories and hospitals) are examples (DHAC 1999e). Electronic information management systems also support current directions and reforms in health care which focus on an integrated and evidence based health system. Under the Practice Incentives Program, a payment is made to those practices where the majority of GPs prescribe electronically, and/or where the practice has either an Internet connection or an email account. Data on this indicator is being reported for the first time this year.

Access and equity are measured by the proportion of nonspecialist attendances that are bulk billed (thereby alleviating any financial barriers to access GPs); the proportion of full time workload equivalent, GPs in rural/remote areas, and the proportion of full time workload equivalent GPs who are female. Data on the latter two indicators is being reported for the first time this year.

The cost to government of unreferral attendances is the only suggested efficiency indicator for GP services at this stage. Data on this indicator is being presented for the first time this year.

Figure 5.2 Performance indicators for general practice



## 5.4 Key performance indicator results

Different delivery contexts, locations and types of client may affect the effectiveness and efficiency of health services. Appendix A contains detailed statistics and short profiles on each State and Territory, which may assist in interpreting the performance indicators presented in this chapter.

### Outcomes

#### *Disease prevention — immunisation*

The level of immunisation coverage of children is the first outcome indicator of the performance of GPs in providing primary care. Child immunisation services are delivered by many providers, such as individual GPs and group practices, community health centres, local government councils and hospitals. The Australian Childhood Immunisation Register's estimates of immunisations by individual GPs in 1997-98 range from 84 per cent in Tasmania to slightly less than 1 per cent in the NT. In Queensland, group general practices were the major service providers, with 82 per cent of valid immunisation episodes. Community health centres were the major service provider for the NT (98.5 per cent) (table 5.2).

Table 5.2 **Proportion of valid episodes by immunising provider, 1997-98 (per cent)<sup>a</sup>**

<i>Provider type</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
GPs	81.3	45.1	82.1	57.7	67.3	84.1	30.1	0.9	65.7
Public hospital	3.9	0.3	4.3	6.0	6.6	0.1	1.0	1.3	3.1
Private hospital	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Aboriginal health service	0.3	1.3	1.0	0.6	0.3	0.0	0.1	0.8	0.7
Community health centre	7.0	0.6	4.1	24.0	6.8	0.1	0.8	98.5	8.6
Local government	7.2	52.7	9.2	8.3	17.5	15.8	0.0	0.0	19.6
State health department	0.0	0.0	0.2	4.8	0.1	0.0	68.0	0.0	2.1
Flying doctor service	0.0	0.0	0.5	0.00	0.2	0.0	0.0	0.0	0.1

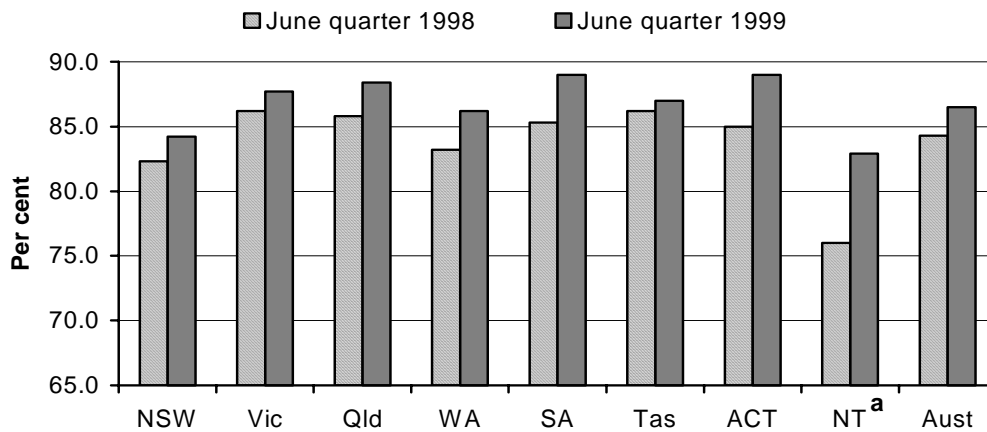
<sup>a</sup> A valid episode is a vaccine administered to a child by a recognised immunisation provider. (Generally an encounter includes a number of episodes.)

Source: table 5A.11.

Nearly 87 per cent of Australian children turning 12 months of age in the quarter ending 30 June 1999 were fully immunised against all diseases (diphtheria/tetanus/whooping cough, polio and *Haemophilus influenzae* type b).

Across jurisdictions, the NT recorded the lowest proportion (83 per cent), while SA and the ACT recorded the highest (89 per cent) (figure 5.3).

**Figure 5.3 Proportion of children turning 12 months of age who were fully immunised**



<sup>a</sup> The NT Government data showed that immunisation coverage was 89 per cent in June 1999.

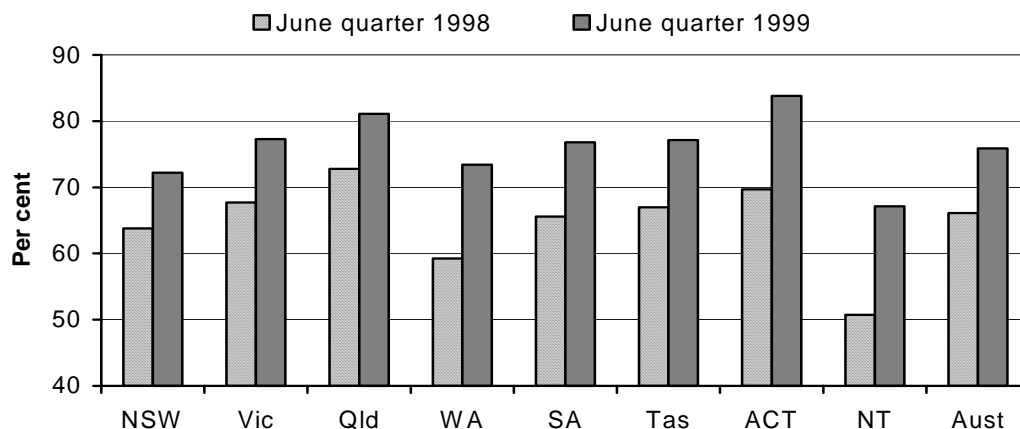
Source: table 5A.12.

Nearly 76 per cent of children turning 24 months of age during the quarter ending 30 June 1999 were assessed as being fully immunised (figure 5.4). Across jurisdictions, the NT recorded the lowest proportion (67 per cent), while the ACT and Queensland recorded the highest (84 per cent and 81 per cent respectively). However, the overall proportions may appear relatively low. This was partly due to poor identification of children on immunisation encounter forms. Fully immunised children in this age group are those who have been vaccinated against diphtheria/tetanus/whooping cough, polio, *Haemophilus influenzae* type b and measles/mumps/rubella.

#### *Disease prevention — notifications of selected childhood diseases*

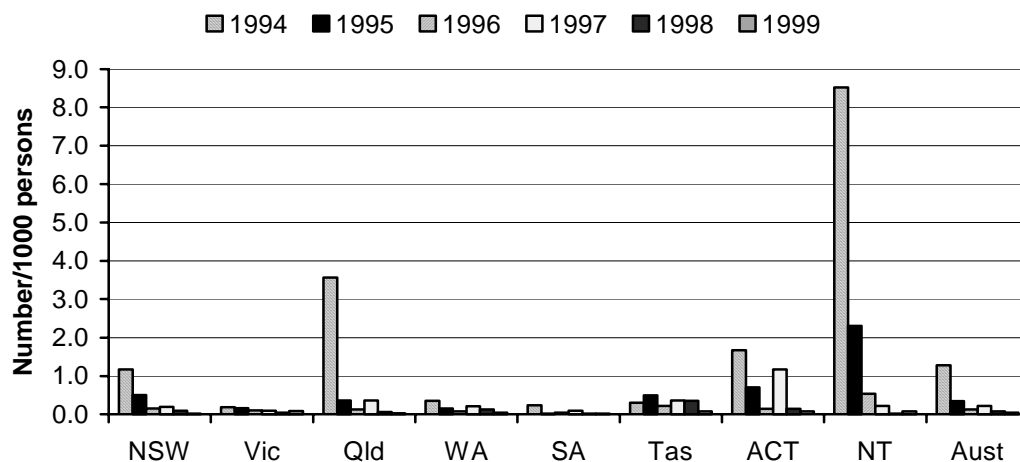
The Immunise Australia Seven Point Plan has resulted in a large fall in the number of notifications of measles. There were nearly 5000 cases of measles in Australia in 1994, but only 166 in 1999, which represents an average annual decrease of 49 per cent. The most severe outbreaks of the disease in 1994 occurred in Queensland (2483 cases) and NSW (1504 cases) which accounted for 51 per cent and 31 per cent of all cases respectively (table 5A.16). Across Australia, the rate per 1000 persons 0 to 14 years of age fell from 1.3 in 1994 to zero in 1999. In Queensland, rate fell from 3.6 in 1994 to zero in 1999. The fall was similar in the NT, from 8.5 in 1994 to 0.1 in 1999 (figure 5.5).

**Figure 5.4 Proportion of children turning 24 months of age who were fully immunised**



Source: table 5A.13.

**Figure 5.5 Notifications of measles, (per 1000 persons) aged 0–14 years**



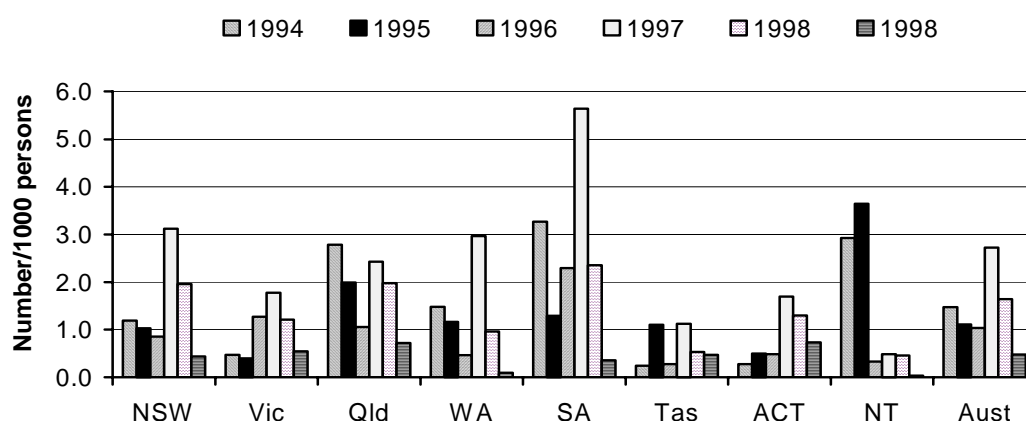
Source: table 5A.16.

From 1994 to 1999 in Australia, the number of notifications of whooping cough (pertussis) decreased at an average annual rate of 19.8 per cent. A severe outbreak of the disease in 1997 represented an increase of 165 per cent from the number of cases reported in 1996. The outbreak was most severe in NSW, which accounted for 38 per cent of all cases (table 5A.14). As a result of the increased incidence of the disease, the then Commonwealth Department of Health and Family Services decided to encourage the immunisation of all children against the disease.

Across Australia, the number of cases per 1000 persons 0 to 14 years of age fell from 1.5 in 1994 to 0.5 in 1999. In SA, it fell from 3.3 in 1994 to 0.4 in 1999. The fall was similar in the NT, from 2.9 in 1994 to zero in 1999 (figure 5.5).

*Haemophilus influenzae* type b has a similar history from 1994 to 1999. There has been a steady decline in the notification rate for the disease across Australia during that period. From 168 in 1994, the number of cases fell to 24 in 1999. This represents an average annual decrease of 32 per cent (table 5A.15).

**Figure 5.6 Notifications of whooping cough, (per 1000 persons) aged 0–14 years**



Source: table 5A.14.

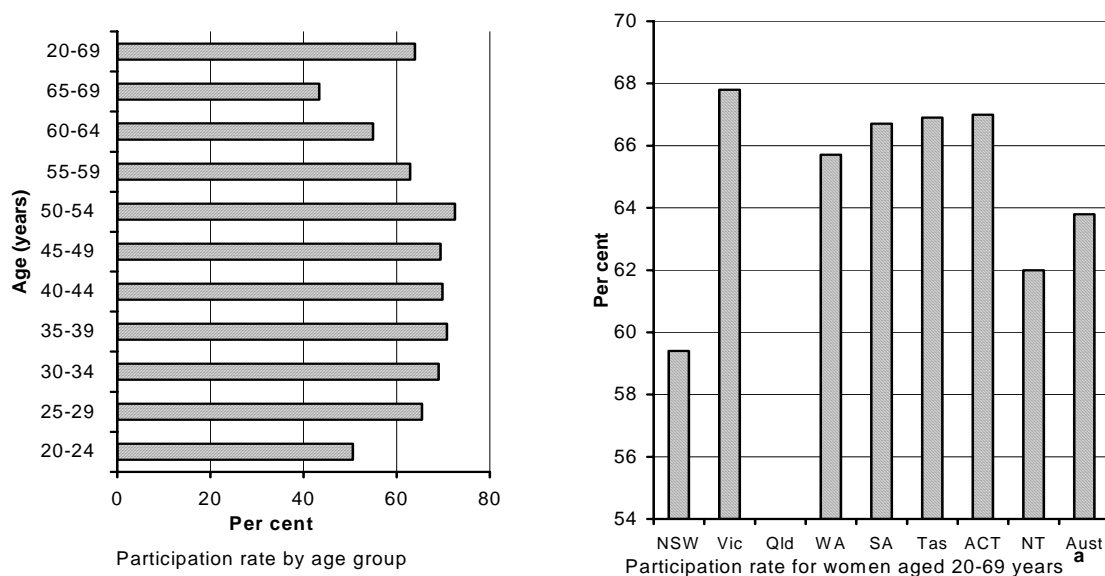
### *Disease prevention — cervical cancer screening*

The third outcome indicator for primary care services provided by GPs is the screening rate for cervical cancer. Like child immunisation, cervical cancer screening tests (that is, pap smears) are offered by a range of health care providers: GPs, gynaecologists, family planning clinics and hospital outpatient clinics.

Cervical cancer screening is targeted at women aged 20–69 years. Nationally, around 64 per cent of females in the target group were screened for cervical cancer between January 1997 and December 1998 (figure 5.7). The participation rate was highest for women aged 50–54 years (72.5 per cent) and lowest for women aged 65–69 years (43.4 per cent). Across jurisdictions, the participation rate of women aged 20–69 years was highest in Victoria (67.8 per cent) and lowest in NSW (59.4 per cent).



**Figure 5.7 Participation rates of women in cervical cancer screening programs, 1997 and 1998**



<sup>a</sup> Rates are expressed per 100 000 women and are age standardised to the Australian 1991 population. Queensland Health Pap Smear Register began operations in February 1999; no data is available for this report. The ACT register contains only women with an ACT address.

Source: 5A.17

## Appropriateness

### *Chronic illness management — prescribing rates for mental illness*

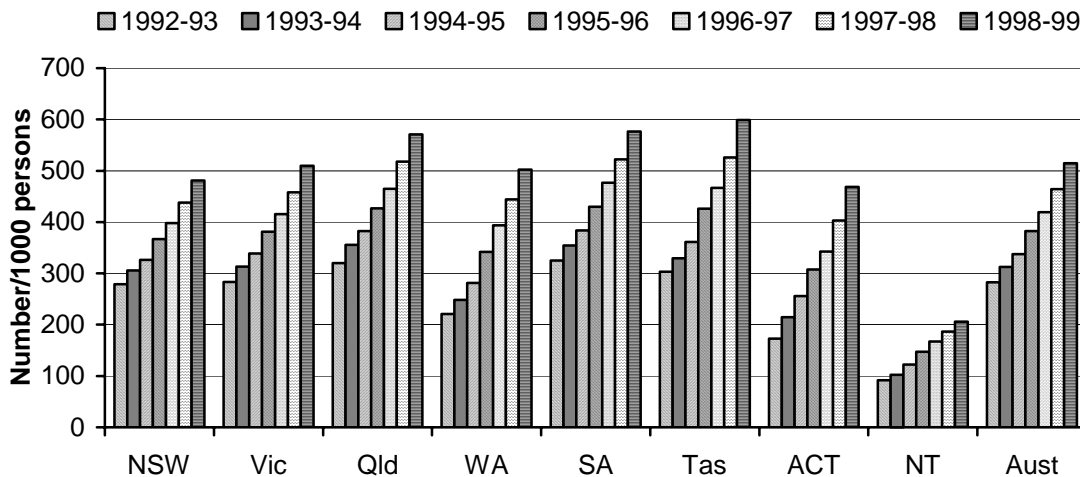
The GP prescribing rates of antidepressants and anxiolytics to manage the two mental health problems, depression and anxiety disorders, are reported for the first time this year. It is anticipated that more rigorous methods of defining this indicator and reporting accordingly will be developed for future Reports.

The prescribing rate for antidepressants across Australia in 1998-99 was 514 per 1000 persons aged 15 years and over. However, the rate differed across jurisdictions. The highest rates in the particular age category were in Tasmania and SA (599 and 577 per 1000 persons respectively). The lowest rate was in the NT (206 per 1000 persons) (figure 5.8).

The average annual growth rate between 1992-93 and 1998-99 in the number of GP ordered scripts for anti-depressants, ordered by GPs, per 1000 people aged 15 years and over was 10.5 per cent across Australia. The highest growth rate was in the

ACT and the NT (both 18.1 per cent), followed by WA (14.7 per cent). The lowest annual growth rate for this period was in NSW and SA (9.5 per cent and 10.0 per cent respectively) (table 5A.18).

**Figure 5.8 Number of GP ordered scripts for anti-depressants, per 1000 persons aged 15 years and over**

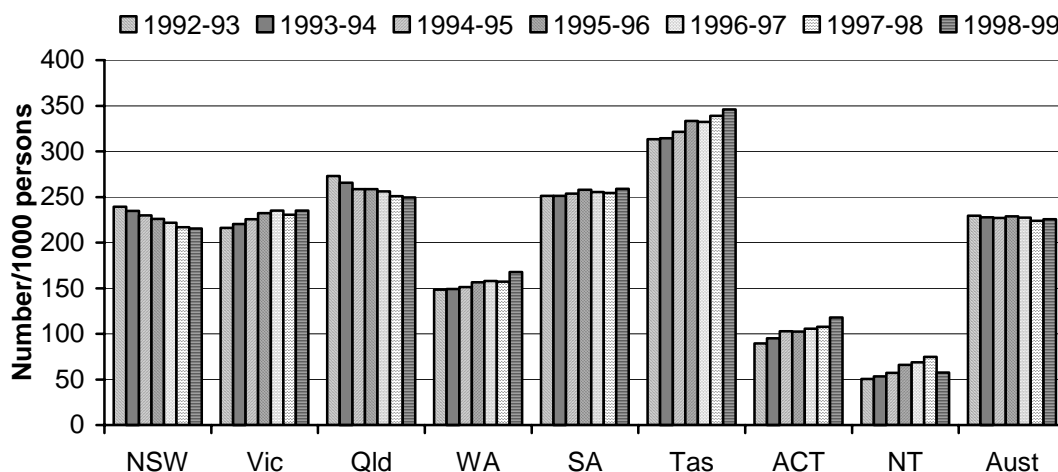


Source: table 5A.18.

The GP rate of prescribing anxiolytics across Australia in 1998-99 was 226 per 1000 persons aged 15 years and over. However, the rate differed across jurisdictions. The highest rates in the particular age category were in Tasmania and SA (346 and 259 per 1000 persons respectively). The lowest rate was in the NT (57 per 1000 persons) (figure 5.9).

Across Australia, the number of GP ordered scripts for anxiolytics per 1000 people aged 15 years and over was relatively uniform between 1992-93 and 1998-99. The trend was different for jurisdictions with the ACT experiencing an average annual growth rate of 4.7 per cent. This rate was followed in the NT and WA (2.1 per cent and 2.0 per cent respectively). Both New South Wales and Queensland experienced negative growth during this period (-1.7 per cent and -1.5 per cent annually) (table 5A.19).

Figure 5.9 **Number of GP ordered scripts for anxiolytics, per 1000 persons aged 15 years and over**



Source: table 5A.19.

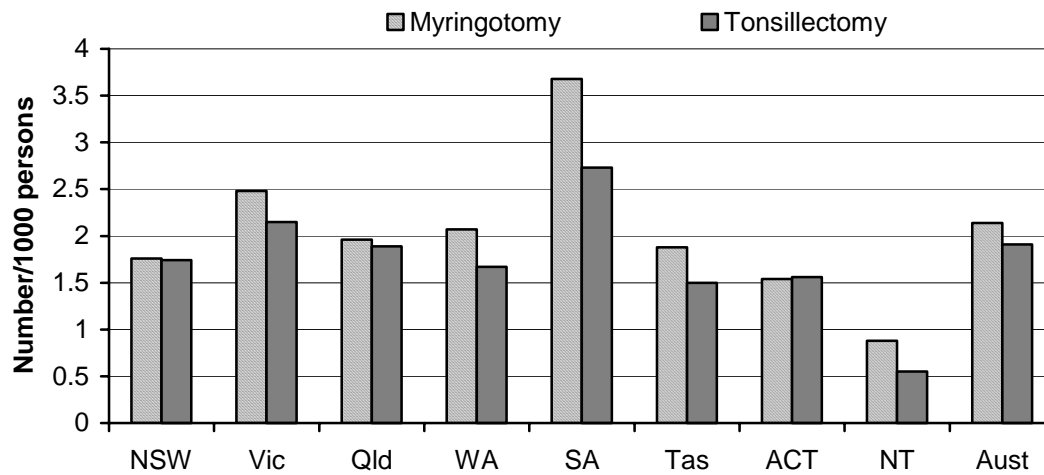
### *Gatekeeping to secondary care*

Age and sex standardised separation rates for selected conditions often not requiring secondary treatment — myringotomy (insertion of grommets) for the treatment of acute otitis media in children and tonsillectomy (removal of tonsils) — are also indicators of the GP's role as the gatekeeper to secondary services. High separation rates may indicate that patients are not receiving appropriate care by GPs, because the conditions can often be managed at the primary care level, without recourse to surgical procedures.

The separation rate for myringotomy in 1997-98 was 2.14 per 1000 people across Australia. SA had the highest separation rate (3.68 per 1000 people), followed by Victoria (2.48 per 1000 people). The lowest separation rate was in the NT (0.88 per 1000 people) (figure 5.10).

The separation rate for tonsillectomy in 1997-98 was 1.91 per 1000 people across Australia. The highest separation rate was in SA (2.73 per 1000 people), followed by Victoria (2.15 per 1000 people). The lowest separation rate was in the NT (0.55 per 1000 people) (figure 5.10).

Figure 5.10 Separation rates for selected conditions often not requiring secondary treatment, 1997-98



Source: table 4A.10 in Chapter 4, 'Public hospitals'.

### Prescribing and diagnosis

Per person benefits paid for GP ordered pathology tests are used to report on the prescribing and diagnosis patterns of GPs. Differences across jurisdictions in the levels of benefits paid for pathology tests and diagnostic imaging ordered by GPs may indicate inappropriate use of these services in diagnosis and treatment.

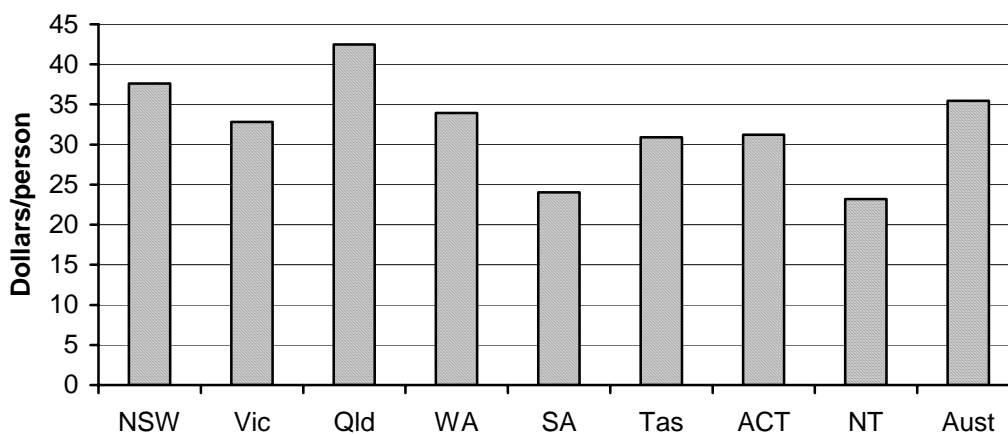
Across Australia, benefits paid for GP ordered pathology tests across were \$35 per person in 1998-1999 (table 5A.20). Queensland reported the highest level of per person benefits paid (\$43), followed by NSW and WA (\$38 and \$34 respectively). The lowest benefits paid were reported in the NT and SA (\$23 and \$24 respectively) (figure 5.11).

Across Australia, benefits paid for GP ordered diagnostic imaging were \$32 per person in 1998-1999 (table 5A.27). NSW recorded the highest level of per person benefits paid (\$36), followed by Queensland (\$31). Both Victoria and WA recorded per person benefits of \$30. The NT reported the lowest benefits paid (\$13) (figure 5.12).

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Figure 5.11 **Benefits paid for pathology test referrals ordered by GPs, 1998-99**

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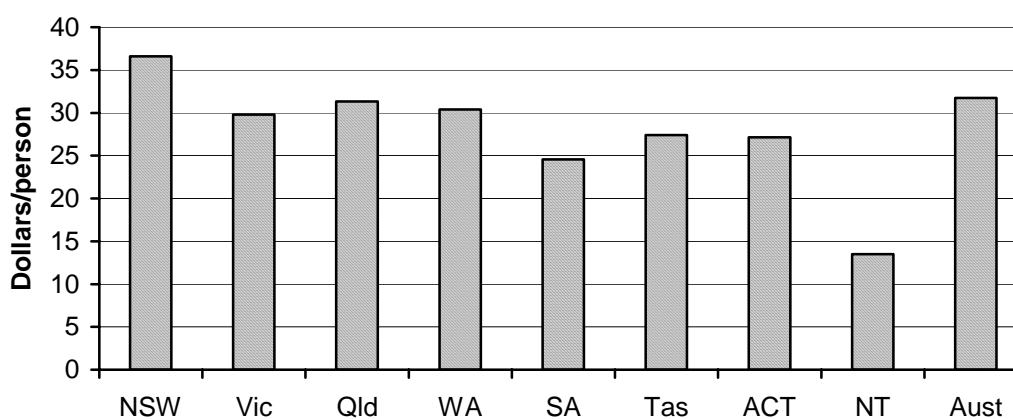


Source: table 5A.20.

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Figure 5.12 **Benefits paid for diagnostic imaging referrals ordered by GPs, 1998-99**

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Source: table 5A.20.

## Quality

Three indicators of the quality of health care delivered by GPs are: the proportion of practices with electronic information management systems; the proportion of full time workload equivalent GPs with vocational registration; and the proportion of practices that are registered for accreditation.

The proportion of practices with electronic information/management systems is a quality indicator which helps to identify the capacity for efficient handling of patient information. Data on a jurisdictional basis was not available. National data from the Practice Incentives Program are available and are reported here. The proportion of practices nationally that prescribed electronically was 59 per cent, and the proportion that had an Internet connection or an email account (modem), was 76 per cent. The highest proportions of practices with electronic prescribing and practices with a modem were in large rural cities (71 per cent and 84 per cent respectively) (table 5.3).

**Table 5.3 Proportion of practices under the Practice Incentives Program with electronic information or management systems, November 1999 (per cent)**

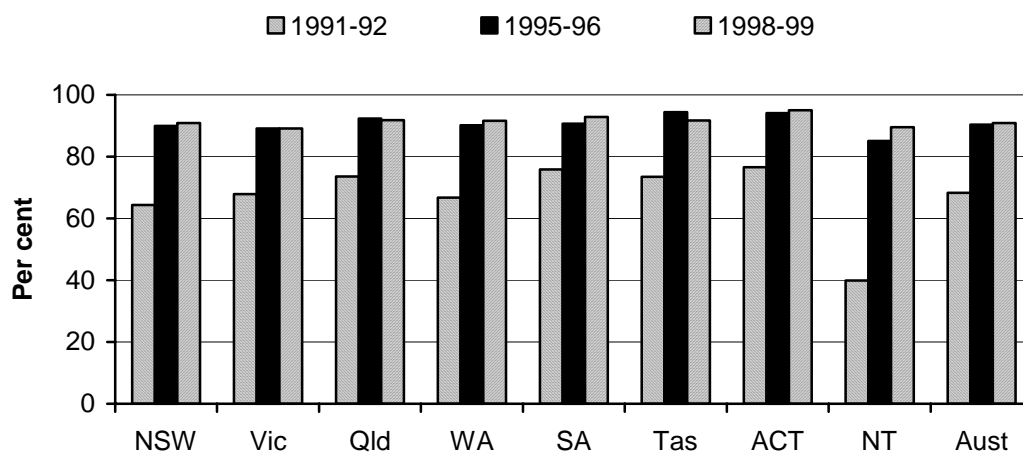
	<i>Electronic prescribing</i>	<i>Electronic connectivity</i>
Capital city	56	73
Other major metropolitan	63	77
Large rural city	71	84
Small rural city	66	81
Other rural area	68	83
Large remote centre	57	82
Other remote area	47	78
Total	59	76

Source: table 5A.22.

The proportion of full time workload equivalent GPs with vocational registration indicates the standard of appropriate training of GPs and their ability to deliver services of high quality (figure 5.13). The ACT had the highest proportion of full time workload equivalent GPs with vocational registration (95 per cent) in 1998-99. The proportion of GPs across Australia with vocational registration steadily rose from approximately 68 per cent in 1991-92 to 91 per cent in 1998-99 — an average annual growth rate of 4.2 per cent (table 5A.21).

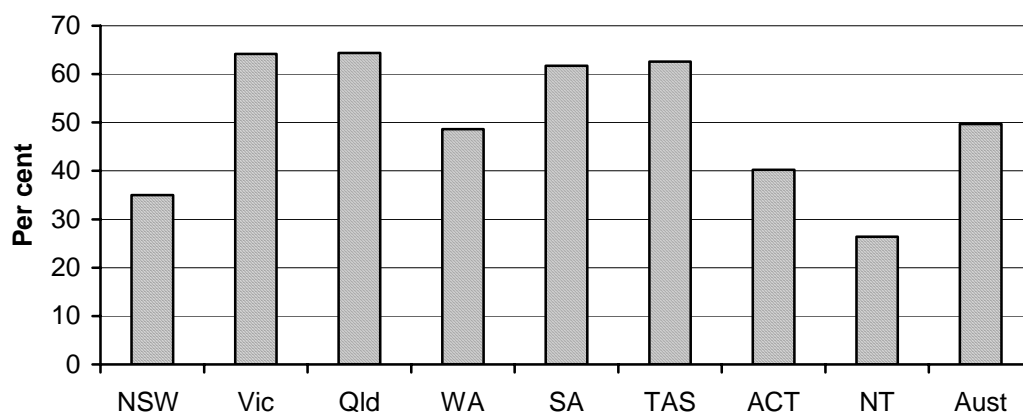
Accreditation in general practice is a systematic way to help identify quality in general practice and to provide GPs with a framework for improving their practices over time. At the end of October 1999, 2944 practices throughout Australia were registered for accreditation with Australian General Practice Accreditation Limited. This represents nearly half of all practices. Victoria and Queensland had the highest rates of registration for accreditation (both slightly more than 64 per cent) and the NT had the lowest rate of 26 per cent (figure 5.14).

Figure 5.13 Proportion of full time workload equivalent GPs with vocational registration



Source: table 5A.21.

Figure 5.14 Proportion of practices registered for accreditation, October 1999



Source: table 5A.23.

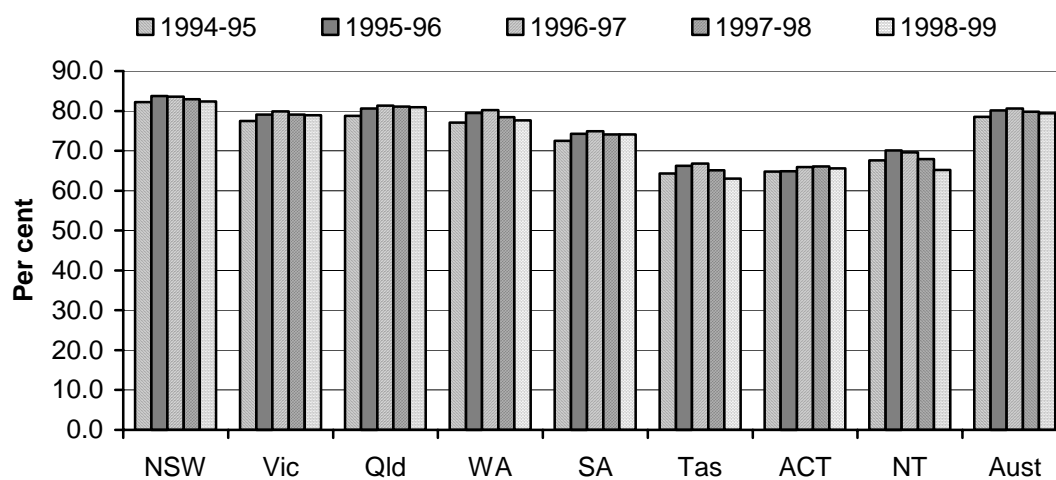
### Access and equity

Three indicators are used to measure access and equity in service delivery by GPs: the proportion of total nonspecialist unreferral attendances that are bulk billed, the number of full-time workload equivalent, GPs in rural/remote areas; and the proportion of full time workload equivalent GPs who are female.

The first indicates the affordability of GP services. Under Medicare, clients may pay the GP's consultation fee and seek reimbursement from the Commonwealth Government, or the GP may bill the Government directly and thereby reduce out-of-pocket costs for patients. A high proportion of bulk billed services indicates a greater level of affordability. Visits to GPs are classed as unreferral attendances under Medicare, and these are further disaggregated into services provided by vocationally registered GPs and those provided by other medical practitioners who are not vocationally registered.

Seventy nine per cent of unreferral attendances were bulk billed across Australia in 1998-99. Bulk billing across Australia fell by 0.4 per cent in 1998-99 from the previous year's level (table 5A.25). These services were provided by both vocationally registered GPs and GPs who are not vocationally registered. Across jurisdictions NSW had the highest proportion of bulk billed services (82.4 per cent), and Tasmania had the lowest (63.0 per cent) (figure 5.15).

**Figure 5.15 Proportion of unreferral attendances provided by GPs that were bulk billed**

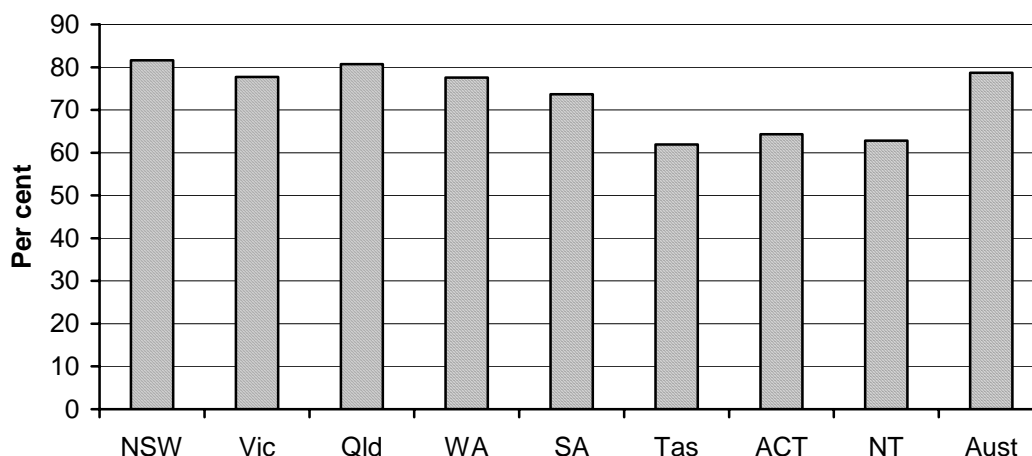


Source: table 5A.25.

Unreferral attendances provided by recognised GPs accounted for 88 per cent of total unreferral attendances in 1998-99 (DHAC 1999d) of which nearly 79 per cent were bulk billed. Across jurisdictions NSW had the highest proportion of bulk billed unreferral attendances that were provided by recognised GPs (81.6 per cent) and Tasmania had the lowest (61.9 per cent) (figure 5.16).



Figure 5.16 **Proportion of bulk billed attendances provided by recognised GPs, 1998-99**



Source: table 5A.24.

Another important access issue is the ability of people in nonmetropolitan areas to access primary health care services provided by GPs. The Commonwealth Government has introduced initiatives — such as the General Practice Rural Incentives Program — and medical support agencies to develop strategies for the recruitment and retention of GPs in rural and remote areas across Australia.

Many rural GPs provide a wide range of services, both in their own practices and in the public hospital system, including consultations, anaesthetics, obstetrics, psychiatric triage, emergency medicine, and relatively complex procedures and operations in response to trauma. However, the comparatively low number of rural GPs per head of population means that they are often stretched in responding to their community's physical and mental health care needs.

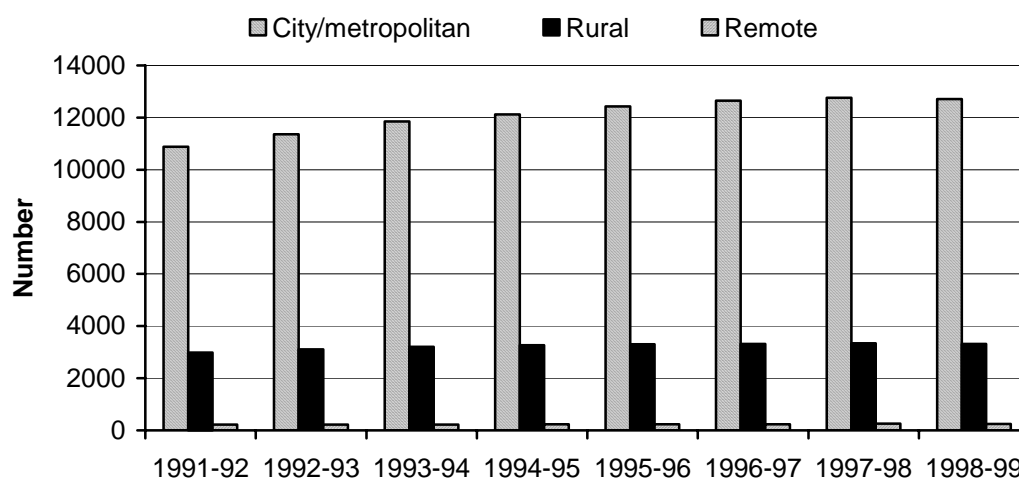
The number of full time workload equivalent, GPs increased from 14 090 in 1991-92 to 16 268 in 1998-99 — an average annual growth rate of 2.1 per cent. The highest average annual growth rate growth occurred in the numbers working in large rural centres (2.4 per cent) and capital cities (2.2 per cent). By contrast, the average annual growth rates in remote centres and other remote areas were 0.6 per cent and 1.8 per cent respectively (table 5A.27).

The distribution of full time workload equivalent, GPs was available for this Report broken down by geographic location on a national basis. Data at the jurisdictional level was unavailable. Seventy eight per cent of full time workload equivalent, non specialist medical practitioners worked in metropolitan (capital cities and other metropolitan areas). Seventy two per cent of the population resided in those areas in

1996 (the most recent year for which the geographic distribution of both the population and GPs was available) (figure 5.17 and table A.6 in appendix A). Twenty two per cent worked in non-metropolitan areas where 28 per cent of the population resided.

Seventy per cent (or 11 428) of full time workload equivalent, GPs worked in capital cities and 8 per cent worked in other metropolitan areas in 1998-99. A further 20 per cent worked in rural centres and areas, and less than 1 per cent worked in each of the remote centres and other remote areas.

**Figure 5.17 Full time workload equivalent GPs, by region<sup>a</sup>**

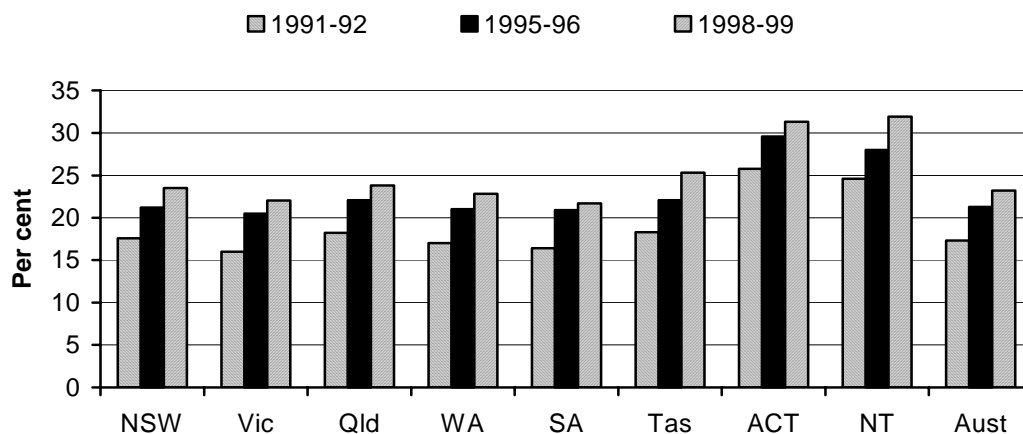


<sup>a</sup> City/metropolitan includes capital cities and other major metropolitan cities. Rural includes large rural cities, small rural cities and other rural areas. Remote includes large remote centres and other remote areas.

Source: table 5A.27.

The final access indicator relates to the proportion of full time workload equivalent GPs who are female. This measure of access recognises the fact that some female patients may be uncomfortable discussing health matters with a male GP. The proportion of female GPs in 1998-99 was highest in the NT and the ACT (32 per cent and 31 per cent respectively), and lowest in Victoria and SA (22 per cent) (figure 5.18). The number of female full time workload equivalent GPs billing Medicare rose by 1328 between 1991-92 and 1998-99. This represented an average annual growth rate of 6.4 per cent (table 5A.26).

Figure 5.18 Females as a proportion of all full time workload equivalent GPs, by jurisdiction



Source: table 5A.26.

## Efficiency

### *Unit cost*

It is an objective of the Review to report comparable estimates of costs. Comparability is maximised when the full range of costs to government is counted on a comparable basis. Where the full costs cannot be counted, comparability is achieved by estimating costs on a consistent basis.

The cost to government of total unREFERRED attendances by GPs per 1000 population is the only suggested efficiency indicator for GP services at this stage. Nationally, the annual cost per 1000 population in 1998-99 was \$128 — highest in NSW and SA (\$135 and \$131 respectively) and lowest in the NT (\$67). Between 1993-94 and 1998-99, the real cost to government per 1000 population has not changed (figure 5.1).

## 5.5 Future directions

The key challenges for improving reporting on general practice and primary care include:

- reporting on Aboriginal and Torres Strait Islander peoples' access to mainstream health services; and
- filling gaps in reporting.

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## **Aboriginal and Torres Strait Islander peoples' access to mainstream services**

In May 1997 the Prime Minister requested that the Steering Committee give priority to developing indicators that measured the performance of mainstream services in meeting the needs of Indigenous Australians. This is an important task, but large gaps remain. The availability and coverage of nationally consistent data on the provision of services to Indigenous clients will increase in future Reports.

### **Filling gaps in reporting**

#### *Appropriateness*

There are a number of gaps remaining in the reporting framework. These include measurement of acute illness management (separation rates for selected short term illnesses), chronic illness management (separation rates for selected chronic illnesses), prescribing and diagnosis (per person benefits for pharmaceuticals) and quality (patient satisfaction). It is the objective of the Review to improve the reporting of these indicators in the future

#### *Quality*

Accreditation in general practice is a systematic way to help identify quality in general practice and to provide GPs with a framework to improve their practices over time. The current accreditation standards are subject to change with the next revision process due in mid 2000. A consultant has been engaged by Australian General Practice Accreditation Limited to research the process of re-accreditation, and the report is due in early 2000. More information should be available for the 2001 Report.

Patient satisfaction is another indicator of the quality of GP services. Definitional problems surrounding this indicator still exist (box 5.4). No routinely collected data are available at the present, but patients' complaints about medical practice could be used as a proxy measure of dissatisfaction. It is anticipated that progress will be made in this area to enable reporting in the future.

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**Box 5.4 Measuring satisfaction in general practice**

A report prepared by Hill and Draper (1995) for the Consumers' Health Forum explored the strengths and weaknesses of a range of consumer feedback mechanisms in general practice. A number of projects funded by the General Practice Evaluation Program sought to develop consumer satisfaction surveys that could be used as a surrogate measure of quality. The fact that most of these surveys found a high level of satisfaction caused some concern within the consumer group, not because consumers were generally not satisfied with general practice, but because this result meant that the mechanism could not contribute to an ongoing quality improvement process.

As Hill and Draper note, while satisfaction is an important issue, it is more important to discover what troubles consumers and what causes dissatisfaction. They quote research showing that even small expressions of dissatisfaction translate into important factors affecting behaviour related to health care.

Some practical suggestions for improving satisfaction surveys included:

- asking about experiences rather than seeking judgments;
- conducting interviews rather than asking people to complete pre-coded questionnaires; and
- using discussion groups to develop questionnaires.

Finally it was recommended that feedback from surveys should not be seen as a substitute for involvement by consumers in the planning and evaluation of service delivery.

While the quality movement is some way from the development of criteria for such a complex process, preliminary work has been undertaken to clarify and document consumer values and experiences.

*Source:* Hill and Draper (1995).

## 5.6 Jurisdictions' comments

Jurisdictions' comments on this chapter are contained at the end of chapter 6.



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## 5A General practice — attachment

Definitions for the indicators and descriptors in this attachment are in section 5A.2. Unsourced information was obtained from Commonwealth, State or Territory Governments.

The data contained in this attachment may be subject to revision. The web page version of the Report contains the most up-to-date data where changes have occurred. This attachment can be found at [www.pc.gov.au/service/gsp/2000/attach5A.pdf](http://www.pc.gov.au/service/gsp/2000/attach5A.pdf). Users without Internet access can contact the Secretariat (details inside front cover of the Report).

### 5A.1 All jurisdictions' data — general practice

#### Descriptors

Table 5A.1 **GPs billing Medicare, by jurisdiction and type of practitioner, 1998-99 (number)**

	<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>
General practitioners	6 409	4 457	3 270	1 756	1 636	524	180	347	18 579
Other medical practitioners	1 620	1 460	1 286	571	384	131	79	66	5 597
Specialists	6 285	4 660	2 949	1 473	1 640	365	99	303	17 774
Total	14 314	10 577	7 505	3 800	3 660	1 020	358	716	41 950

Source: DHAC (1999a).

Table 5A.2 **Full time workload equivalent GPs billing Medicare, by jurisdiction (number)**

	<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>
1991-92	5 219	3 432	2 475	1 136	1 213	341	201	73	14 090
1992-93	5 388	3 618	2 605	1 201	1 244	352	215	76	14 697
1993-94	5 573	3 764	2 741	1 254	1 289	362	219	77	15 279

(Continued on next page)

**Table 5A.2 (Continued)**

	<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>
1994-95	5 680	3 871	2 818	1 301	1 278	370	223	87	15 629
1995-96	5 790	3 959	2 884	1 368	1 292	368	225	85	15 971
1996-97	5 787	4 060	2 992	1 381	1 298	372	225	86	16 200
1997-98	5 867	4 003	3 076	1 402	1 318	361	235	90	16 353
1998-99	5 755	4 034	3 101	1 392	1 318	357	226	87	16 268

Source: DHAC (1999 — GP Branch unpublished).

**Table 5A.3 Proportion of all GPs who observed the schedule fee for unREFERRED attendances (per cent)**

	<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>
1990-91	81.2	71.5	78.8	75.0	75.0	70.1	61.2	62.0	76.7
1991-92	82.6	76.2	79.6	77.8	77.5	71.9	63.8	63.9	79.1
1992-93	84.2	79.4	81.7	80.2	78.9	74.1	65.2	65.2	81.2
1993-94	85.6	81.9	83.3	82.1	80.3	74.7	67.6	66.8	82.9
1994-95	85.9	82.7	84.0	82.3	80.1	74.5	67.8	68.6	83.4
1995-96	86.7	83.8	85.1	83.8	81.0	75.7	67.5	70.9	84.4
1996-97	86.5	84.3	85.4	84.1	81.1	76.3	68.4	71.0	84.5
1997-98	85.5	83.4	84.8	82.2	80.0	74.0	68.3	69.1	83.5
1998-99	85.2	83.1	84.7	81.3	79.6	72.4	68.1	66.7	83.2

Source: DHAC (1999a).

**Table 5A.4 Benefits paid for GP psychiatric service referrals (dollars per person)**

	<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>
Sep 1998	2.04	2.71	1.87	2.24	2.75	1.64	1.46	0.35	2.21
Dec 1998	1.83	2.49	1.77	1.21	2.67	1.65	1.26	0.32	1.96
Mar 1999	1.83	2.32	1.74	1.09	2.37	1.47	1.18	0.34	1.87
Jun 1999	1.99	2.60	1.82	1.17	2.67	1.70	1.27	0.41	2.05

Source: Health Insurance Commission (unpublished — 9 November 1999).

**Table 5A.5 Benefits paid for GP initial specialist referrals (dollars per person)**

	<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>
Sep 1998	4.97	4.14	3.14	3.23	4.21	3.51	3.60	1.36	4.10
Dec 1998	4.61	3.74	3.00	3.24	4.10	3.29	3.44	1.50	3.84
Mar 1999	4.70	3.72	3.08	3.09	3.94	3.07	3.44	1.46	3.85
Jun 1999	4.94	4.06	3.03	3.31	4.20	3.31	3.54	1.65	4.05

Source: Health Insurance Commission (unpublished — 9 November 1999).



**Table 5A.6 Benefits paid for GP subsequent specialist referrals (dollars per person)**

	<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>
Sep 1998	4.92	4.93	3.39	3.05	5.10	3.85	3.45	1.31	4.39
Dec 1998	4.78	4.78	3.36	3.20	5.17	3.78	3.60	1.38	4.32
Mar 1999	4.57	4.53	3.25	2.92	4.71	3.37	3.33	1.33	4.08
June 1999	4.89	4.99	3.30	3.19	5.12	3.64	3.58	1.41	4.38

Source: Health Insurance Commission (unpublished — 9 November 1999).

**Table 5A.7 BEACH Survey Report: patient characteristics<sup>a</sup>**

<i>Patients</i>	<i>Sample size (n)</i>	<i>Rate per 100 encounters<sup>b</sup></i>
Number of patients	96 901	
Gender		
Males	39 873	41.14
Females	57 042	58.86
Missing gender	1 474	na
Age		
<1 year	2 238	2.3
1–4 years	5 075	5.21
5–14 years	6 992	7.18
15–24 years	9 477	9.73
25–44 years	25 178	25.84
45–64 years	23 744	24.37
65–74 years	12 280	12.6
>75 years	12 465	12.79
Missing age	1 022	na
Ethnicity/Aboriginality		
Non-English speaking background	13 195	13.77
Aboriginal	1 006	1.02
Torres Strait Islander	102	0.1
Aboriginal/Torres Strait Islander	38	0.04
Status		
New to practice	9 409	9.69
Seen previously	87 674	90.31
Status missing	1 312	na

<sup>a</sup> Survey period was April 1998 to March 1999. <sup>b</sup> Encounters define the different types of services provided by the participating GPs during the course of their recording period. **na** Not available.

Source: Britt et al., (1999).

**Table 5A.8 BEACH Survey Report: top 30 reasons for encounter<sup>a, b</sup>**

<i>Reasons given for encounter<sup>c</sup></i>	<i>Sample size (n)</i>	<i>% of total reasons for encounters</i>	<i>Rate per 100 encounters</i>
Prescription all*	7 946.1	5.61	8.20
Cough	6 019.0	4.25	6.21
Cardiac check-up*	4 986.0	3.52	5.15
Immunisation all*	4 742.2	3.35	4.89
Throat symptom/complaint	3 696.2	2.61	3.81
Back complaint*	3 461.1	2.44	3.57
Rash*	3 357.4	2.37	3.46
General check-up*	3 032.0	2.14	3.13
Upper respiratory infection, acute	2 794.5	1.97	2.88
Hypertension*	2 231.3	1.57	2.30
Abdominal pain*	2 174.4	1.53	2.24
Depression*	2 047.2	1.44	2.11
Pain, ear/earache	1 881.7	1.33	1.94
Headache	1 875.5	1.32	1.94
Test results*	1 874.1	1.32	1.93
Fever	1 767.5	1.25	1.82
Female genital check-up*	1 651.9	1.17	1.70
Weakness/tiredness general	1 515.5	1.07	1.56
Diarrhoea	1 354.6	0.96	1.40
Asthma	1 327.1	0.94	1.37
Sneezing/nasal congestion	1 307.0	0.92	1.35
Pain, chest NOS	1 268.9	0.90	1.31
Knee symptom/complaint	1 199.9	0.85	1.24
Skin symptom/complaint	1 192.3	0.84	1.23
Foot and toe symptom/complaint	1 161.7	0.82	1.20
Sleep disturbance	1 148.6	0.81	1.19
Pre/post natal*	1 148.5	0.81	1.19
Neck symptom/complaint	1 140.9	0.80	1.18
Anxiety*	1 092.5	0.77	1.13
Swelling*	1 079.5	0.76	1.11
<i>Subtotal</i>	<i>71 475</i>	<i>50.42</i>	
<b>Total problems</b>	<b>141 766</b>	<b>100.00</b>	<b>146.30</b>

<sup>a</sup> Survey period was April 1998 to March 1999. <sup>b</sup> This reflects the patients' expressed demand for care as perceived and recorded by the GP (maximum of three per encounter). <sup>c</sup> The problem label is the individual International Classification of Primary Care (ICPC) rubric label unless denoted by \*, which indicates a grouping of multiple ICPC rubrics under the same problem (concept) label.

Source: Britt et al., (1999).

Table 5A.9 **BEACH Survey Report: problems managed by participating GPs according to ICPC chapter<sup>a, b</sup>**

<i>Problem managed</i>	<i>Sample size (n)</i>	<i>% of total problems</i>	<i>Rate per 100 encounters</i>
Respiratory	23 554	16.73	24.31
Musculoskeletal	16 404	11.65	16.93
Skin	15 976	11.34	16.49
Circulatory	15 638	11.10	16.14
General and unspecified	12 775	9.07	13.18
Psychological	10 142	7.20	10.47
Digestive	9 926	7.05	10.24
Endocrine and metabolic	8 534	6.06	8.81
Female genital system	6 073	4.31	6.27
Ear	4 757	3.38	4.91
Pregnancy and family planning	3 927	2.79	4.05
Neurological	3 898	2.77	4.02
Urology	2 754	1.96	2.84
Eye	2 720	1.93	2.81
Blood	1 642	1.17	1.69
Male genital systems	1 364	0.97	1.41
Social problems	742	0.53	0.77
<i>Subtotal</i>	<i>140 824</i>	<i>100.00</i>	
<b>Total problems</b>	<b>140 824</b>	<b>100.00</b>	<b>145.33</b>

<sup>a</sup> Survey period was April 1998 to March 1999 <sup>b</sup> ICPC = International Classification of Primary Care.

Source: Britt et al., (1999).

Table 5A.10 **BEACH Survey Report: top 30 problems managed by participating GPs<sup>a</sup>**

<i>Problem label<sup>b</sup></i>	<i>Sample size (n)</i>	<i>% of total problems</i>	<i>Rate per 100 encounters</i>
Hypertension*	8 042	5.71	8.30
Upper respiratory infection, acute	6 623	4.70	6.83
Immunisation all*	5 025	3.57	5.19
Depression*	3 367	2.39	3.47
Acute bronchitis/bronchiolitis	3 185	2.26	3.29
Asthma	3 079	2.19	3.18
Back complaint*	2 816	2.00	2.91
Diabetes – unspecified*	2 473	1.76	2.55
Lipid disorder	2 393	1.70	2.47
Osteoarthritis*	2 118	1.50	2.19
Rash*	2 106	1.50	2.17
Sprain/strain*	1 790	1.27	1.85
Dermatitis, contact/allergic	1 778	1.26	1.83

(Continued on next page)

Table 5A.10 (Continued)

<i>Problem label<sup>b</sup></i>	<i>Sample size (n)</i>	<i>% of total problems</i>	<i>Rate per 100 encounters</i>
Acute otitis media/myringitis	1 746	1.24	1.80
Anxiety*	1 639	1.16	1.69
Sleep disturbance	1 580	1.12	1.63
Urinary tract infection*	1 569	1.11	1.62
Female genital check-up*	1 566	1.11	1.62
Sinusitis acute/chronic	1 513	1.07	1.56
General check-up*	1 501	1.07	1.55
Oesophagus disease	1 445	1.03	1.49
Menopausal symptom/complaint	1 428	1.01	1.47
Tonsillitis*	1 422	1.01	1.47
Prescription all*	1 360	0.97	1.40
Viral disease, other/NOS	1 284	0.91	1.32
Cardiac check-up*	1 204	0.86	1.24
Arthritis*	1 097	0.78	1.13
Ischaemic heart disease without angina	1 054	0.75	1.09
Fracture*	1 051	0.75	1.08
Gastroenteritis, presumed infection	1 047	0.74	1.08
<i>Subtotal</i>	<i>68 298</i>	<i>48.5</i>	
<b>Total problems</b>	<b>140 824</b>	<b>100.00</b>	<b>145.30</b>

<sup>a</sup> Survey period was April 1998 to March 1999. <sup>b</sup> The problem label is the individual International Classification of Primary Care (ICPC) rubric label unless denoted by \*, which indicates a grouping of multiple ICPC rubrics under the same problem (concept) label.

Source: Britt et al., (1999).

## Effectiveness

### Outcomes

#### Disease prevention

Table 5A.11 Proportion of valid episodes, by immunisation provider, 1997-98 (per cent)<sup>a</sup>

<i>Provider type</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Individual general practitioners	80.66	43.89	0.82	53.74	65.47	84.10	30.10	0.91	47.93
General practice <sup>b</sup>	0.50	1.25	81.20	2.73	1.41	0.00	0.00	0.00	17.57
Public hospital	3.85	0.25	4.30	5.99	6.62	0.10	0.97	1.30	3.10
Private hospital	0.25	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.09
Aboriginal health service	0.32	1.33	1.00	0.55	0.26	0.00	0.10	0.81	0.73
Community health centre	7.00	0.59	4.10	24.04	6.80	0.05	0.84	98.54	8.60

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Table 5A.11 (Continued)

Provider type	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Division of general practice	0.18	0.00	-0.09	1.19	0.40	0.00	0.00	0.00	0.18
Local government council	7.23	52.68	9.20	8.29	17.48	15.75	0.00	0.00	19.55
State health department	0.00	0.00	-0.22	4.79	0.06	0.00	67.99	0.01	2.06
Flying doctor service	0.01	0.00	0.45	0.00	0.16	0.00	0.00	0.00	0.11
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

<sup>a</sup> Each vaccine administered to a child by a recognised immunisation provider (generally a number of episodes are included in an encounter). <sup>b</sup> A group of medical practitioners who have registered at the practice level. One registration number has been allocated for use by all providers at the practice for the purpose of the ACIR.

Source: Health Insurance Commission (1999).

Table 5A.12 Proportion of children turning 12 months of age who were immunised<sup>a, b</sup>

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Fully immunised									
30 June 1997	73.2	80.1	80.6	66.9	77.0	76.0	77.4	61.7	75.9
30 June 1998	82.3	86.2	85.8	83.2	85.3	86.2	85.0	76.0	84.3
30 June 1999	84.3	87.7	88.4	86.2	89.0	87.0	89.0	82.9 <sup>d</sup>	86.5
Immunised against (at 30 June 1999)									
Diphtheria/tetanus	86.2	89.4	89.4	87.2	90.2	88.4	89.5	85.9	88.1
Whooping cough	86.2	89.3	89.3	87.2	90.1	88.2	89.5	85.9	88.0
Diphtheria/tetanus/ whooping cough	86.1	89.3	89.3	87.2	90.0	88.2	89.5	85.9	88.0
Polio	86.0	89.2	89.2	87.3	90.1	88.0	89.5	85.2	87.9
Hib <sup>c</sup>	85.4	88.6	89.7	87.2	89.8	87.6	89.1	89.0	87.7

<sup>a</sup> Only vaccines administered before 12 months are included in the coverage calculation. <sup>b</sup> Fully immunised children are those who have been vaccinated against diphtheria/tetanus/pertussis, polio and Hib

<sup>c</sup> Haemophilus influenzae type b. <sup>d</sup> Estimates of immunisation coverage rates from the NT Government, based on the Territory's Childhood Immunisation Database, are 89 per cent.

Source: Health Insurance Commission (unpublished — 30 September 1999).

Table 5A.13 Proportion of children turning 24 months who were immunised<sup>a, b</sup>

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Fully immunised									
30 June 1998	63.8	67.7	72.8	59.2	65.6	67.0	69.7	50.7	66.1
30 June 1999	72.2	77.3	81.1	73.4	76.8	77.1	83.8	67.1	75.9
Immunised against (at 30 June 1999)									
Diphtheria/tetanus	82.1	84.8	86.8	81.9	85.6	85.1	87.0	75.0	84.0
Whooping cough	82.0	84.8	86.7	81.8	85.4	85.2	87.0	75.0	83.9
Diphtheria/tetanus/ whooping cough	81.9	84.7	86.7	81.8	85.4	85.1	87.0	75.0	83.8
Polio	87.9	91.0	91.3	88.3	92.2	91.8	91.7	86.9	89.8

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Table 5A.13 (Continued)

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Hib <sup>c</sup>	82.1	84.4	87.0	82.0	83.9	83.8	86.7	82.8	83.8
Measles/mumps/ rubella	86.5	89.7	90.8	87.8	90.1	90.2	91.2	87.3	88.7

<sup>a</sup> Only vaccines administered before 24 months are included in the coverage calculation. <sup>b</sup> Fully immunised children are those who have been vaccinated against diphtheria/tetanus/pertussis, polio and Hib and measles/mumps and rubella. <sup>c</sup> Haemophilus influenzae type b.

Source: Health Insurance Commission (unpublished — 30 September 1999).

Table 5A.14 Notifications of whooping cough received by State/Territory health authorities (number)<sup>a, b</sup>

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
1994	1 534	447	1 937	568	982	26	19	138	5 651
1995	1 342	376	1 416	448	389	118	34	174	4 297
1996	1 112	1 201	766	183	690	30	33	16	4 031
1997	4 094	1 679	1 785	1 163	1 689	119	115	24	10 668
1998	2569	1 151	1 465	380	701	56	87	23	6432
1999 <sup>c</sup>	581	518	536	38	106	48	48	2	1 877
Notifications per 1000 persons aged 0 – 14 years <sup>d</sup>									
1994	1.2	0.5	2.8	1.5	3.3	0.2	0.3	2.9	1.5
1995	1.0	0.4	2.0	1.2	1.3	1.1	0.5	3.6	1.1
1996	0.9	1.3	1.1	0.5	2.3	0.3	0.5	0.3	1.0
1997	3.1	1.8	2.4	3.0	5.6	1.1	1.7	0.5	2.7
1998	2.0	1.2	2.0	1.0	2.4	0.5	1.3	0.5	1.6
1999	0.4	0.5	0.7	0.1	0.4	0.5	0.7	0.0	0.5

<sup>a</sup> Whooping cough is pertussis. <sup>b</sup> Data for 1998 and 1999 are provisional and may be revised. <sup>c</sup> At 20 July 1999. <sup>d</sup> ABS, *Estimated Resident Population, by Age* (cat. no. 3201.0).

Source: NNDSS (1999).

Table 5A.15 Notifications of Haemophilus influenzae type b received by State/Territory health authorities (number)<sup>a</sup>

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
1994	62	32	38	11	19	4	1	1	168
1995	29	14	9	5	6	5	1	5	74
1996	13	11	11	1	7	1	2	5	51
1997	18	6	15	6	2	2	0	4	53
1998	11	5	11	5	1	2	0	0	35
1999 <sup>b</sup>	7	1	8	3	2	0	0	3	24

<sup>a</sup> Data for 1998 and 1999 are provisional and may be revised. <sup>b</sup> At 3 August 1999.

Source: NNDSS (1999).

**Table 5A.16 Notifications of measles received by State/Territory health authorities (number)<sup>a</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
1994	1 504	177	2 483	133	70	32	114	402	4 915
1995	649	150	251	58	5	53	48	110	1 324
1996	204	96	93	33	13	23	10	26	498
1997	260	91	261	83	29	38	79	11	852
1998	125	36	44	50	5	36	10	1	307
1999 <sup>b</sup>	23	88	19	15	4	8	5	4	166
Notifications of measles per 1000 people aged 0 – 14 years <sup>c</sup>									
1994	1.2	0.2	3.6	0.3	0.2	0.3	1.7	8.5	1.3
1995	0.5	0.2	0.4	0.2	0.0	0.5	0.7	2.3	0.3
1996	0.2	0.1	0.1	0.1	0.0	0.2	0.1	0.5	0.1
1997	0.2	0.1	0.4	0.2	0.1	0.4	1.2	0.2	0.2
1998	0.1	0.0	0.1	0.1	0.0	0.3	0.1	0.0	0.1
1999	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0

<sup>a</sup> Data for 1998 and 1999 are provisional and may be revised. <sup>b</sup> At 3 August 1999. <sup>c</sup> ABS, *Estimated Resident Population, by Age* (cat. no. 3201.0).

Source: NNDSS (1999).

**Table 5A.17 Participation rates of women in cervical cancer screening programs, 1997 and 1998 (per cent)**

<i>Age group (years)</i>	<i>NSW<sup>a</sup></i>	<i>Vic</i>	<i>Qld<sup>b</sup></i>	<i>WA</i>	<i>SA<sup>a</sup></i>	<i>Tas</i>	<i>ACT<sup>c</sup></i>	<i>NT</i>	<i>Aust</i>
20–24	48.2	48.8	na	54.5	55.8	65.3	52.5	58.4	50.6
25–29	62.6	66.4	na	68.1	69.4	72.4	66.5	65.0	65.4
30–34	65.7	71.5	na	71.3	71.6	72.3	70.2	65.6	69.0
35–39	66.6	74.9	na	73.2	72.5	72.7	70.8	67.5	70.8
40–44	65.4	74.6	na	71.4	72.0	70.2	71.7	64.4	69.8
45–49	64.3	75.6	na	69.6	71.0	69.8	72.8	69.5	69.4
50–54	66.1	80.7	na	72.0	74.0	70.9	79.4	65.8	72.5
55–59	56.6	70.8	na	62.3	65.0	60.4	71.3	61.8	62.9
60–64	48.3	61.6	na	57.0	59.0	53.4	63.2	48.4	54.9
65–69	36.4	51.3	na	45.1	46.6	41.5	50.2	38.7	43.4
70–74	17.0	26.2	na	20.2	12.8	14.7	22.1	22.4	22.4
75–79	8.2	11.9	na	9.1	na	6.6	10.6	14.6	8.5
80–84	4.0	6.0	na	4.3	na	3.3	4.9	8.8	4.2
85 + <sup>d</sup>	na	na	na	na	na	na	na	na	na
All ages	53.7	61.0	na	60.7	60.8	58.8	64.2	65.7	57.7
AS Rate (A) <sup>e</sup>	54.2	62.3	na	60.0	60.2	60.7	61.3	57.0	58.4
20-69	60.1	68.1	na	66.4	67.2	67.5	67.4	63.9	63.9
AS Rate (A) <sup>e</sup>	59.4	67.8	na	65.7	66.7	66.9	67.0	62.0	63.8

<sup>a</sup> All women aged 70 years or more are grouped in the category women aged 70-74 years. <sup>b</sup> Queensland Health Pap Smear Register began operations in February 1999; no data is available for this report. <sup>c</sup> The ACT register contains only women with an ACT address. <sup>d</sup> Rates cannot be calculated for the 85+ age group because hysterectomy fractions are not available for this age group. <sup>e</sup> Rates are expressed per 100 000 women and are age standardised to the Australian 1991 population. **na** Not available.

Source: AIHW (unpublished data).

## Chronic illness management

**Table 5A.18 GP ordered scripts for anti-depressants ('000)**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
1992-93	1305	994	751	282	376	110	39	11	3868
1993-94	1441	1106	859	322	411	120	50	13	4320
1994-95	1554	1200	948	371	447	132	60	15	4727
1995-96	1769	1361	1084	460	503	157	73	19	5424
1996-97	1947	1500	1210	540	560	172	82	22	6034
1997-98	2173	1675	1376	623	617	194	97	26	6781
1998-99	2416	1892	1549	720	687	222	114	29	7628
Annual growth rate %	10.8	11.3	12.8	16.9	10.6	12.4	19.5	17.2	12.0
Number per 1000 persons aged 15 years and over <sup>a</sup>									
1992-93	279	283	320	221	325	303	173	92	283
1993-94	306	313	356	249	354	329	214	102	312
1994-95	326	339	383	282	384	361	256	122	338
1995-96	367	381	426	342	430	426	308	147	382
1996-97	398	415	465	394	477	467	343	167	419
1997-98	438	458	518	444	522	526	403	187	464
1998-99	481	510	571	502	577	599	469	206	514

<sup>a</sup> ABS, *Estimated Resident Population, by Age* (cat. no. 3201.0).

Source: Health Insurance Commission (unpublished — November 1999).

**Table 5A.19 GP ordered scripts for anxiolytics ('000)**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
1992-93	1120	759	641	189	291	113	20	6	3139
1993-94	1106	777	641	193	291	114	22	7	3151
1994-95	1095	799	640	199	296	118	24	7	3179
1995-96	1089	830	657	210	301	122	24	8	3243
1996-97	1085	849	667	217	300	122	25	9	3275
1997-98	1074	843	667	221	300	125	26	10	3267
1998-99	1082	873	677	240	308	128	29	8	3345
Annual growth rate %	-0.6	2.4	0.9	4.1	1.0	2.0	5.9	4.5	1.1
Number per 1000 persons aged 15 years and over <sup>a</sup>									
1992-93	239	216	273	148	251	313	90	51	230
1993-94	235	220	266	149	251	314	95	53	228
1994-95	230	226	259	151	254	321	103	57	227
1995-96	226	232	259	156	258	333	103	66	229
1996-97	222	235	256	158	255	332	106	69	227
1997-98	217	231	251	157	254	339	108	75	224
1998-99	215	235	250	168	259	346	118	57	226

<sup>a</sup> ABS, *Estimated Resident Population, by Age* (cat. no. 3201.0).

Source: Health Insurance Commission (unpublished — November 1999).



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### *Gatekeeping to secondary care*

See table 4A.10.

### *Prescribing and diagnosis*

**Table 5A.20 Benefits paid for selected referrals ordered by GPs, 1998-99 (dollars per person)**

	<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>
Pathology tests	37.62	32.81	42.50	33.92	24.05	30.92	31.21	23.20	35.45
Diagnostic imaging	36.61	29.79	31.33	30.41	24.56	27.39	27.15	13.49	31.74

Source: Health Insurance Commission (unpublished — November 1999).

### *Quality*

**Table 5A.21 Full time workload equivalent GPs with vocational registration**

	<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>
Full time workload equivalent GPs with vocational registration (no.)									
1991-92	3 359	2 331	1 822	759	920	250	154	29	9 623
1992-93	4 664	3 140	2 322	1 041	1 094	311	192	56	12 820
1993-94	4 909	3 303	2 506	1 134	1 154	338	204	61	13 610
1994-95	5 109	3 470	2 616	1 182	1 172	346	205	76	14 176
1995-96	5 210	3 529	2 663	1 234	1 172	348	211	73	14 439
1996-97	5 187	3 592	2 763	1 241	1 200	347	213	76	14 619
1997-98	5 260	3 544	2 833	1 277	1 225	335	222	77	14 772
1998-99	5 229	3 596	2 648	1 275	1 222	327	215	78	14 790
Proportion of full time workload equivalent GPs with vocational registration (%)									
1991-92	64.4	67.9	73.6	66.7	75.9	73.5	76.6	39.9	68.3
1992-93	86.6	86.8	89.1	86.7	88.0	88.3	89.4	74.4	87.2
1993-94	88.1	87.8	91.4	90.4	89.5	93.3	93.1	79.4	89.1
1994-95	89.9	89.6	92.8	90.8	91.7	93.3	92.0	87.1	90.7
1995-96	90.0	89.1	92.3	90.2	90.7	94.4	94.1	85.1	90.4
1996-97	89.6	88.5	92.3	89.8	92.5	93.3	95.0	88.5	90.2
1997-98	89.7	88.5	92.1	91.1	92.9	92.6	94.1	85.9	90.3
1998-99	90.9	89.1	91.8	91.6	92.8	91.7	95.0	89.5	90.9

Source: DHAC (1999 — GP Branch unpublished).

**Table 5A.22 Proportion of practices under the Practice Incentives Program with electronic information or management systems, November 1999 (per cent)**

	<i>Electronic prescribing</i>	<i>Electronic connectivity</i>
Capital city	56	73
Other major metropolitan	63	77
Large rural city	71	84
Small rural city	66	81
Other rural area	68	83
Large remote centre	57	82
Other remote area	47	78
Total	59	76

Source: Health Insurance Commission (unpublished — 29 November 1999).

**Table 5A.23 Practices registered for accreditation, October 1999 (per cent)**

<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>
35.0	64.2	64.4	48.6	61.7	62.6	40.2	26.4	49.7

Source: AGPAL (1999).

### *Access and equity*

**Table 5A.24 Proportion of bulk billed attendances provided by recognised GPs (per cent)**

	<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>
1993-94	80.3	74.5	76.7	75.5	70.1	61.9	62.6	64.2	76.2
1994-95	81.4	76.1	78.5	76.5	71.2	63.4	62.7	65.7	77.5
1995-96	82.9	77.8	80.3	79.1	73.3	65.7	63.2	68.6	79.3
1996-97	82.7	78.5	81.1	79.8	73.9	66.3	64.6	68.8	79.7
1997-98	82.0	77.6	80.8	78.2	73.4	64.2	64.5	66.1	78.9
1998-99	81.6	77.7	80.7	77.6	73.7	61.9	64.3	62.8	78.7

Source: DHAC (1999d).

**Table 5A.25 Proportion of unREFERRED attendances provided by GPs that were bulk billed (per cent)**

	<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>
1984-85	60.2	46.6	50.3	50.1	48.5	42.3	30.0	44.8	52.5
1985-86	64.5	48.5	53.2	53.0	51.6	45.8	32.0	47.1	55.8
1986-87	69.3	52.5	57.4	56.4	55.5	47.3	34.6	48.5	60.1
1987-88	71.0	53.3	61.1	58.8	57.8	49.0	40.1	50.8	62.0
1989-90	74.5	60.3	68.5	64.3	62.6	55.8	50.6	55.8	67.4

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Table 5A.25 (Continued)

	<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>
1990-91	76.1	64.5	72.0	68.4	65.7	58.7	55.7	57.9	70.3
1991-92	76.9	69.0	71.8	70.6	67.0	59.4	58.9	59.2	72.0
1992-93	78.6	72.4	74.4	72.9	68.3	60.9	61.3	62.9	74.2
1993-94	81.0	75.8	76.9	76.0	71.5	62.9	64.3	65.4	77.0
1994-95	82.2	77.5	78.8	77.1	72.5	64.3	64.8	67.6	78.5
1995-96	83.7	79.1	80.6	79.5	74.3	66.2	64.9	70.1	80.1
1996-97	83.6	79.9	81.3	80.2	74.9	66.8	65.9	69.6	80.6
1997-98	82.9	79.1	81.1	78.4	74.1	65.1	66.1	67.9	79.8
1998-99	82.4	78.9	80.9	77.6	74.1	63.0	65.6	65.2	79.4

Source: DHAC (1999d).

Table 5A.26 Female full time workload equivalent GPs

	<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>
Number of female full time workload equivalent GPs (no.)									
1991-92	919	548	449	193	199	62	52	18	2 441
1992-93	1 007	614	503	210	223	71	57	17	2 700
1993-94	1 085	683	551	230	253	74	61	18	2 955
1994-95	1 160	750	590	262	265	83	64	22	3 197
1995-96	1 225	811	637	287	270	82	66	24	3 403
1996-97	1 290	860	689	298	268	83	68	24	3 579
1997-98	1 347	867	712	312	279	83	73	26	3 701
1998-99	1 350	889	737	318	286	90	71	28	3 769
Females as a proportion of all full time workload equivalent GPs (%)									
1991-92	17.6	16.0	18.2	17.0	16.4	18.3	25.8	24.6	17.3
1992-93	18.7	17.0	19.3	17.5	17.9	20.1	26.6	22.2	18.4
1993-94	19.5	18.1	20.1	18.3	19.6	20.5	27.9	23.2	19.3
1994-95	20.4	19.4	20.9	20.2	20.7	22.4	28.7	24.8	20.5
1995-96	21.2	20.5	22.1	21.0	20.9	22.1	29.6	28.0	21.3
1996-97	22.3	21.2	23.0	21.6	20.6	22.3	30.3	27.7	22.1
1997-98	23.0	21.7	23.2	22.2	21.2	23.0	31.0	29.4	22.6
1998-99	23.5	22.0	23.8	22.8	21.7	25.3	31.3	31.9	23.2

Source: DHAC (1999 — GP Branch unpublished).

Table 5A.27 Full time workload equivalent GPs, by region

	<i>Capital city</i>	<i>Other metropolitan centre</i>	<i>Large rural centre</i>	<i>Small rural centre</i>	<i>Other rural centre</i>	<i>Remote centre</i>	<i>Other remote area</i>	<i>Total</i>
Full time workload equivalent nonspecialist medical practitioners (no.)								
1991-92	9 784	1 097	798	825	1 359	110	117	14 090
1992-93	10 218	1 145	830	867	1 414	108	117	14 697
1993-94	10 656	1 195	864	899	1 437	109	118	15 279
1994-95	10 901	1 225	889	924	1 453	114	122	15 629

(Continued on next page)

Table 5A.27 (Continued)

	Capital city	Other metropolitan centre	Large rural centre	Small rural centre	Other rural centre	Remote centre	Other remote area	Total
1995-96	11 172	1 252	908	929	1 472	118	120	15 971
1996-97	11 383	1 267	926	925	1 462	116	121	16 200
1997-98	11 465	1 291	946	930	1 469	121	131	16 353
1998-99	11 428	1 277	939	918	1 458	115	133	16 268
Proportion of full time workload equivalent nonspecialist medical practitioners (%)								
1991-92	69.44	7.79	5.66	5.86	9.65	0.78	0.83	22.78
1992-93	69.52	7.79	5.65	5.90	9.62	0.73	0.80	22.70
1993-94	69.74	7.82	5.65	5.88	9.41	0.71	0.77	22.43
1994-95	69.75	7.84	5.69	5.91	9.30	0.73	0.78	22.41
1995-96	69.95	7.84	5.69	5.82	9.22	0.74	0.75	22.21
1996-97	70.27	7.82	5.72	5.71	9.02	0.72	0.75	21.91
1997-98	70.11	7.89	5.78	5.69	8.98	0.74	0.80	22.00
1998-99	70.25	7.85	5.77	5.64	8.96	0.71	0.82	21.90

Sources: DHFS (1997a, 1997b); DHAC (1999 — GP Branch unpublished).

Table 5A.28 Proportion of full time workload equivalent GPs billing Medicare (per cent)

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
1991-92	37.04	24.36	17.57	8.06	8.61	0.24	1.42	0.52	100.00
1992-93	36.66	24.62	17.72	8.17	8.46	2.40	1.46	0.52	100.00
1993-94	36.47	24.64	17.94	8.21	8.44	2.37	1.43	0.50	100.00
1994-95	36.34	24.77	18.03	8.32	8.18	2.37	1.43	0.56	100.00
1995-96	36.25	24.79	18.06	8.57	8.09	2.30	1.41	0.53	100.00
1996-97	35.72	25.06	18.47	8.52	8.01	2.30	1.39	0.53	100.00
1997-98	35.88	24.48	18.81	8.57	8.06	2.21	1.44	0.55	100.00
1998-99	35.38	24.80	19.06	8.56	8.56	2.19	1.39	0.53	100.00

Source: Table 5A.2.

### Efficiency

Table 5A.29 Commonwealth Government expenditure on unreferral consultations to GPs (dollars per 1000 population)<sup>a</sup>

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
At current prices									
1993-94	130.05	119.20	116.96	103.46	123.56	108.35	101.37	63.53	120.24
1994-95	133.12	123.26	119.04	106.24	123.50	111.20	104.47	66.87	124.35
1995-96	138.42	128.92	122.11	113.83	128.47	115.01	106.56	68.46	128.07
1996-97	135.88	130.52	123.40	112.86	128.78	115.87	108.04	66.74	127.78

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Table 5A.29 (Continued)

	<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>
1997-98	136.65	127.97	125.30	112.36	130.19	113.41	109.44	67.60	127.77
1998-99	135.71	128.82	125.75	111.23	131.36	114.73	109.99	66.88	127.75
At 1998-99 prices									
1993-94	138.20	126.67	124.29	109.95	131.31	115.14	107.73	67.51	127.78
1994-95	140.27	129.88	125.44	111.95	130.14	117.18	110.08	70.46	131.03
1995-96	142.41	132.63	125.63	117.11	132.17	118.32	109.63	70.43	131.76
1996-97	138.09	132.64	125.41	114.70	130.87	117.75	109.80	67.83	129.86
1997-98	137.20	128.48	125.80	112.81	130.71	113.87	109.88	67.87	128.28
1998-99	135.71	128.82	125.75	111.23	131.36	114.73	109.99	66.88	127.75

<sup>a</sup> Population is estimated resident population for each year.

Sources: ABS (cat. no. 3201.0); DHAC (1999d).

## 5A.2 Definitions

Table 5A.30 Terms

<i>Term</i>	<i>Definition</i>
Age standardised	The age standardised rate removes the effect of different age distributions (across jurisdictions or over time) when making comparisons. It is calculated by weighting the age specific rates for each jurisdiction by the national age distribution
Ambulatory services	Services provided by hospitals to non-admitted patients
Case mix adjustment	Adjustment of data on cases treated to account for the number and type of cases. Cases were sorted into diagnosis related groups which represented a class of patients with similar clinical conditions requiring similar hospital services.
Community health services	Health services for individuals and groups delivered in a community setting, rather than in hospitals or in private facilities
Consultations	The different types of services provided by GPs (also called encounters).
Divisions of general practice	Local networks of GPs operating within a defined geographic area.
Full time workload equivalents	A measure of medical practitioner supply based on claims processed by Medicare in a given period. The calculation is made by dividing the practitioner's Medicare billing by the mean billing of full time practitioners for that period. Full time equivalents (FTEs) are calculated in the same way as full time workload equivalents.
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.
General practitioner	A recognised general practitioner who had at least half of the schedule fee value of his/her Medicare billing from 'non-referred attendance items'

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Table 5A.30 (Continued)

<i>Term</i>	<i>Definition</i>
Management	Ongoing process beginning with initial client contact and includes all actions relating to that client. Included are assessment/evaluation, education of the person, family or carer(s), diagnosis, treatment. Problems associated with adherence to treatment and liaison with or referral to other agencies are also included.
Other medical practitioner	A medical practitioner other than a recognised general practitioner who had at least half of the schedule fee value of his/her Medicare billing from 'other non-referred attendance items'
Other specialist	A medical practitioner not classified as 'general practitioner', 'other medical practitioner' or 'recognised specialist' but undertaking a majority of specialist work, although not formally recognised as a specialist by Medicare. Also includes specialists with recognition in one field but working in an unrelated field.
Pap smear	A procedure for the detection of cancer and pre-cancerous conditions of the female genital tract
Primary care	Essential health care based on practical, scientifically sound and socially acceptable methods made universally accessible to individuals and families in the community.
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
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.
Psychiatrist	Medical practitioner with specialist training in psychiatry
Reasons for consultation	The expressed demand of the patient for care as perceived and recorded by the GP
Recognised general practitioner	A vocationally registered general practitioner, a Fellow of the Royal Australian College of General Practitioners or equivalent, or a general practice registrar in a training placement
Recognised immunisation provider	A provider recognised by the Health Insurance Commission as a provider of immunisation to children
Recognised specialist	A medical practitioner classified as a specialist on the Medicare database earning at least half of his/her income from relevant specialist items in the schedule having regard to the practitioner's field of specialist recognition
Screening	The performance of tests on apparently well people to detect a medical condition at an earlier stage than would otherwise be possible without the test
Unreferred attendances	GP services, emergency attendances after hours, other prolonged attendances, group therapy and acupuncture. All attendances for specialist services are excluded as these must be 'referred' to receive Medicare reimbursement.
Vocational registration	A formal training program that promotes quality in general practice. Vocationally registered GPs are registered separately from other nonspecialist practitioners for Medicare purposes, and receive higher Medicare benefits for services.

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**Table 5A.31 Indicators**

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<i>Indicator</i>	<i>Definition</i>
Immunisation coverage	Percentage of children aged 12 months and 24 months who were fully immunised
Notifications of selected childhood diseases	Number of cases of measles, pertussis and Haemophilus influenzae type b notified by State/Territory health authorities
Cervical cancer screening rates for target population	Percentage of women screened against cervical cancer in the age group 20–60 years
Prescribing rates for mental illness	Number of GP scripts per 1000 persons for anti-depressants and anxiolytics
Standardised separation rates for selected conditions often not requiring secondary treatment	Age- and sex-standardised hospital separation rates for myringotomy and tonsillectomy
Standardised separation rates for selected conditions often requiring secondary treatment	Age- and sex-standardised hospital separation rates for hip replacements, lens insertion and angioplasty
Per person benefits paid for GP ordered pathology	Total benefits paid for pathology tests ordered by GPs divided by the population
Per person benefits paid for GP ordered diagnostic imaging	Total benefits paid for diagnostic imaging tests ordered by GPs divided by the population
Proportion of practices with electronic information management systems	Number of practices with electronic prescribing and/or electronic connectivity, registered under the Practice Incentive Program, divided by the total number of practices registered
Proportion of practices registered for accreditation	Number of practices which have registered for accreditation through Australian General Practice Accreditation Limited divided by the total number of practices in the Divisions of General Practice
Proportion of GPs with vocational registration	Number of full time workload equivalent GPs who are vocationally registered divided by the total number of fulltime workload equivalent GPs
Nonspecialist attendances which are bulk billed	Number of unREFERRED attendances which were bulk billed and provided by nonspecialist medical practitioners divided by the total number of unREFERRED attendances
Nonspecialist medical practitioners by region	Number of full-time workload equivalent nonspecialist medical practitioners practising in capital cities, other metropolitan centres and rural/remote areas, divided by the total number of FWE nonspecialists
Proportion of GPs who are female	Number of all full time workload equivalent GPs who are female divided by the total number of full time workload equivalent GPs
Cost to government per unREFERRED attendance	Cost to the Commonwealth Government of total unREFERRED attendances by nonspecialist medical practitioners per 1000 population.

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## 6 Health management issues

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 growing interest in preventative care, for example, has given prominence to community based health services. The ability of governments to improve particular health outcomes is maximised when health care providers integrate their prevention/early detection and intervention 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.

The issues discussed in this chapter relate to breast cancer management strategies and mental illness management. Each has a broad ranging public health focus and involves a variety of services (prevention/early detection and intervention) available in a range of settings (public acute care hospitals, community health services and general practice) (box 6.1). Cancer control and mental health are identified by governments as National Health Priority Areas, along with diabetes mellitus, cardiovascular health, injury prevention and control and 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).

Chapter 6 provides descriptive information for each health management issue (section 6.1), a discussion of the framework of performance indicators for each area (section 6.2), the key performance results (section 6.3) and the future directions in performance reporting in these areas (section 6.4). The chapter also includes comments from each jurisdiction on their performance in managing breast cancer and mental illness (section 6.5).

Performance data are presented for these health issues for the second time in this Report. The data for breast cancer management covers selected performance measures that monitor the effectiveness of BreastScreen Australia and the effectiveness of breast cancer control generally. The data for mental illness cover aspects of both the efficiency and effectiveness of health care services provided to treat mental illness.

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Box 6.1 **Some common health terms used in this chapter**

**Affective disorder:** a mood disturbance that includes mania, hypomania and depression

**Ambulatory care:** services provided by hospitals to non-admitted patients

**Anxiety disorder:** 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

**Community health services:** health services for individuals and groups delivered in a community setting, rather than in hospitals or in private facilities

**General practice:** a medical practice that offers primary, continuing, comprehensive, whole-person care for individuals, families and the community

**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

**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 achievement of individual and collective goals consistent with justice' (DHAC 1999)

**Mental health prevention:** 'interventions that occur before the initial onset of a disorder' (DHAC 1999a)

**Mental health problem:** a disruption in the interactions between the individual, the group and the environment, producing a diminished state of mental health

**Mental health promotion:** 'focuses on improving environments (social, physical, economic) which affect mental health and enhancing the 'coping' capacity of communities as well as individuals' (DHAC 1999a)

**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 a medical condition at an earlier stage than would otherwise be the case

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## 6.1 Profile of health management

Breast cancer and mental illness are significant causes of morbidity and mortality in Australia, so appropriate management of these illnesses will have a large effect on the health and wellbeing of many Australians. Both are the subjects of public health campaigns designed to improve community awareness (box 6.2). Their treatment also requires public acute care hospital services, community health services and general practice services. (The public acute care hospital and general practice components of the health care system are discussed in chapters 4 and 5 respectively).

### Breast cancer management

Breast cancer was the most common cancer affecting Australian women in 1996, with over 9500 new cases diagnosed in that year (AIHW 1999b). It was also responsible for 2542 deaths in 1998, making it the most common cause of cancer deaths among females (ABS 1999).

The risk of a woman developing breast cancer before the age of 75 years is 1 in 12 in Australia. The major risk factors for breast cancer are age (breast cancer rates typically increase with age from the third decade), family history of breast cancer, long duration of menstrual life, late first birth and low parity (number of children) (AIHW 1999a). However, known risk factors explain only one-third of all breast cancers. Age is the best indicator of risk, with women over the age of 50 years accounting for almost three quarters of all new cases.

Breast cancer is not amenable to practical prevention, so the focus of breast cancer control is on screening and early detection. Cancers detected early may be treated more conservatively, and patients generally have a higher likelihood of recovery. Because age is the most significant risk factor, the joint Commonwealth/State BreastScreen program targets women aged 50–69 years, although women aged 40–49 years and over 70 years may also use the service. The program aimed to achieve a participation rate of 70 per cent among women aged 50–69 years by 1999.

More than 109 000 new cases of breast cancer were diagnosed in women in Australia between 1982–96. This represented an average annual growth rate of 4.5 per cent. The number of new cases per year increased steadily from (7943) in 1992 to 1995 (9951) then fell in 1996 to (9556) (figure 6.1).

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## Box 6.2 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).

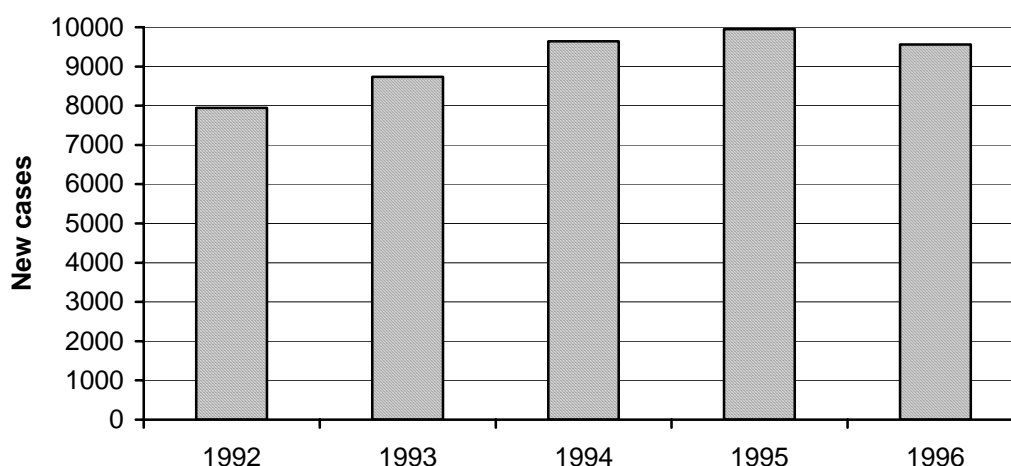
Promotion and protection activities are often referred to as population public health activities because they are delivered to populations rather than individuals. Prevention and provision activities are termed 'public health personal clinical activities'.

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 communicable diseases (such as HIV/AIDs and tuberculosis), childhood immunisation, asthma, oral health, nutrition and risk factors for disease.

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

*Sources:* AIHW (1998a); Fry (1994); NPHP (1997).

Figure 6.1 Number of new cases of breast cancer, across Australia



Source: AIHW (1999b).

Between 1982 and 1996, the average annual growth rate in the incidence (number of new cases) of breast cancer among women aged 40–49 years was 5.5 per cent and 4.4 per cent among women aged 50–69. For women in the age group 15–39 years, the average annual growth rate was 2 per cent for the same period.

The age-standardised incidence rates of breast cancer from 1982–86 to 1992–96 are shown in table 6.1. The incidence of breast cancer among women aged between 15 and 39 years remained relatively stable between 1987 and 1996, but continued to rise for each of the older age groups.

Table 6.1 Age-standardised incidence rates of breast cancer per 100 000 woman years in Australia <sup>a, b</sup>

Age group	1982-86	1987-91	1992-96
15-39 years	16.6 (16.0-17.3)	17.9 (17.2-18.5)	17.8 (17.2-18.5)
40-49 years	119.2 (115.9-122.5)	134.8 (131.6-137.9)	146.3 (143.3-149.3)
50-69 years	179.7 (176.6-182.9)	211.9 (208.5-215.2)	264.8 (261.1-269.4)
70+ years	254.9 (249.3-260.5)	282.7 (261.1-268.4)	304.4 (299.1-309.8)

<sup>a</sup> Age-standardised rates are expressed per 100 000 woman years, and are age-standardised to the Australian 1991 Population Standard. <sup>b</sup> Data in brackets are 95 per cent confidence intervals.

Source: AIHW (1999b).

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## Mental health management

Mental disorders refer to a group of problems such as depression, bipolar disorder, eating disorders (anorexia and bulimia), anxiety, phobias, schizophrenia and other psychoses, dual diagnosis (problematic alcohol and drug abuse in addition to a mental disorder) and personality disorders. There is evidence that some people may be predisposed to mental disorders such as schizophrenia. Factors such as stress, bereavement, relationship breakdown, child abuse, unemployment and social isolation can also contribute to the onset of mental disorders (DHAC 1999a).

The results from the first component of the National Survey of Mental Health and Wellbeing (ABS 1997) found that almost one in five Australians had an anxiety, affective or substance use disorder (or more than one of these disorders) during the 12 months prior to the survey. However, this figure underestimates the prevalence of all mental disorders among Australian adults, mainly because it excludes mental disorders such as schizophrenia, dementia and the personality and somatoform disorders. These disorders are estimated to add approximately 3 per cent to the overall prevalence of mental disorders.

Of the nearly 18 per cent of people suffering from a mental disorder, only 38 per cent contacted a health service for their problem and 50 per cent of this group saw a mental health professional. General practitioners were the main service providers, seeing 29 per cent of those people with a mental disorder who contacted a health service because of their mental health problem. These data suggest that almost two thirds of Australians with a mental disorder do not receive any form of treatment.

The episodes of mental disorders experienced may be mild or temporary for some people, but severe or prolonged for others. Some people recover spontaneously, although the majority requires some form of treatment (such as counselling and/or pharmacotherapy). Most requiring treatment recover fully; only a small number of people experience long periods of distress and disability (DHAC 1999a).

The National Survey of Mental Health and Wellbeing found that the prevalence of mental disorders differed between males and females although this difference was not large. Females were more likely to suffer from anxiety disorders (12 per cent) and males were more likely to suffer from substance use disorders (11 per cent) (table 6.2).

**Table 6.2 Prevalence of mental disorders in all Australian adult men and women, 1997**

<i>Mental disorder</i>	<i>No. of affected persons</i>		<i>Proportion of population affected</i>	
	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>
	<i>no.</i>	<i>no.</i>	<i>per cent</i>	<i>per cent</i>
Any affective disorder	275 300	503 300	4.2	7.4
Any anxiety disorder	470 400	829 600	7.1	12.0
Any substance use disorder	734 300	307 500	11.1	4.5
Total	1 151 600	1 231 500	17.4	18.0

Source: DHAC (1999c).

The World Health Organisation and the World Bank have identified that the burden of mental illness, while responsible for little more than 1 per cent of all deaths, accounts for almost 11 per cent of the disease burden worldwide. It has been estimated that depression alone will constitute one of the greatest health problems worldwide by 2020 (Murray and Lopez 1996).

Commonwealth and State and Territory governments recognised the importance of mental health (in terms of its effect on both quality of life and the total health care budget) by launching the National Mental Health Strategy in April 1992. The aim of the strategy was to set directions for the reform of Australia's mental health services. It also established a collaborative framework to assist the State, Territory and the Commonwealth governments in pursuing these directions.

The extension of the strategy for a further five years (1998–2003) has been accompanied by a Second National Health Mental Plan, which was endorsed in July 1998 (box 6.3). The plan provides a framework for a coordinated national approach to mental health service and policy reform within which all jurisdictions will work. It includes policy objectives and service delivery plans provided by the Commonwealth and State and Territory governments. The focus of the plan is consistent with the need to consider mental health reform within the broader health reform context. The plan retains the national policy framework outlined in the National Mental Health Policy, builds on achievements to date, and identifies further priority areas for reform within three key areas.

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### Box 6.3    **The Second National Mental Health Plan**

The Second National Mental Health Plan is a joint statement by the health ministers of the Commonwealth, State and Territory governments of Australia. The five-year plan commenced on 1 July 1998 and will end on 30 June 2003.

The aim of the second plan is to build on the achievements of the first National Mental Health Plan by identifying additional areas for national activity. It will also provide the future framework for policy development and activity in mental health service reform.

The second plan targets three additional areas for reform: They are:

- *promotion and prevention*, including mental health promotion, community education, prevention of mental disorder and early intervention;
- *partnerships in service reform*, recognising that specialised mental health services can only meet some of the needs of people with mental disorders; and
- *quality and effectiveness*, which focuses on the quality and effectiveness of mental health services, with particular emphasis on improved consumer outcomes across the lifespan of the plan.

The plan clarifies Commonwealth, State and Territory government roles and responsibilities as a basis for a national approach to mental health reform. It also provides an agreed nationally consistent framework for future activity at all levels of government.

Source: DHFS (1998b).

The analysis of expenditure on mental health services is limited because the scope of the expenditure data only covers the provision of ‘specialised mental health services’, and thus understates total health expenditure. Expenditure estimates exclude services such as general hospital and medical services, and general community support programs. For example, expenditure on mental health services excludes the treatment of a patient for depression who was admitted to a general ward of a hospital. Further, the focus is on recurrent expenditure only, and fails to take account of capital costs.

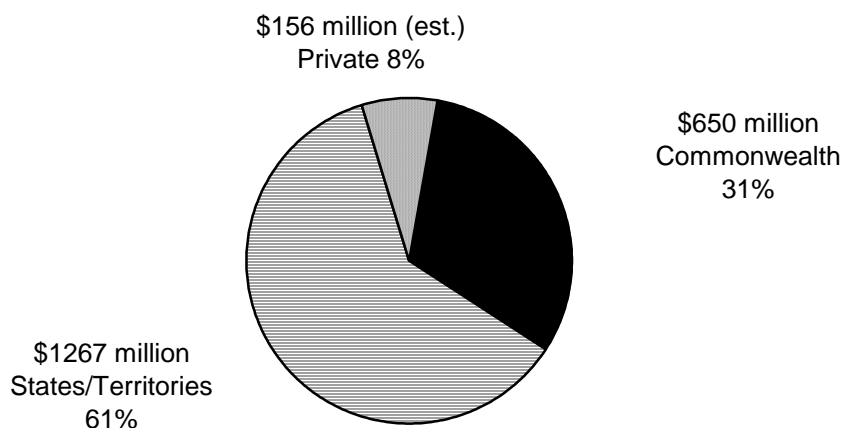
Targeted spending on mental health and related services was \$2074 million in 1996-97. Of the 1996-97 expenditure, State and Territory governments contributed \$1267 million (61 per cent of targeted spending on mental health), the Commonwealth Government contributed \$650 million (31 per cent), and \$156 million (8 per cent) was privately funded (figure 6.2).



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Figure 6.2 **Distribution of recurrent expenditure on mental health services, 1996-97**

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Source: table 6A.31.

Targeted funding for mental health services increased by an average of 5.7 per cent per year (in 1996-97 dollars) between 1992-93 and 1996-97 across Australia. The largest increase came from the Commonwealth Government, whose expenditure rose by nearly \$213 million (10.4 per cent per year). Private health insurance funding of private hospitals rose by \$42.8 million (8.3 per cent per year), while total expenditure by State and Territory governments rose by \$157.5 million (3.4 per cent per year). The average annual growth rate in recurrent expenditure across jurisdictions was highest in WA, the NT and Queensland (6.9 per cent, 6.9 per cent and 6.2 per cent respectively) and lowest in Victoria (0.8 per cent) in real terms over this period (figure 6.3).

In contrast, per capita mental health expenditure has grown relatively slower than total expenditure. The average annual growth rate of targeted expenditure per person on mental health services was 2.2 per cent per year (in 1996-97 dollars) across Australia between 1992-93 and 1996-97. The highest average annual growth rate for the same period was in WA (5.2 per cent), with both the ACT and the NT recording 4.7 per cent and 4.5 per cent respectively (figure 6.4). Victoria had the lowest average annual growth rate. However, in absolute terms, per person expenditure on mental health services remained at a consistently high level in Victoria. Across jurisdictions, WA had the highest per person expenditure (\$78.10) in 1996-97 and Queensland had the lowest (\$61.80) (figure 6.4).

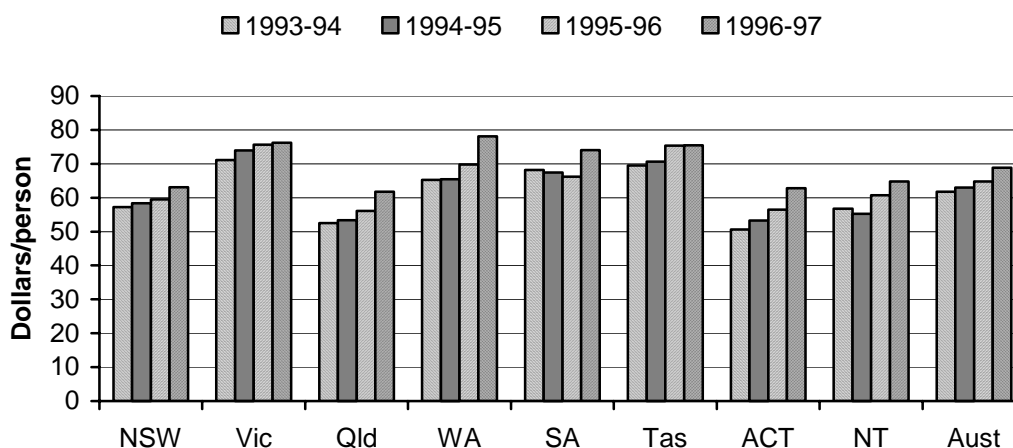
**Figure 6.3 Average annual growth rate in recurrent expenditure by jurisdiction, 1992-93 to 1996-97<sup>a</sup>**



<sup>a</sup> In 1996-97 dollars.

Sources: table 6A.33.

**Figure 6.4 Average targeted real expenditure on mental health services<sup>a</sup>**



<sup>a</sup> In 1996-97 dollars.

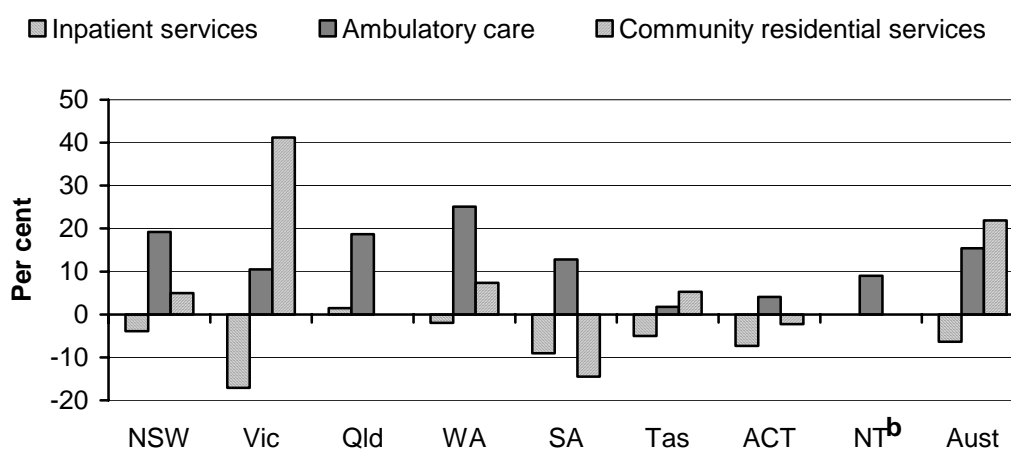
Source: table 6A.34.

Nearly 19 000 full time equivalent staff were estimated to be employed in public mental health services in 1996-97, of whom 59 per cent worked in inpatient facilities (psychiatric hospitals and general hospitals). Nursing and related occupations accounted for 53 per cent of the total workforce, while medical,

diagnostic and allied health, and administrative/domestic staff comprised 8 per cent, 15 per cent and 20 per cent respectively (DHAC 1999a).

The overall size of the workforce did not change substantially between 1993-94 and 1996-97. However, there were some important changes in composition. The average growth rate per year of full time equivalent staff working in ambulatory care settings and community residential services rose by 15 per cent and 22 per cent respectively, while there was a decrease of 6 per cent per year in the number of staff employed in inpatient facilities. Across jurisdictions, staff composition across service settings changed most noticeably in Victoria, where there was an average annual increase of 41 per cent in full time staff employed in community residential services and a decrease of 17 per cent for those working in inpatient services. These trends reflect the major structural reform which has taken place under the National Mental Health Strategy since its inception (figure 6.5).

Figure 6.5 **Average annual growth rate in the number of full time equivalent staff employed in specialist mental health services, by service setting and jurisdiction<sup>a</sup>, 1993-94 to 1996-97**



<sup>a</sup> Community residential services are not provided in Queensland and the NT. <sup>b</sup> The annual growth rate in staff employed in inpatient services is zero.

Source: table 6A.35.

## 6.2 Framework of performance indicators

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

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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 indicated in this chapter.

The framework for breast cancer management focuses on achieving a balance between early detection of the disease and intervention. Thus the performance indicators developed relate to early detection, intervention and overall performance. A similar approach is adopted for emergency management services (see chapter 10).

The distinction between prevention and intervention is more difficult for 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. Thus, the mental illness indicators focus on aspects of service delivery by different providers. However, the Second National Mental Health Plan places considerable emphasis on promoting 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. Indicators representing these components of mental illness management will be developed for future Reports.

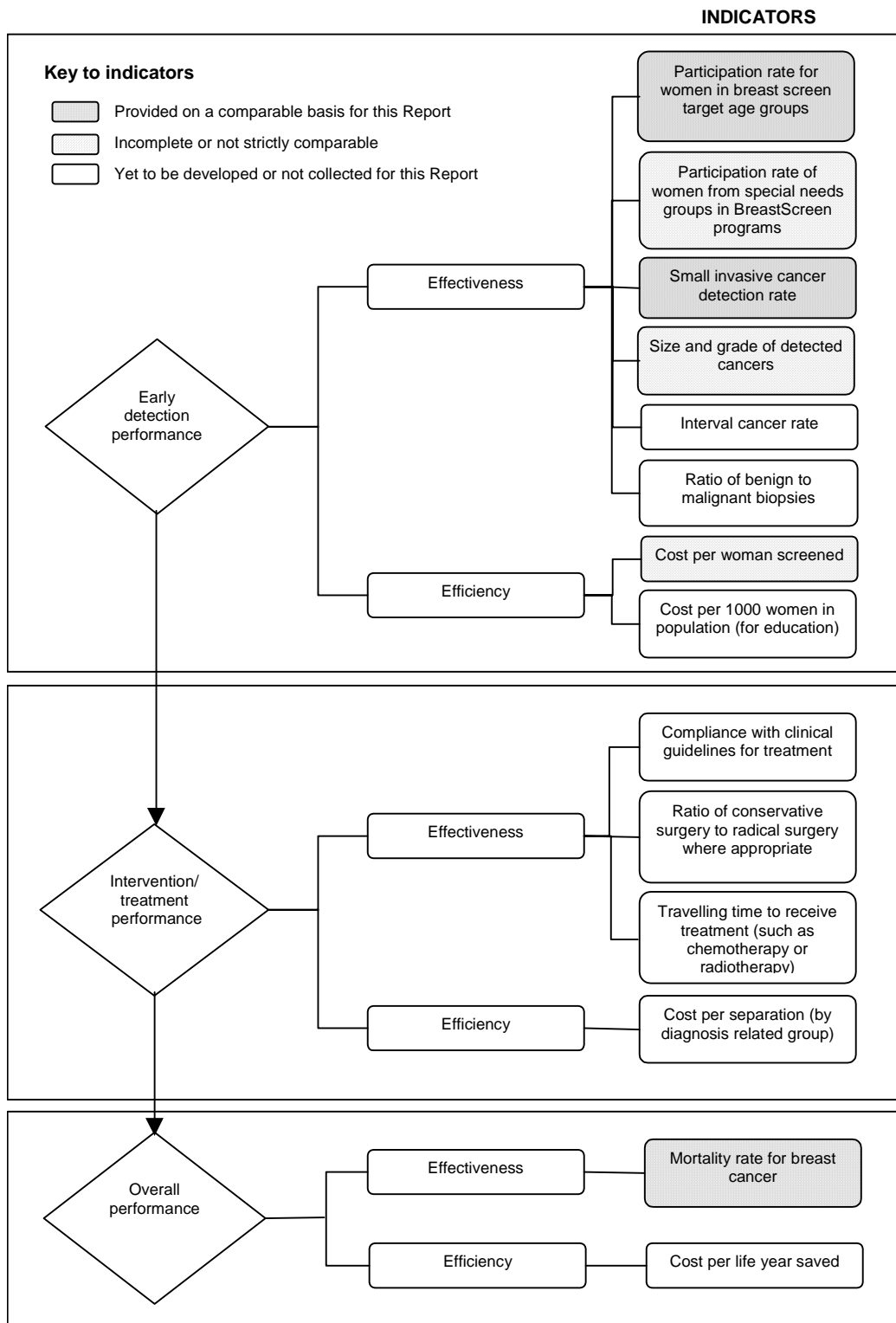
## **Breast cancer management**

The measures developed to report on the performance of breast cancer management are based on the shared government objective for managing the disease (box 6.4). These measures are indicators of the performance of the program to undertake early detection of breast cancer through an organised public health initiative, and of the treatment of breast cancer in public acute care hospitals (figure 6.6). The framework includes indicators of performance related to age-specific mortality rates for breast cancer and combined expenditure on early detection and treatment per episode of illness, as well as indicators of the performance of early detection and intervention strategies.

### **Box 6.4 Objective for breast cancer management**

The objective for breast cancer management is to provide an effective balance of early detection and treatment services with a view to reducing morbidity and mortality in a manner that is equitable and efficient.

Figure 6.6 Performance indicators for breast cancer management



The BreastScreen Australia program aims to detect breast cancer early through organised breast screening services, primarily targeted at women aged 50 to 69 years. If breast cancer is detected early, while still localised in the breast, chances of

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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). The size and grade of detected cancers reflect the effectiveness of early detection programs. Other effectiveness indicators, such as the participation rate of women in screening and the small cancer detection rate, are specific to breast cancer screening programs. The two efficiency indicators for early detection programs are the cost per woman screened and the cost of education programs per 1000 women in the population.

Effectiveness indicators for treatment focus on appropriateness (general practitioner and surgeon compliance with clinical practice guidelines for the management of early and advanced breast cancer, and the ratio of conservative surgery to radical surgery), and access (travelling time for radiotherapy and/or chemotherapy).

Some data on the effectiveness of breast cancer screening services, such as the participation rate of women in the target age group in breast screening programs and the small cancer detection rate, are presented in this Report for the second year. Data on the overall effectiveness of breast cancer management, as indicated by mortality rates from breast cancer, are also presented for the second time.

Other effectiveness indicators are being reported for the first time. These include the size and grade of detected cancers, and the participation rates of Indigenous women and those from culturally and linguistically diverse backgrounds. Data on these indicators have been sourced from jurisdictions directly, and in the absence of validation, are not strictly comparable.

Efficiency data on the cost per woman screened are presented for the first time. Data have been sourced from jurisdictions and are not strictly comparable as the reporting period is not yet uniform across all jurisdictions.

Data collection for some of the other indicators (such as the ratio of benign to malignant biopsies, cost of education programs per 1000 women in the population, and cost per separation for treatment services) is hampered by conceptual and practical issues with data definitions and identifying data items. These issues will be addressed for future Reports, thus the indicators may change over time as better ones are developed. The framework can also be expected to evolve as the focus of and objectives for breast cancer management change.

## **Mental health**

The framework of performance indicators for mental health services builds on governments' objectives for mental health service delivery (box 6.5) as encompassed in the National Mental Health Strategy. The framework reports on the

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effectiveness (in terms of quality, appropriateness, access and outcomes) and efficiency (in terms of unit cost) of mental health services (figure 6.7). It covers a number of service delivery types (institutional and community based services) and indicators of systemwide performance.

**Box 6.5 Objectives for mental health service delivery**

Key objectives include:

- to promote the mental health of the Australian community;
- to prevent, where possible, the development of mental health problems and mental disorders;
- to reduce the impact of mental disorders on individuals, families and the community;
- to assure the rights of people with mental disorders;
- to encourage partnerships between service providers; and
- to improve the quality of service delivery.

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

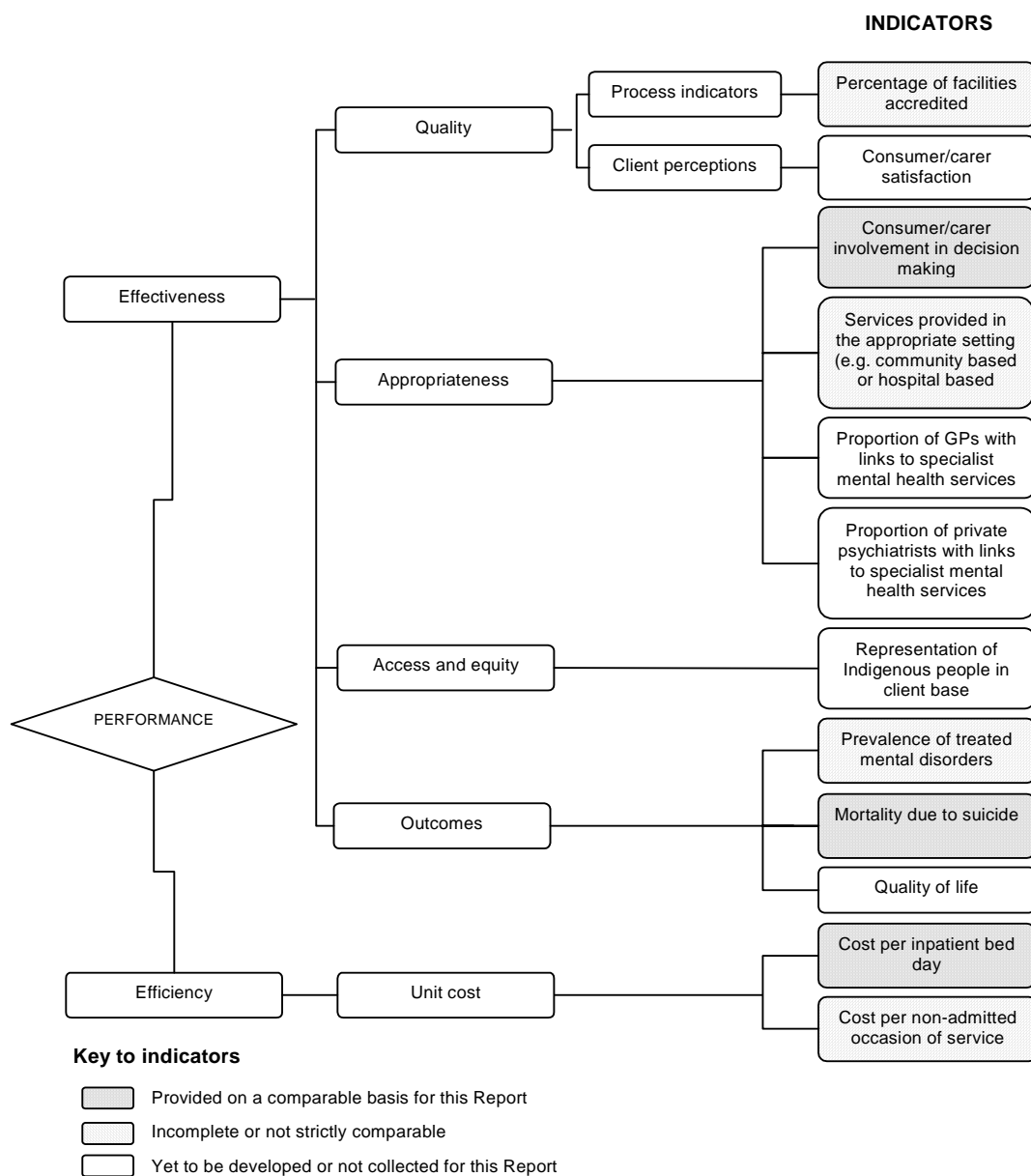
*Source:* DHFS (1998b); DHAC (1999a).

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 National Mental Health Strategy: to promote the mental health of the Australian community, and where possible, to prevent the development of mental health problems. The quality of life outcome 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.

The percentage of accredited facilities delivering mental health services to people with a mental health problem is used as a process indicator of quality. Some data are available and are being reported for the first time this year.

Consumer/carer involvement in decision making is an appropriateness indicator, which reflects the National Mental Health Strategy's aim to assure the rights of people with mental disorders, and to focus on improving the outcomes for consumers.

Figure 6.7 Performance indicators for mental health services



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, quality imperatives (the proportion of facilities accredited and consumer/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.



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Reporting requirements under the National Mental Health Strategy mean that some performance data for mental health services are already available. This Report presents data on some aspects of the effectiveness of mental health services (consumer/carer involvement in decision making, the appropriateness of care setting, the prevalence of mental disease in the general population, mortality rates from suicide) and the efficiency of institutional services (cost per inpatient bed day).

Ongoing work to provide a more comprehensive set of performance indicators and to improve existing indicators and the data, is discussed in section 6.4.

## 6.3 Key performance indicator results

### Breast cancer management – Early detection

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

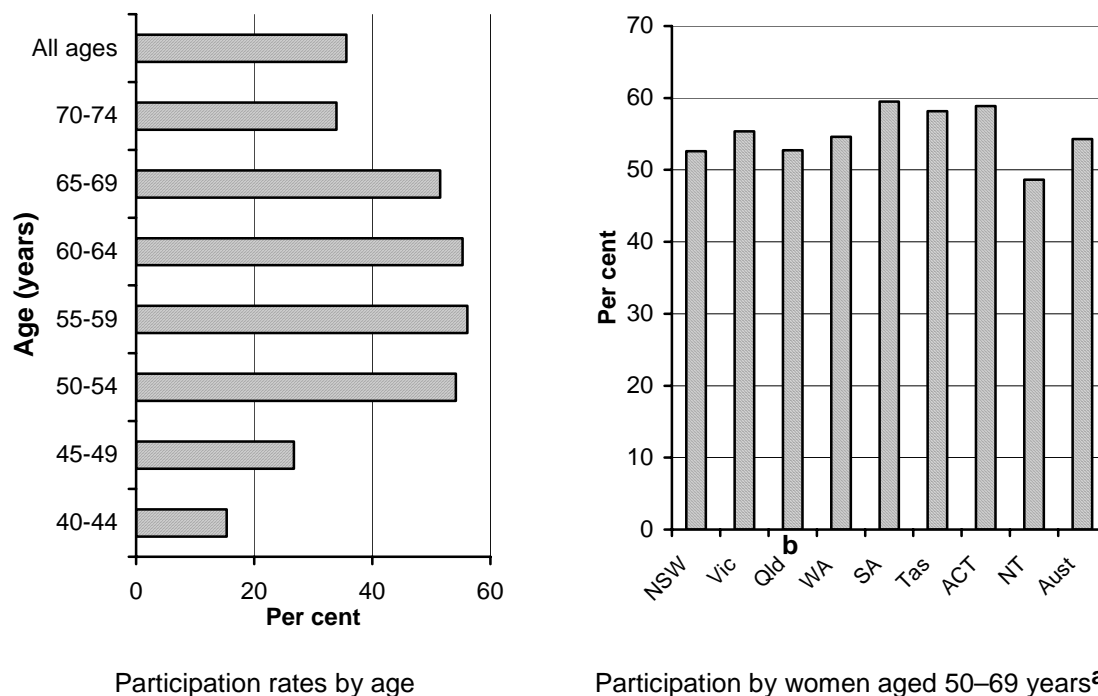
The aim of BreastScreen Australia is to screen 70 per cent of women aged 50–69 years, regularly at two-yearly intervals. The participation of women in the target age group in breast cancer screening is an indicator of the effectiveness of early detection programs (figure 6.8). Fifty-four per cent of all women in this age group participated in the program in 1997 and 1998, along with 26.7 per cent of women aged 45–49 years and 33.9 per cent of women aged 70–74 years.

Age standardised participation rates varied within the target age group (50–69 years) in 1997 and 1998. Women aged 55–59 years were most actively involved in breast screening (with 56.1 per cent participating in the BreastScreen Australia program), whereas women in the 65–69 age group had the lowest participation rate (51.5 per cent). Participation of women in the target age group was highest in SA (59.5 per cent of women aged 50–69 years), followed by ACT (58.9 per cent). By contrast, the NT recorded the lowest participation rates in the target group (48.6 per cent).

#### *Participation rates of women from special needs groups in breast screen programs*

The participation rate of Indigenous women and women from culturally and linguistically diverse backgrounds in breast cancer screening is another indicator of the effectiveness of early detection programs. Data on this indicator are being presented for the first time in this Report. However, the data for jurisdictions are not comparable as different time periods for screening have been reported.

**Figure 6.8 Participation rates of women in BreastScreen Australia, 1997 and 1998**



<sup>a</sup> Rates are age standardised to the Australian 1991 population. <sup>b</sup> Only five of the 11 BreastScreen services were in operation five or more years.

Source: table 6A.1.

Jurisdictions reported the following results:

- NSW reported that in 1998-99, 18 per cent of Indigenous women and 23 per cent of women from culturally and linguistically diverse backgrounds, in the target age group 50–69, were screened (table 6A.5);
- Victorian data for the 1997 calendar year indicated that 36 per cent of Indigenous women and 52 per cent of women from culturally and linguistically diverse backgrounds, in the target age group 50–69, were screened (table 6A.7);
- Queensland and WA reported that in 1997-98, the participation rates for Indigenous women in the target age group 50–69 years were 46 per cent and 36 per cent respectively. For women from culturally and linguistically diverse backgrounds in the target age group 50–69 years, the participation rates were 61 per cent and 47 per cent respectively (tables 6A.11 and 6A.15). Queensland anticipates that, with the establishment in 1999 of a relocatable service that travels to the far north of the State, the participation rate of Indigenous women in breast screening services will increase;
- SA reported that 42 per cent of Indigenous women and 53 per cent of women from culturally and linguistically diverse backgrounds, in the target age group

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50–69, were screened in the 24 month period to 31 December 1998 (table 6A.20);

- Tasmania reported that in the period 1 April 1994 to 30 June 1999, 39 per cent of Indigenous women and 53 per cent of women from culturally and linguistically diverse backgrounds, in the target age group 50–69, were screened (table 6A.23);
- the ACT reported that in the period 1 April 1997 to 30 June 1999, 50 per cent of Indigenous women and 71 per cent of women from culturally and linguistically diverse backgrounds, in the target age group 50–69, were screened (table 6A.26);
- the NT reported that from 1 October 1996 to 31 December 1998, 57 per cent of Indigenous women and 70 per cent of women from culturally and linguistically diverse backgrounds, in the target age group 50–69, were screened (table 6A.29).

#### *Small invasive cancer detection rate*

The small invasive cancer detection rate is also an indicator of the effectiveness of early detection programs for breast cancer. 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, thus are less expensive to manage. Women with small cancers are less likely than women with larger tumours to require a mastectomy (AIHW 1998b).

The rate of small cancers detected, under the BreastScreen Australia screening and assessment services in 1998, was unavailable for NSW and consequently national totals have not been presented. However, data from other jurisdictions showed that the age standardised rate of small cancers detected over all age groups was highest in Tasmania (32.2 for every 10 000 women screened) and lowest in the ACT (10.4 per 10 000 women screened (table 6.3).

There was significant variation in the age standardised small cancer detection rate within the target age group (50 - 69 years) across jurisdictions in 1998. The rate of small invasive cancers detected per 10 000 women was highest in Tasmania (22.3 for every 10 000 women screened), compared with 13.4 in Queensland and 15.1 in SA (table 6.3).

**Table 6.3 Detection rate of small diameter, invasive breast cancers, 1998  
(number per 10 000 women screened)**

<i>Women aged</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
40-44	na	1.5	4.8	0.0	2.9	0.0	10.5	0.0	na
45-49	na	10.3	5.7	5.5	5.6	5.8	0.0	14.3	na
50-54	na	13.2	10.1	9.1	11.1	22.1	16.8	8.3	na
55-59	na	15.2	10.3	18.2	14.3	10.8	24.0	15.9	na
60-64	na	24.2	18.8	18.3	19.7	29.2	14.0	59.0	na
65-69	na	22.2	15.1	31.5	15.9	27.3	19.1	0.0	na
70-74	na	28.3	35.8	20.9	30.1	0.0	0.0	0.0	na
75-79	na	28.7	36.4	31.8	25.0	94.6	0.0	344.8	na
80-84	na	64.7	30.6	84.0	129.4	0.0	0.0	0.0	na
85+	na	0.0	101.3	0.0	0.0	666.7	0.0	0.0	na
All ages <sup>a</sup>	na	16.4	16.3	15.7	16.6	32.2	10.4	31.8	na
50-69 <sup>a</sup>	na	18.4	13.4	18.7	15.1	22.3	18.4	20.8	na

<sup>a</sup> Age standardised to the Australian 1991 population.

Source: table 6A.2.

### *Size and grade of detected cancers*

The size and grade of detected invasive cancers is also an indicator of the effectiveness of early detection programs for breast cancer. The tumour grade describes the degree of similarity of the cancer cells to normal cells. The degree of differentiation of the cancer indicates the prognosis of the disease. For example, a well-differentiated cancer is associated with a good prognosis and those which are moderately differentiated are associated with an intermediate prognosis. Data on this indicator are being presented for the first time in the 2000 Report. Most jurisdictions were able to supply data and the results are as follows:

- Victoria reported that in 1997, 40 per cent of cancers which were 10mm or less in diameter were found to be well differentiated, while nearly 21 per cent of this group were poorly differentiated. For cancers 11-15mm in diameter, the majority (48 per cent) were moderately differentiated (table 6A.8);
- Queensland reported that in 1998, 43 per cent of cancers which were 10mm or less in diameter were found to be well differentiated, while nearly 18 per cent of this group were poorly differentiated. For cancers 11-15mm in diameter, the majority (51 per cent) were moderately differentiated (table 6A.13);
- WA reported that from January 1996 to December 1998, 50 per cent of cancers which were 10mm or less in diameter were found to be well differentiated, while 9 per cent of this group were poorly differentiated. For cancers 11-15mm in diameter, the majority (46 per cent) were well differentiated (table 6A.17);

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- SA reported that in 1998, 56 per cent of cancers which were 10mm or less in diameter were found to be well differentiated, while nearly 7 per cent of this group were poorly differentiated. For cancers 11-15mm in diameter, the majority (48 per cent) were well differentiated (table 6A.21);
  - Tasmania reported that in 1998, 40 per cent of cancers which were 10mm or less in diameter were found to be well differentiated, while 17 per cent of this group were poorly differentiated. For cancers 11-15mm in diameter, the majority (55 per cent) were moderately differentiated (table 6A.24); and
  - the ACT reported that in 1998, 54 per cent of cancers which were 10mm or less in diameter were found to be well differentiated, while 8 per cent of this group were poorly differentiated. For cancers 11-15mm in diameter, the majority (50 per cent) were moderately differentiated (table 6A.27).

#### *Cost per woman screened*

The cost per woman screened is an efficiency indicator for the prevention and early detection of breast cancer. It measures the total cost per woman screened of providing the BreastScreen program. Costs include screen taking, reading X-rays, assessment, recruitment, data collection and service management, in addition to the cost of providing the service to women. Data on this indicator are being reported for the first time in the 2000 Report. The results presented are not yet strictly comparable, and further work will be required to improve the data.

Jurisdictions reported the following results:

- NSW reported that for 1998-99, the cost per woman screened, including capital expenditure was \$91 and excluding capital expenditure was \$87 (table 6A.6);
- Victoria reported that for 1997, the cost per woman screened in rural areas was \$112 and in urban areas \$90 (table 6A.10);
- Queensland and WA reported that for 1998-99, the cost per woman screened was \$108 and \$94 respectively (table 6A.14 and table 6A.19);
- SA and Tasmania reported that for 1997-98, the cost per woman screened was \$97 and \$115 respectively (table 6A.22 and table 6A.25);
- the ACT reported that for 1997-98, the cost per woman screened was \$116 (table 6A.28); and
- the NT reported that for 1998-99, the cost per woman screened was \$235 (table 6A.30).

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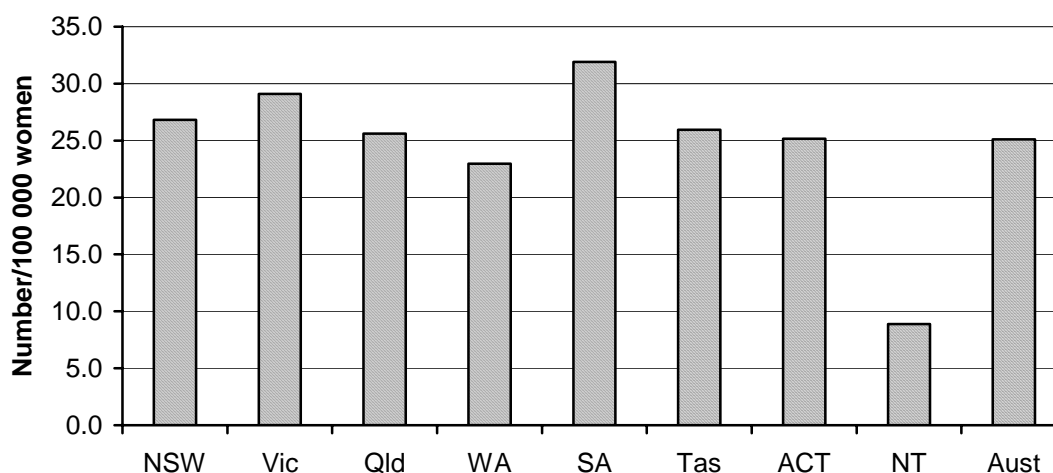
## Breast cancer management – Overall performance

### *Mortality rate for breast cancer*

The number of women dying from breast cancer and age-specific mortality rates partly indicate the effectiveness of both early detection and treatment services for breast cancer. The number of deaths due to breast cancer rose steadily from 1989 to 1995 but has been decreasing since then. Breast cancer claimed the lives of 2542 Australian women in 1998, accounting for the largest proportion of cancer deaths of women in that year. It also comprised 4.2 per cent of all deaths in that year (ABS 1999).

There were 25.1 deaths from breast cancer per 100 000 women in 1998 (figure 6.9). The highest rates were recorded in Victoria and SA (29.1 and 31.9 deaths per 100 000 women respectively), and the NT recorded the lowest rate (8.9 deaths for every 100 000 women).

Figure 6.9 **Mortality rate from breast cancer, 1998**



Source: table 6A.4.

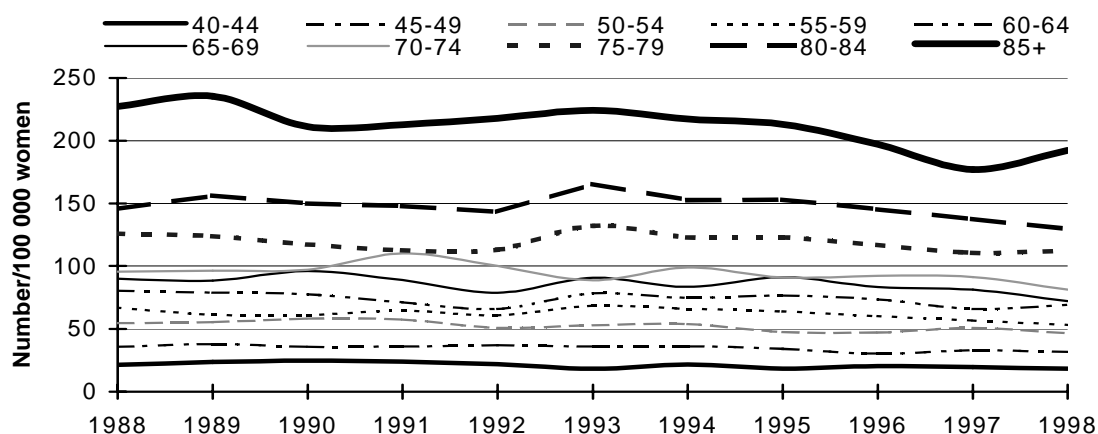
Age-standardised mortality rates are the most appropriate measure for looking at changes in mortality rates over time and these data are available for the 10 years to 1998. The age-standardised mortality rate for all ages fell from 27 deaths per 100 000 women in 1988 to 23 deaths per 100 000 women in 1998 (figure 6.9).

The age-standardised mortality rate in 1998 was:

- 18 per 100 000 woman years for women aged 40–44 years;
- 32 per 100 000 woman years for women aged 45–49 years;

- 59 per 100 000 woman years for women in the target age group 50–69 years; and
- 121 per 100 000 woman years for women aged 75–79 years and over (AIHW unpublished).

Figure 6.10 **Age-specific and age-standardised mortality rates from breast cancer<sup>a</sup>**



<sup>a</sup> Rates were age standardised to the Australian 1991 population.

Source: table 6A.3.

The changes in age-specific breast cancer mortality rates varied across age cohorts. The age standardised mortality rate for women in the target age group, 50–69 years, fell from 68.3 deaths per 100 000 women in 1982 to 64.9 in 1996. The mortality rates also fell for women aged 40–49 years from 27.3 to 25.3 deaths and for women aged over 70 years (from 125.5 to 121 deaths). Over the same period, the death rates remained fairly constant for women in younger age groups 15–39 years.

## Mental health management – Quality

### *Percentage of facilities accredited*

The percentage of accredited facilities, delivering services to people with a mental health problem, is used as a process indicator of quality. Imperfect data are available for this Report (number of facilities accredited, not percentage) but improvements can be expected when the National Standards for Mental Health Services review is complete in about two years.

Jurisdictions reported the following:

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- NSW reported that, as at 30 June 1999, 43 facilities providing inpatient public mental health services were accredited. The number of accredited beds available in these facilities was 1933;
  - Victoria reported that, as at 30 June 1998, 55 facilities providing acute inpatient public mental health services were accredited. The number of accredited beds available in these facilities was 1120. There were 39 community and residential facilities accredited with 868 beds available;
  - Queensland reported that, as at 30 June 1999, 12 public hospitals providing acute inpatient public mental health services were accredited. The number of accredited acute and non-acute beds available in these facilities was 375;
  - in WA, as at 30 June 1998, 16 facilities were accredited. These facilities included authorised hospitals, extended care units and psychiatric wards in public acute care hospitals. The number of accredited beds available in these facilities was 372;
  - in SA, as at 30 June 1998, eight public hospitals with designated/specialist mental health facilities were accredited. The number of accredited beds available in these facilities was 183;
  - Tasmania reported that, as at 30 June 1998, four public hospitals with designated/specialist mental health facilities were accredited. The number of accredited beds available in these facilities was 80; and
  - the ACT reported that, in 1997-98, two public hospitals with designated/specialist mental health facilities were accredited. The number of accredited beds available in these facilities was 52.

## **Mental health management - Appropriateness**

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

An indicator of appropriateness is consumer/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:

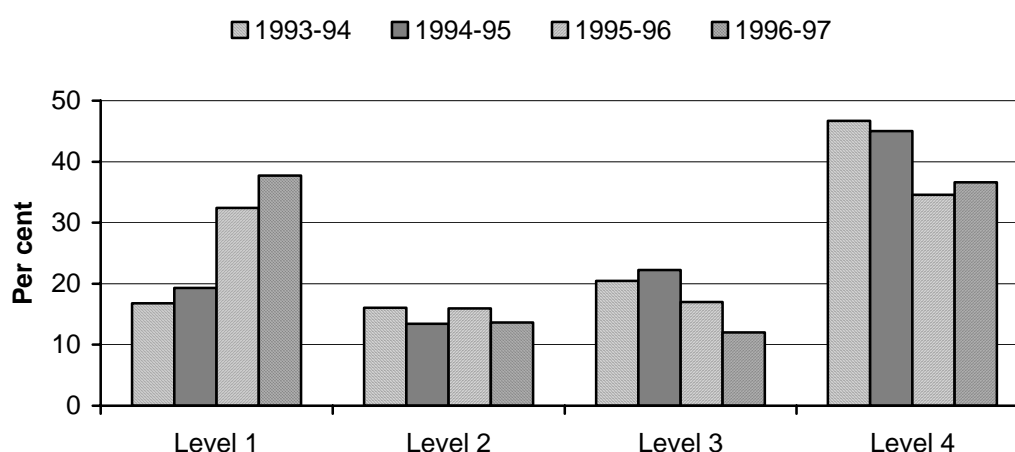
- level 1 — appointment of a person to represent the interests of consumers and carers on the organisation management committee or a specific consumer/carer advisory group to advise on all aspects of service delivery;
- level 2 — a specific consumer/carer advisory group to advise on some aspects of service delivery;



- level 3 — participation of consumers/carers in broadly based committees; and
- level 4 — other/no arrangements.

Of the 137 organisations responding in 1993-94, 17 per cent reported a level 1 rating. Approximately 16 per cent reported a level 2 rating, 20 per cent reported a level 3 rating, and almost half (47 per cent) reported a level 4 rating. By 1996-97, the survey results suggested consumers/carers had a greater involvement in decision making, with 38 per cent of the 183 respondents reporting a level 1 rating. For level 2, the rating was 14 per cent and for levels 3 and 4, 12 and 37 per cent respectively (figure 6.11).

Figure 6.11 Trends in consumer/carer participation in decision making



Source: 6A.40.

### *Services provided in the appropriate setting*

The National Mental Health Strategy advocated 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 provide continuity of care, so 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
- mainstreamed mental health services with other components of health care.

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

Across Australia, per person expenditure on community based mental health services was \$31 in 1996-97, compared with \$16 for services in co-located units in general hospitals and \$23 for stand-alone psychiatric hospitals (table 6.4). Across jurisdictions, per person expenditure on community services ranged from \$21 in Queensland to \$47 dollars in Victoria. For stand-alone hospitals, per person expenditure was highest in SA and lowest in Victoria (\$39 and \$15 respectively).

The average annual growth rate for community services across Australia was almost 14 per cent between 1992-93 and 1996-97. The annual growth rate was highest in Victoria (19 per cent) and lowest in the ACT (nearly 6 per cent). Per person expenditure rose by 4 per cent annually over the same period for co-located units, but fell by almost 8 per cent for stand-alone hospitals (table 6.4).

Table 6.4 **Average per person real government expenditure, by service type<sup>a, b</sup>**

	<i>Stand-alone hospitals</i>			<i>Co-located units</i>			<i>Community services</i>		
	<i>1992-93</i>	<i>1996-97</i>	<i>Change</i>	<i>1992-93</i>	<i>1996-97</i>	<i>Change</i>	<i>1992-93</i>	<i>1996-97</i>	<i>Change</i>
	\$	\$	%	\$	\$	%	\$	\$	%
NSW	27	23	-4.0	15	16	0.6	18	26	10.3
Vic	41	15	-21.9	10	14	9.1	24	47	18.9
Qld	25	25	-0.6	17	17	0.2	12	21	16.5
WA	33	29	-3.1	14	21	10.8	17	29	14.4
SA	39	39	-0.4	7	10	8.3	20	27	7.1
Tas	32	25	-5.8	13	18	7.5	21	34	12.7
ACT	0	0	0.0	21	27	5.7	29	36	5.7
NT	0	0	0.0	30	37	5.5	22	35	12.4
Aust	31	23	-7.8	14	16	4.2	19	31	13.9

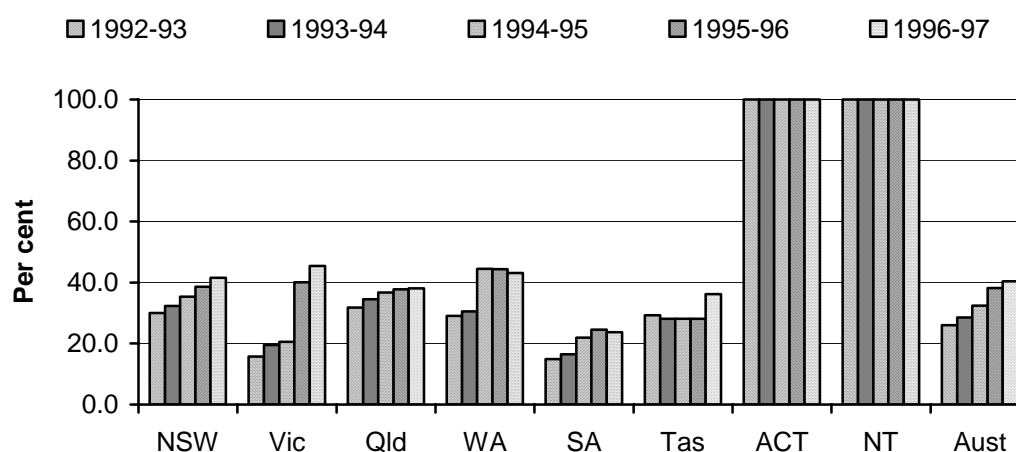
<sup>a</sup> In 1996-97 dollars. <sup>b</sup> Numbers have been rounded off to the nearest dollar.

Source: table 6A.36.

The trend away from stand-alone hospitals towards co-located units in general hospitals and services offered in community settings was also reflected in changes in patient days over the period. Approximately 26 per cent of total inpatient bed days occurred in co-located units in general hospitals in 1992-93, rising to 40 per cent in 1996-97. Across jurisdictions, the largest increase occurred in Victoria, where the growth rate in patient bed days spent in co-located units as a proportion of total bed days was 30 per cent per year over the same period. The growth rate was lowest in Queensland (4.6 per cent) (figure 6.12).

Victoria recorded the highest proportion of inpatient days occurring in co-located units in 1996-97 (46 per cent), followed by (43 per cent) in WA (among jurisdictions where both service types are available). By contrast, the proportion was lowest in SA and Tasmania (24 per cent and 36 per cent respectively) (figure 6.12).

**Figure 6.12 Bed days in co-located units as a proportion of total inpatient bed days**



Source: table 6A.38.

The number of patient bed days, recorded in community based services delivering 24-hour specialised mental health care, rose by 13 per cent per year between 1992-93 and 1996-97 — up from 259 200 to 427 208 (figure 6.13). There was strong yearly growth in the number of bed days in Victoria (27 per cent). The other two States in which growth occurred over the same period were NSW and Tasmania (5 and 3 per cent respectively). There was a fall in South Australia (19 per cent per year) and in WA (4 per cent per year). The ACT did not record any growth during this period. These services were not available in Queensland and the NT.

## Mental health management - Outcomes

### *Prevalence of mental disorders*

Outcome indicators for mental health management include the prevalence of mental illness in the community and deaths from suicide. According to the 1997 National Survey of Mental Health and Wellbeing, approximately 2.4 million adults (or

17.7 per cent of all adults) experienced the symptoms of a mental disorder at some time in the 12 months before the survey.

**Figure 6.13 Average annual growth rate in the number of patient bed days in community based residential services**



<sup>a</sup> These services were not available in Queensland or the NT.

Source: 6A.39.

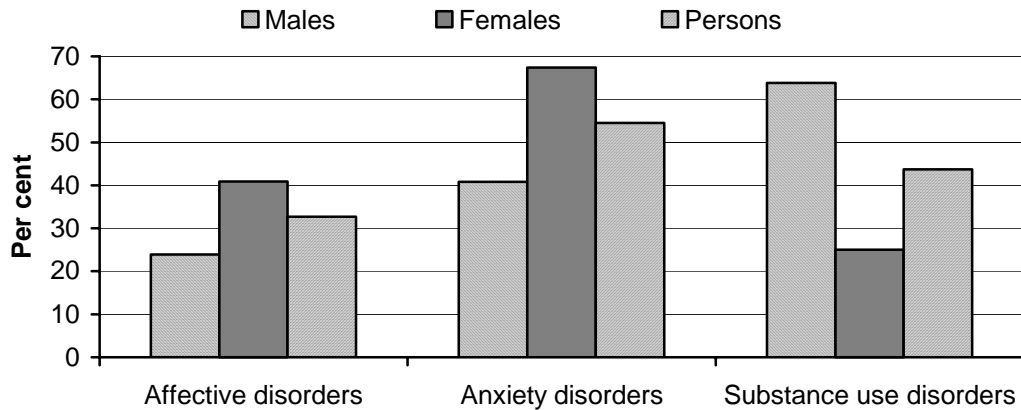
Overall, anxiety disorders (such as agoraphobia, post-traumatic stress disorder and social phobia) were the most common type of mental disorder reported in 1997, with persons reporting anxiety symptoms accounting for 54.5 per cent of those reporting symptoms of a mental disorder. Persons reporting substance use disorders accounted for 43.7 per cent of the total, and persons with affective disorders (such as depression, mania and bipolar disorder) accounted for 32.7 per cent (figure 6.14).

There were differences between males and females. Females most commonly experienced anxiety disorders (which accounted for 67.4 per cent of females experiencing mental disorder symptoms), followed by affective disorders (40.9 per cent) and substance abuse (25.0 per cent). By contrast, males most commonly suffered substance abuse (which accounted for 63.8 per cent of males experiencing mental disorder symptoms), followed by anxiety disorders (40.8 per cent) and affective disorders (23.9 per cent) (figure 6.14).

The prevalence of mental disorders was higher for younger people than older people (figure 6.15). Almost 27 per cent of adults aged 18–24 years experienced symptoms of a mental disorder in the 12 months before the survey, compared with 6.1 per cent of people aged 65 years and over. The prevalence of anxiety disorders was highest for adults aged 45–54 years (11.9 per cent); the prevalence of affective disorders

was highest in the 35–44 year age range (7.2 per cent); and the prevalence of substance use disorders was highest in adults aged 18–24 (16.1 per cent).

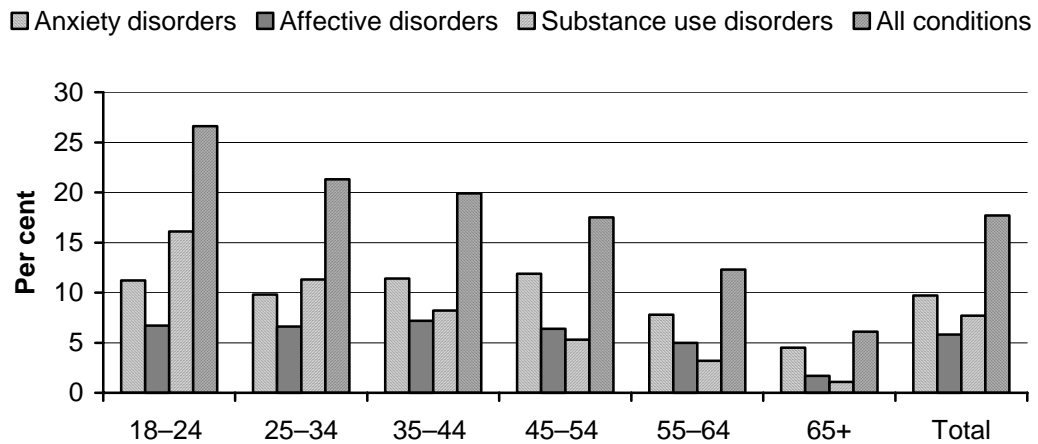
Figure 6.14 Prevalence of mental disorders, 1997<sup>a</sup>



<sup>a</sup> Defined as the percentage of adults with a mental disorder. Components do not add to 100 because respondents may have reported symptoms for more than one type of mental disorder.

Source: table 6A.41.

Figure 6.15 Prevalence of mental disorders, by age, 1997<sup>a</sup>



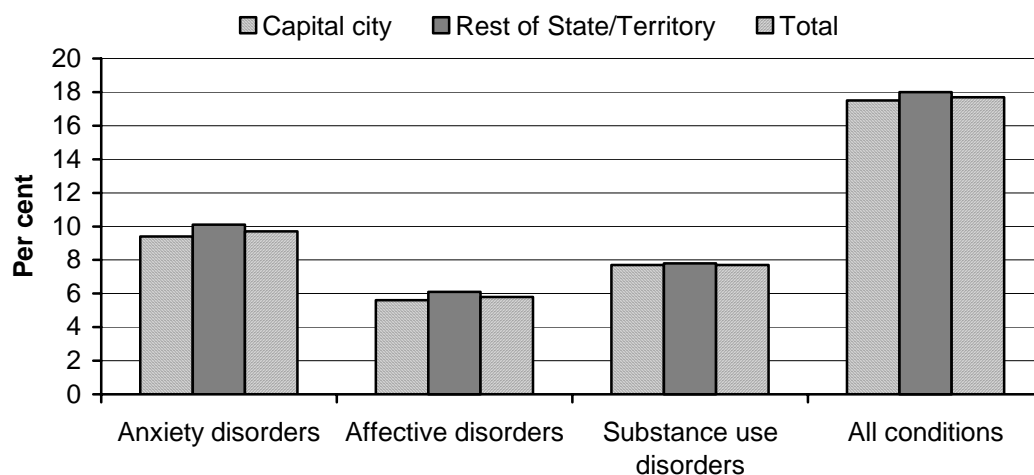
<sup>a</sup> Percentage of all adults with a mental disorder. Components do not add to 100 because respondents may have reported symptoms for more than one mental disorder.

Source: table 6A.42.

The prevalence of mental illness did not vary greatly with geographic location (figure 6.16). Eighteen per cent of adults residing outside capital cities experienced mental disorder symptoms in the 12 months before the survey, compared with

17.7 per cent of adults living in capital cities. A similar pattern was recorded for individual disorders.

Figure 6.16 Prevalence of mental disorders, by geographic location, 1997<sup>a</sup>



<sup>a</sup> Components do not add to 100 because respondents may have reported symptoms for more than one mental disorder.

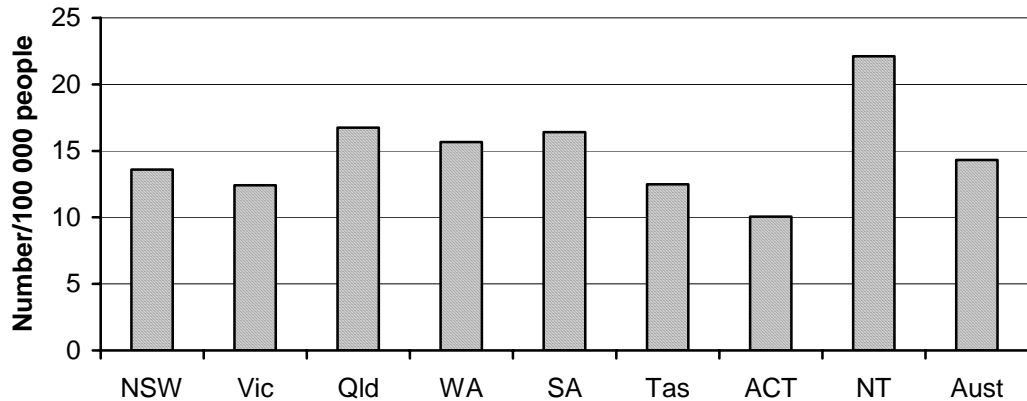
Source: table 6A.43.

### *Mortality due to suicide*

The prevalence of mental illness is thought to have a significant effect on the number of deaths from suicide. Nearly 2700 deaths from suicide were recorded in Australia in 1998, which equalled 14.3 deaths for every 100 000 people. Across jurisdictions, the death rate from suicide in 1998 ranged from 10.1 per 100 000 people in the ACT to 22.1 in the NT (figure 6.17).

The mortality rate due to suicide for males was more than three times that for females in 1998 — a trend that was consistent over the 10 years to 1998. Overall, the mortality rate was relatively stable, although there was a large increase in the number of deaths between 1996 and 1997. The mortality rate increased in that period from 13.1 deaths per 100 000 people in 1996 to 14.7 in 1997, falling slightly to 14.3 deaths per 100 000 people in 1998 (figure 6.18).

Figure 6.17 Mortality rate due to suicide, 1998

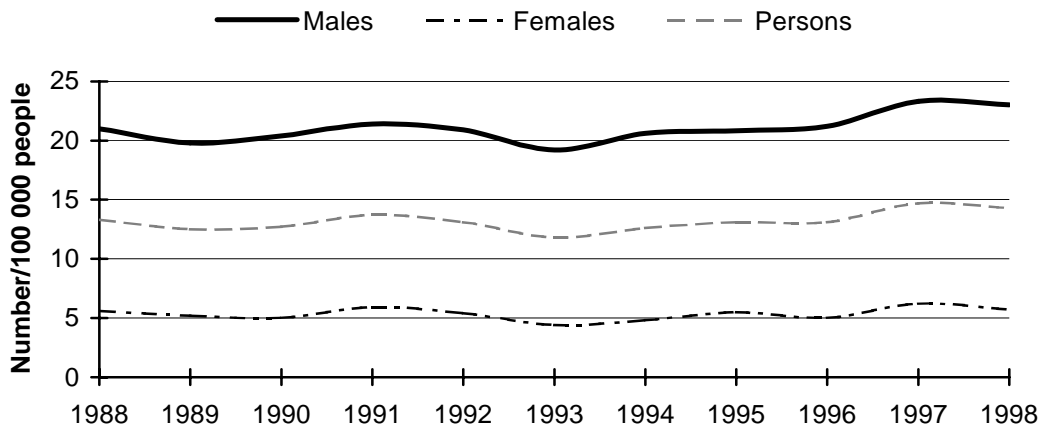


Source: table 6A.45.

The largest proportion of suicides in 1998 was committed by people aged 15–24 years (23.8 per cent), followed by people aged 25–44 years (20.1 per cent). Moreover, suicide was the second leading cause of death for people in both age groups (ABS 1999). The death rate from suicide for people aged 15–24 years was 16.7 deaths per 100 000 people of that age group in 1998. Across jurisdictions, the NT recorded the highest rate (38.7 deaths per 100 000 people), while Tasmania recorded the lowest (6.3 deaths per 100 000 people) (figure 6.19). There was an average annual increase in the mortality rate due to suicide in this age group of 4.7 per cent between 1996 and 1998, with the largest rises occurring in the NT (30.3 per cent), and SA (23.5 per cent). Queensland, Tasmania and the ACT recorded a decrease in the annual mortality rate.

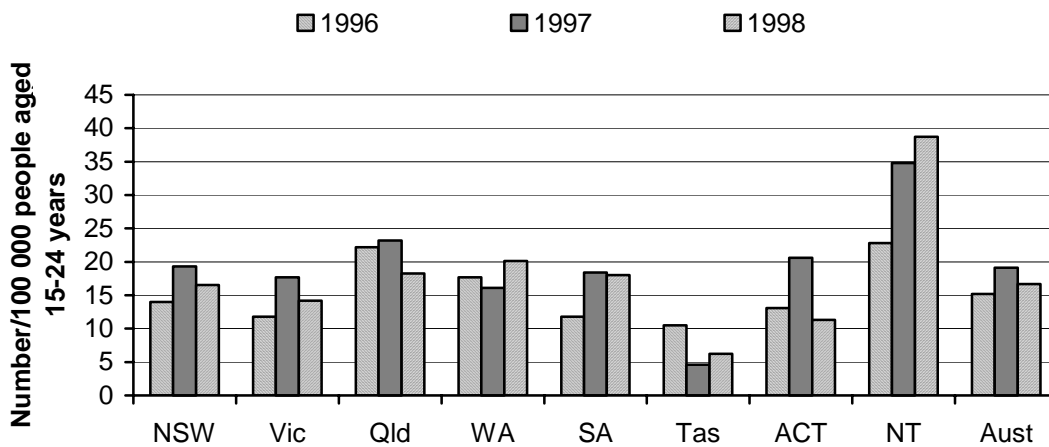
The high proportion of deaths of people aged 15–24 years (especially males) attributable to suicide prompted governments to establish the National Youth Suicide Prevention Strategy in 1995. The strategy aims to address Australia's youth suicide rates that are high in comparison with a number of other Western countries. It recognises the complexity of youth suicide prevention, and the necessary links between preventing youth suicide and promoting emotional and social health and wellbeing (DHAC 1999a).

Figure 6.18 Mortality rate due to suicide



Source: table 6A.44.

Figure 6.19 Mortality rate due to suicide for people aged 15–24 years



Source: table 6A.46.

## Mental health management - Efficiency

### *Cost per inpatient bed day*

It is an objective of the Review to report comparable estimates of costs. Comparability is maximised when the full range of costs to government is counted on a comparable basis. Where the full costs cannot be counted, comparability is achieved by estimating costs on a consistent basis.



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 case mix adjusted separation similar to that presented for public acute care hospitals. However, the current method for adjusting inpatient separations (AN-DRGs) does not accurately reflect differences in treating those with mental illnesses (section 6.3). Until an appropriate casemix classification has been developed and introduced, average inpatient day costs will be used as an indicator of efficiency. However, this data should be used cautiously in any comparative assessment.

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, if 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. Across Australia, the average length of stay for patients with mental illness was nearly 16 days in 1997-98. Queensland reported the highest average length of stay (25 days) and the NT the lowest (10 days) (table 6.5).

**Table 6.5 Average length of stay in public acute and psychiatric hospitals for mental health<sup>a</sup>, 1997-98**

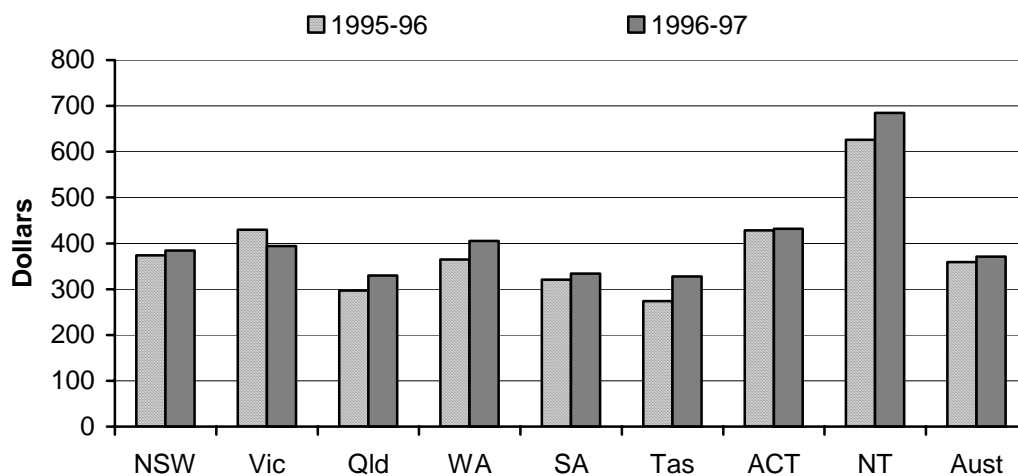
	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Average length of stay	14.1	13.3	25.0	15.9	12.0	11.8	13.1	9.9	15.8

<sup>a</sup> Excludes alcohol and drug related episodes.

Source: AIHW (1999a).

The average cost of treating an inpatient was \$371 per day in 1996-97 which was 3 per cent higher than the previous year. Across jurisdictions, the average cost ranged from \$328 in Tasmania to \$685 in the NT. Compared to 1995-96, there was a decrease of 8 per cent in average inpatient costs in Victoria in 1996-97. In Tasmania there was a steep increase of 20 per cent and in both Queensland and WA the increase in inpatient costs was 11 per cent (figure 6.20).

Figure 6.20 Average inpatient costs per day for patients with mental illness



Source: table 6A.47.

#### *Cost per non-admitted occasion of care*

The provision of ambulatory treatment, rehabilitation and support to non-inpatients is an important component of public hospital services. Community health services also play an important role in the provision of services to people in an acute phase of a mental health problem or who are receiving post-acute care. The average cost per occasion of service in both service settings provides a measure of the efficiency with which non-inpatient services are provided. The following results from jurisdictions are not comparable due to differences in definitions.

Jurisdictions reported the following results:

- NSW estimated that the average cost of treating a public psychiatric patient in an emergency department, outpatient clinic, and in a primary and community based setting was \$80, \$133 and \$93 respectively (table 6A.50);
- in WA the average cost of treating a public psychiatric patient under community management in 1997-98 was \$1859, which was 7 per cent less than the previous year (table 6A.57); and
- in SA the average cost of treating a public psychiatric patient in an outpatient clinic was \$92 in 1996-97. The cost per patient of treating adults and children in primary and community based settings was \$118 and \$184 respectively (table 6A.50).

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## 6.4 Future directions in performance reporting

Key challenges for improving reporting on health management performance are:

- filling gaps in reporting;
- improving the reporting on Aboriginal and Torres Strait Islander peoples' access to mainstream health services;
- improving the measurement of unit costs;
- reviewing the indicator framework; and
- extending the coverage of the Review.

### Filling gaps in reporting

#### *Breast cancer*

Currently performance data for breast cancer management are limited to some aspects of the effectiveness and efficiency of the breast cancer screening program, BreastScreen Australia, and breast cancer management overall. Data on the effectiveness indicators—the participation rate of Indigenous women and women from culturally and linguistically diverse backgrounds in screening programs and the size and grade of detected cancers—have been reported by jurisdictions for the first time. It is anticipated that more comparable and comprehensive data will be available for future Reports.

Data on the efficiency of early detection (such as cost per woman screened) have been reported by some jurisdictions for the first time. An evaluation plan has been developed by BreastScreen Australia which will provide a comprehensive analysis of the effectiveness and efficiency of the program, including an economic evaluation. It is anticipated that nationally comparable data will be available for future Reports.

The National Breast Cancer Centre announced the release of a new protocol in July 1999 for *'The ascertainment and reporting of interval cancers within the BreastScreen Australia Program'*. This report has been endorsed by the BreastScreen National Advisory Committee. The protocol outlines the major reasons for measuring interval cancer rates in a screening program, including measuring the effect of the screening program on mortality. Program evaluation and comparison can also be achieved using measures such as program sensitivity, which relies on the calculation of the interval cancer rate (NHMRC 1999a). The development and reporting of the interval cancer rate, which is an indicator of the

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effectiveness of the screening program, will also facilitate program outcomes to be compared across States and Territories and on an international basis. It is anticipated that national data will be made available from the Australian Institute of Health and Welfare in March 2000. Reporting of this new performance indicator for effectiveness is expected to take place for the first time in the 2001 Report.

It is anticipated that data will be available for the 2001 Report on the effectiveness indicators, the ratio of benign to malignant biopsies and the ratio of conservative surgery to radical surgery. Clarification is also being sought on the availability of data on the indicators, travelling time to receive treatment, cost per separation by AN-DRG and cost per life year saved.

The National Health and Medical Research Council (NHMRC) *Clinical Practice Guidelines: The Management of Early Breast Cancer* was first published in 1995. The initiative was part of the national program to promote the development of evidence-based clinical practice guidelines. The guidelines summarise areas of knowledge and highlight those areas where there is a deficiency in knowledge. Continuing evaluation of the guidelines will be carried out to determine the degree of use by practitioners, and the resultant effects on patient outcomes (NHMRC 1999b). The guidelines are specifically designed to:

- assist in decision making by women and their doctors, and educate all involved in the care of women with breast cancer; and
- assess and assure the quality of care.

The second edition of the guidelines are expected to be released in early 2000.

The National Health and Medical Research Council National Breast Cancer Centre established a multi-disciplinary working group in 1996 to develop *Clinical Practice Guidelines: The Management of Advanced Breast Cancer*. The first edition is expected to be released in mid 2000. The overarching aim of the guidelines is to develop a process of caring support when a woman is diagnosed with advanced breast cancer. This includes outlining the patterns of care available to her in a clear and compassionate manner over an appropriate period of time.

When developing the guidelines for the management of early and advanced breast cancer, it became evident that women with breast cancer suffer significant emotional morbidity. This impacts on the ability of the woman to function as an individual and impacts on her family as well. In response to this, *Psychosocial Clinical Practice Guidelines: Providing Information, Support and Counselling to Women with Breast Cancer* has been developed and will be released on 14 February 2000. These guidelines aim to consider the extent and type of psychosocial needs of women with breast cancer and the most effective ways of providing appropriate interventions.

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In addition, it was recognised that an important risk factor for common cancers is considered to be attributable to inherited cancer predisposition. Therefore, the need for a coordinated national policy on cancer genetics has become apparent. In response to this, the Australian Cancer Network, the National Breast Cancer Centre and the National Health and Medical Research Council have developed *Guidelines on Familial Aspects of Cancer*, which are expected to be released in mid 2000.

### *Mental health management*

The National Health Priority Areas initiative, which is a collaborative effort between Commonwealth and State and Territory governments, has targeted depression as a primary focus. This is allied to the estimates of the World Health Organisation and the World Bank which predict that depression will constitute the greatest disease burden in the developing world and rank second to ischaemic heart disease world wide by 2020. Depression is also a major focus of the Second National Mental Health Plan that includes the development of a proposed three-year National Depression Action Plan. It is anticipated that greater emphasis for future Reports will be placed on reporting indicators, such as prevalence rates of depression in the community, hospital separations for suicide, self-inflicted injury among young adults, and exploration of the link between depression and suicide.

Under the first National Mental Health Plan, policies were proposed to encourage increased involvement of general practitioners in the management of psychiatric clients. The second of the key themes in the Second National Mental Health Plan highlights the Commonwealth's commitment to the integration of mental health services with other health services, and to the development of strategic partnerships and alliances. Particular importance is placed on establishing closer working relationships with general practitioners.

Arrangements designed to develop better links between GPs and mental health specialists are often described as shared care models. Governments have sought to increase access to joint or shared care for suitable patients, but currently there are no data that enable reporting on these efforts (AHM 1998).

Government funding arrangements can affect the adoption of these models. One shared care project used a seeding grant to the local Division of General Practice to pay general practitioners for time spent consulting about their patients with psychiatrists from the Area Mental Health Service. A paper examining this project noted that the most common single impediment to transfer of a patient from the care of the Area Mental Health Service to a GP was drug costs. Some drugs are free to patients under Area Mental Health Service care but costly if prescribed by a GP (Meadows 1998).

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Before data can be collected for this indicator, a nationally agreed definition of shared care against which data can be collected will need to be developed. This will be complicated as the concept is still being developed and, as a result, a range of shared care models may evolve. One such shared care model is Consultation Liaison in Primary Care in Psychiatry, based in the northwest of Melbourne (box 6.6).

**Box 6.6 Shared care models — Consultation Liaison in Primary Care Psychiatry**

The Northwest Melbourne Area Mental Health Service has promoted collaboration between GPs and public sector mental health services through the clinical consultation-liaison in primary care psychiatry (CLIPPP) service since 1995. During the first two years, more than 220 patients had consultations in their general practice clinic with psychiatrists from the area mental health service. More than 90 were transferred from the specialist care of the area mental health service to shared care. Forty GPs from seven group practices participated. Key features of the shared care model are:

- case managers within the area mental health service identify candidate patients — typically clinically stable, without recent relapse, with fair to good insight, and with some social support;
- patients are prepared for transfer. A concise summary of diagnosis, history and treatment adherence is prepared from the case notes. Impediments to transfer are identified and acted upon, where possible; the outcome of this action is recorded;
- a management plan is drawn up. An appointment between the GP, psychiatrist and patient is arranged to discuss the draft plan and establish the plan for continuing management;
- the GP takes over primary responsibility for the care of the patient;
- a patient registration and tracking system, maintained by area mental health service staff, supports the GP in maintaining continuity of care and provides information about satisfaction and other quality assurance;
- an electronic diary of due dates for review of each patient is maintained. Clinical staff review patients at three monthly intervals, by telephone contact with the patient and by checking the GP's case notes for continued contact; and
- a psychiatrist usually reviews patients every six to 12 months.

*Source: Meadows (1998).*

A shared care model is also being developed in Queensland under the General Practice and Psychiatric Partnerships (GPAPP) project. This project commenced in July 1999 and is expected to be completed in July 2003. The appropriateness indicator, the proportion of GPs having shared care arrangements with specialist mental health services, attempts to measure the extent of this involvement. Priority

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will be given to developing this indicator to reflect the directives and aims of the Second National Mental Health Plan.

### **Improving reporting on Aboriginal and Torres Strait Islander peoples' access to mainstream services**

In May 1997, the Prime Minister requested that the Steering Committee give priority to developing indicators that measured the performance of mainstream services in meeting the needs of Indigenous Australians. This is an important task, but large gaps remain. The availability and coverage of nationally consistent data on the provision of services to Indigenous clients will increase in future Reports.

A number of reports have contributed to the identification of the mental health needs of the Aboriginal and Torres Strait Islander communities. They include the Royal Commission into Aboriginal Deaths in Custody 1988, the Report of the Human Rights and Equal Opportunities Commission Inquiry into Human Rights and Mental Illness 1993, and the National Consultancy Report on Aboriginal and Torres Strait Islander Mental Health 1995. There is an acknowledgment of the holistic concept of health held by Aboriginal and Torres Strait Islander communities (NACCHO 1997):

Not just the physical well-being of the individual but the social, emotional, spiritual and cultural well-being of the whole community ... Health services should strive to achieve the state where every individual can achieve their full potential as human beings ...

There is also recognition of the complexity and breadth of issues that contribute to the psychological wellbeing and mental health of individuals, and their significance in the development of culturally appropriate and effective treatment models and programs. The Second National Mental Health Plan seeks to identify better ways of meeting the mental health needs of Indigenous people, people from culturally and linguistically diverse backgrounds, and those living in rural and remote areas.

Only limited national statistics are available on the mental health status of Indigenous people. Investigations have shown that loss, separation and traumatic experiences for Indigenous peoples significantly contribute to psychosocial morbidity. Trauma, grief and loss have affected the physical as well as mental health of Indigenous people, yet no data are available to quantify the extent and role of this impact. Studies have shown that these risk factors are key variables contributing to the high levels of psychiatric disorder found in Indigenous communities, particularly to a high frequency of depression (Swan and Raphael 1995). The high rate of entry into the criminal and juvenile justice system for Indigenous peoples is also a risk factor.

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## Improving the measurement of unit costs

The Steering Committee is working to improve estimates of unit costs by introducing a more consistent treatment of:

- superannuation costs (see SCRCSSP 1998);
- payroll tax (see SCRCSSP 1999); and
- depreciation and the user cost of capital.

Accounting for these should improve the comparability and accuracy of unit cost information in future Reports.

Little accurate cost data are available for reporting the efficiency of mental health services, particularly services provided outside hospitals. Funding for these services is generally based on historic cost or input based funding methods which hardly allow for differences in the illness and/or severity of clients. Further, these funding methods do not provide strong financial incentives for efficiency, quality, improved consumer outcomes or substitution between different service types.

The framework for public hospitals includes cost per case mix adjusted separation as an efficiency indicator, which accounts for the differences in patient mix across operators. Each case mix class groups patients with clinical similarities and resource use similarities.

The main classification system used in Australia is the AN-DRG model. However, AN-DRGs do not accurately predict the cost of treating different people with mental illnesses. Further, they were developed for classifying acute inpatient episodes and therefore may provide perverse incentives to substitute inpatient care for community based care.

The Mental Health Classification and Service Costs (MH-CASC) project was a major service utilisation study conducted under the National Mental Health Strategy. The project commenced in 1995 and continued over three years. The aims of the project were to determine whether clinical factors predict service costs and to develop the first version of a national case mix classification (with associated cost weights) for specialist mental health services that:

- can be used to classify mental health patients in the various treatment settings;
- has sensible clinical groupings; and
- relies on information generated for clinical purposes.

The project developed an episode classification for inpatient and community health care. The recommended first version of the classification system includes 42 patient



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classes — 19 for community episodes and 23 for inpatient episodes. The classification may be used for management information and funding purposes (Buckingham *et al.* 1998).

Under the National Information Priorities and Strategies, which is part of the Second National Mental Health Plan, further development and refinement of the mental health case mix classification will be undertaken. This will build on the findings of the MH-CASC project.

### **Reviewing the indicator framework**

The Second National Mental Health Plan incorporates three key themes that form the basis for the plan: promotion/prevention, development of partnerships in service reform, and the quality and effectiveness of service delivery. Under this plan, strategies to implement change in each area and the resulting outcomes have been developed. It is anticipated that in the future priority will be given to developing new indicators which reflect the focus areas of the Second National Mental Health Plan.

### **Extending the coverage of the Review**

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 (that is, cardiovascular health, diabetes mellitus, asthma and injury prevention and control). These priorities focus government attention on areas where a concerted effort could achieve significant gains in the health of the nation. A limited number of priority indicators, encompassing the continuum of care (from prevention through to treatment, rehabilitation and palliation) are reported for each area every two years. The first report on injury prevention and control was released in 1998, and reports for cardiovascular health and diabetes mellitus were released in 1999.

## **6.5 Jurisdictions' comments**

This section provides comments from each jurisdiction on the services covered in chapters 4, 5 and 6. Appendix A contains detailed statistics and short profiles on each State and Territory, which may assist in interpreting the performance indicators presented in this chapter. 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 aboriginality and ethnicity).

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## **New South Wales Government comments**

“ A scan across performance indicator development activities in health reveals the scale of effort currently devoted to these enterprises. Performance indicators are being developed for the Review of Government Services, under the previous National Health Ministers Benchmarking Working Group, for each of the National Health Priority areas (such as cardiovascular health, cancers, diabetes, and mental health) and through the National Mental Health Report. Indicators have been developed for over 20 national strategies such as BreastScreen Australia, the National Tobacco Strategy and the National Alcohol Strategic Plan. Through the Public Health Partnership a public health indicator framework is being developed. Performance indicators are reported through the Australian Health Care Agreement and the Public Health Outcome Funding Agreements. Performance indicators are reported by various State health portfolios (for example see the NSW Hospital Comparison Data Book and the Chief Health Officer's Report at <http://www.health.nsw.gov.au/pubs/>). Outside the public sector many other performance comparison activities are under way for example as an adjunct to accreditation processes.

The breadth of these activities highlights the need for a national framework for performance measurement that delivers meaningful, useful and timely information. To be justified these efforts must contribute to improved policy, management and delivery of health services, and not remain interesting but esoteric exercises. Despite existing efforts there remain concerns that identifying the performance of whole health systems is elusive, and significant gaps remain in areas such as the contribution of the health system to improved health, the quality of services and the performance of important services such as community based services. Some of these concerns lay behind the recent establishment, by Health Ministers, of a National Health Performance Committee. This Committee has commenced its work and will be seeking to develop an appropriate framework during 2000. The Committee will be working closely with the Review and other national processes concerned with performance comparison. NSW Health strongly supports these developments.

The 2000 Report further expands reporting of measures and this is welcomed. This year's report has also been able to further explore issues lying behind the comparisons. The inclusion of waiting times for elective surgery across all jurisdictions comes after a gap of many years. These data suggest Australia is achieving waiting times that exceed the performance of many western countries. However issues of comparability across States remain, particularly in the allocation of 'urgency' categories. The discussion of unit costs for public hospitals demonstrates key issues have yet to be resolved. A key step is to estimate costs for 'acute' patients. NSW aims to provide these estimates for the next report. A challenge for the review is to create a process that leads to improved services, not just interesting comparisons. To meet this challenge the Review needs to consider ways of comparing services below the jurisdiction level, for example comparing peer organisations and services. Information on underlying variation in performance should also be 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. 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.

The development of a performance measurement framework for general practice, including indicators of quality, safety and evidence of best practice, is particularly important in a funding environment where outcomes are rewarded and emphasis is placed on quality. Mental health, aged care, palliative care and other chronic illness management are major areas of general practice involvement where *care* is important and *cure* less certain. In the absence of standard measures for assessing the outcomes of general practice there is a risk of focusing on doing what can be counted, and on programs where improvements can be clearly demonstrated, in return for resource investment.

The breast cancer control services overseen by BreastScreen Australia provide an example of a comprehensive mechanism for assessing the effectiveness and efficiency of service delivery at both national and jurisdictional levels. There is an extensive national data collection covering all aspects of the screening service and arrangements are in place for national reporting by State and Territory BreastScreen programs against agreed key performance indicators. State/Territory data are provided for annual national reports, prepared by the AIHW on behalf of the Commonwealth. The purpose of the AIHW reports is to collect and publish critical descriptive data on national program performance. Considerable work is being done to ensure that the data are accurate, valid and comparable both between States/Territories and from year to year.

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, as well as for benchmarking between jurisdictions.

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### **Queensland Government comments**

Queensland Health supports enhanced cooperation between the public and private sectors aimed at improving quality, efficiency and accessibility to health services. For example, the General Practitioners Integration Project will improve integration of care between public hospital services and the broader health and community care services, particularly the general practice sector. Another example is the establishment of a number of collocated public and private hospitals including at Caboolture, Gladstone, The Prince Charles Hospital, Logan and Redland Hospital. Two Build, Own, Operate and Transfer hospital projects have also been initiated at Noosa and Robina.

Better integration of internal resources is also crucial to achieving more efficient and effective service delivery. The Clinical Benchmarking Project will establish an interface between clinical costing software and core feeder systems to support coordinated clinical service reform. The project will integrate feeder systems including finance, payroll, patient admissions, discharge information, patient nurse dependency, theatre, pathology, imaging and pharmacy. This will enhance planning, performance management and budgeting.

Queensland Health has developed the Queensland BreastScreen Register and the Queensland Pap Smear Register during 1998-99, providing central repositories for screening information. The registers improve services to Queensland women by identifying women who are unscreened, and groups of women who are under-screened to allow more effective targeting of future educational and promotional strategies.

An Aboriginal and Torres Strait Islander Health Information Network (linking information from Queensland Health services, Aboriginal and Torres Strait Islander community health services, public health services and non-government health organisation) is being established which will enhance information relevant to the health status of Aboriginal and Torres Strait Islander people. This information will inform the future development of health services.

Queensland is taking steps to improve access to health services through a variety of measures. Access to health services for people living in rural and remote areas will be enhanced through increased use of Telemedicine. Telemedicine has proved very effective in meeting the health needs of rural and remote communities. Access to elective surgery has increased through the adoption of improved processes. Queensland Health has increased admissions for elective surgery by 3.3 per cent and the percentage of patients waiting longer than 30 days for admission was only 1.9 per cent at 1 July 1999 for category 1 patients. This has been achieved by strategies to optimise throughput, targeting long wait complex surgical cases, increasing day only surgery use, theatre utilisation and liaison with general practitioners. Additionally, waiting lists are published each quarter for 95 per cent of the State's elective surgery by hospital, category and specialty.

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### **Western Australian Government comments**

Within the constraints of limited resources, WA continues to pursue innovations in health service delivery that would maximise the value of the health dollar for the community.

The State launched a health call centre named HealthDirect in May 1999. This service gives the community a 24-hour a day, seven-day a week point of contact for assistance with health concerns. HealthDirect provides advice on the most appropriate way to deal with a health problem when the caller is unable to contact his or her own GP. After three months of operation, call volumes levelled out at approximately 3000 calls a week with the busiest periods being from 5:00pm to 11:00pm and the busiest days being the weekends.

A number of issue-specific initiatives were introduced to the community. To address the need to move from a concentration on a clinical model of maternity care, for example, a consumer information booklet titled *Your Birthing Choice* was produced and distributed through GP Divisions, the Australian College of Midwives and Health Services, the State Library and similar networks. In recognition of Western Australia's low donation rates, DonateWest was established to maximise donation rates and ensure positive outcomes for donor families and recipients. This agency provides a statewide framework for policy and practice to lift donation rates and increase community awareness about the importance of donation. The Universal Neonatal Hearing Screening Program was launched to detect hearing loss in the first three months of life. This early diagnosis and intervention has been demonstrated to make significant differences in outcomes for affected children.

Certain projects that were commenced in recent years have made significant gains. The renal dialysis program has been substantially expanded in the past four years with the addition of nine new services including an in-centre facility at Fremantle Hospital and several metropolitan and rural satellite services. In 1999-00 five new satellite services were planned including two in the northwest to provide an opportunity for repatriation of patients who had been forced to move to Perth for treatment. Innovative service delivery models are being explored including community-based dialysis and the involvement of private providers. In response to continuing issues with waiting lists, the Central Wait List Bureau was established in 1998. In its first 12 months of operation elective surgery waiting lists were reduced by 26 per cent through a combination of audits and of fast tracking patient procedures through service coordination. The Bureau is currently working with GP divisions to conduct clinical reviews of existing lists.

WA continues to develop the output based model of care delivery with a framework that supports policies of care closer to home, value for money and innovative service models. Its efforts at achieving allocative efficiency are articulated in its purchasing intentions and provider arrangements.

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### **South Australian Government comments**

The SA Department of Human Services continues to provide a quality public health service within the constraints of cost pressures and increasing demand. These ongoing pressures result from a number of factors including developments in technology and the ageing of the population. A continuing important element of demand is that arising from the increasing numbers of people in SA dependent on government income support (for example, the unemployed, single parents) who, along with the elderly, are among the largest users of the public health system.

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). The department has maintained its efforts to ensure that appropriate health care is provided to all who need it. SA has for many years had a strong community service sector, in both the health and welfare fields. The department is actively undertaking further development of integrated and coordinated service provision across all three portfolio areas of health, housing and community services.

The department has released a Strategic Plan for the Human Services portfolio for the period 1999 – 2002. This Strategic Plan includes commitments to:

- improve service outcomes through the adoption of continuous improvement and best practice processes by promoting evidence based decision making and reviewing and further trialing coordinated care,
- improve outcomes for those who receive hospital treatment by benchmarking services for best practice,
- improve the response of mainstream services to meet the needs of Indigenous people,
- improve the range and mix of services available to people with mental health needs ranging from mental health promotion and illness prevention to long term support for people with an on-going psychiatric disability, and
- an increase in the levels of community- based mental health services.

The department supports the development of performance indicators across the broader (non-hospital) health sector based on nationally agreed data definitions.

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### Tasmanian Government comments

In seeking to expand the focus on 'health gain' at all levels of treatment and care in the public health system, Tasmania is continuing to develop performance and quality measurement frameworks to support the collection of data and to inform decisions about the efficacy of existing service outputs.

Over the past year Tasmania has conducted the most comprehensive public health assessment ever undertaken in the state. The *Healthy Communities Survey* was sent to over 25 000 Tasmanians in November 1998 and a first analysis was published in August of this year. As a document indicating how Tasmanians assess their own health, it reveals, for example, that four out of five assess their health as good and that there is little difference in health status between men and women or between people in urban and non-urban areas.

As noted in previous reports, Tasmania supports the continued reporting and publication of information to inform governments and the public about performance in the public health sector. Care should be taken, however, in comparing data between jurisdictions because of differences in how health services are managed. It should be noted that the comparatively high number of private hospital beds in Tasmania can influence *the representation* of performance in the public hospital sector as a percentage of total population when compared with other jurisdictions. Tasmania's small population, particularly in relation to the usage of some services, also makes it prone to statistical fluctuation from year to year.

Tasmania continues to be characterised by a highly regionalised low level population base. The relative social and economic disadvantage of the population generally, statistically low health status, rising community expectations about ready access to high quality (and expensive) medical treatment, and isolation all contribute to the costs of service provision in Tasmania being higher than in other larger jurisdictions.

While some pressure on the public health system has been partially alleviated by a significant one-off budget allocation in 1999 and an increased recurrent commitment by the State Government to the Department of Health and Human Services, it will be some time before the positive impacts on service provision are reflected in performance reporting.

In terms of quality, Tasmania's public health system is highly rated, with all three major hospitals having gained full accreditation from the *Australian Council on Health Care Standards* and many other services working towards assessment and accreditation against national standards programs.

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### **Australian Capital Territory Government comments**

The ACT has entered its fourth year of operation under a purchaser-provider arrangement. The purchase of services in the acute care sector is on the basis of price, volume and quality and these are defined in purchase agreements between the Department of Health and Community Care and the two public hospitals. The Territory currently funds public hospital activity using a case mix based funding model.

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. The causes of these higher costs are the result of a number of different factors including local ACT factors and policy decisions (or opportunity costs) and higher cost structures for example the high cost of Visiting Medical Officers. The Government is concerned about the high costs and is committed to developing strategies to bring these costs more in line with national benchmarks.

Since 1995-96 there has been an increase in the number of separations and cost weighted separations produced in the ACT public hospital system. Also, the average acuity of these separations has been increasing. This reflects Government policy in a number of areas including the introduction of bone marrow transplants and cardio-thoracic surgery, the development of a clinical school and development of a regional teaching and referral role for the ACT. This trend towards increasing acuity and throughput presents a significant challenge to the ACT public hospital system.

In October 1998 the ACT Government released its *Setting the Agenda* document to guide the Department of Health and Community Care in determining and implementing the future directions of the provision of health care in the ACT. The document's objectives include reforming the hospital system by focusing hospital services on essential acute services and continually reviewing services with a view to, where clinically appropriate, shifting services to a stronger community based primary care sector. The first step in the process of moving functions to the community has occurred with the transfer of the allied health areas of The Canberra Hospital to ACT Community Care.

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**

There are five public hospitals in the Northern Territory (NT) located in Darwin, Alice Springs, Nhulunbuy (Gove), Katherine and Tennant Creek. The only private hospital in the Territory is located in Darwin. The combined hospital bed numbers are 721.

The NT has unique demographic features, which augment the challenges government faces in contributing to the wellbeing of Territorians. Our scattered population represents 1 per cent of Australians living in 17 per cent of the land area. Aboriginal people have the highest impact on demand for health services, and comprise 28 per cent of the population but account for 43.9 per cent of hospital separations.

The demographics and the high number of Aboriginal people using health services feed into high morbidity rates and greater proportion of separations than other states.

Waiting times for elective surgery in part are due to the number of public and private facilities available in the NT compared to other states, as well as the availability of specialist services. Specialist services have been expanded, and combined with new technology to reduce waiting times and the number of people travelling interstate for certain types of treatment. Data on emergency department waiting times will be included in the next edition.

Hospitals which are not accredited or booked for survey are preparing intended plans to meet accreditation requirements. The hospitals are also reporting on a broad range of clinical indicators and to that end, resolving issues of data collection and validation such is evident in the reported unplanned re-admission rate. The proportion of same day and not same day care includes gynaecological and endoscopic procedures, which in other states are more likely to be outpatient or privately sourced work.

The NT boasts a highly integrated approach to primary health care, preventive strategies and a commitment to strengthen community capacity. Although breast cancer control strategies and the management of mental illness are targeted in this edition, the interactions between community based services and hospitals are a focus in the NT. The Territory has also pioneered Australia's first fully integrated Community Care Information System to track client and health progress across the continuum of community and tertiary health care. An example of the interactions are the Coordinated Care Trials conducted in the Tiwi Islands and Katherine West.

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## 6A Health management issues — attachment

Definitions for the descriptors and indicators in this attachment are in section 6A.5. Unsourced information was obtained from Commonwealth, State or Territory governments. Data in this Report are examined by the Review's Health Working Group but have not been formally audited by the Secretariat.

The data contained in this attachment may be subject to revision. The web page version of the Report contains the most up-to-date data where changes have occurred. This attachment can be found at [www.pc.gov.au/service/gsp/2000/attach6A.pdf](http://www.pc.gov.au/service/gsp/2000/attach6A.pdf). Users without Internet access can contact the Secretariat (details inside front cover of the Report).

### 6A.1 All jurisdictions' data — breast cancer management

#### Prevention/early detection performance

##### *Effectiveness*

Table 6A.1 **Age-specific participation rates of women in BreastScreen Australia, 1997 and 1998 average (per cent)**

Age group (years)	NSW	Vic	Qld <sup>a</sup>	WA	SA	Tas	ACT	NT <sup>c</sup>	Aust
40-44	19.5	7.1	23.3	10.4	10.7	19.8	14.9	12.4	15.3
45-49	31.5	14.1	34.4	27.2	23.3	38.6	32.9	23.6	26.7
50-54	51.0	57.9	52.3	53.8	58.3	58.2	57.2	54.3	54.1
55-59	55.0	56.2	54.1	56.2	62.3	61.7	63.0	53.9	56.1
60-64	54.0	55.0	53.8	56.5	61.7	59.0	60.3	42.8	55.3
65-69	50.5	51.8	50.6	51.7	55.6	53.2	54.9	42.1	51.5
70-74	38.9	39.9	35.1	16.9	17.8	16.4	19.0	23.4	33.9

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Table 6A.1 (Continued)

Age group (years)	NSW	Vic	Qld <sup>a</sup>	WA	SA	Tas	ACT	NT <sup>c</sup>	Aust
75-79	20.2	11.9	22.7	8.5	7.9	7.8	11.5	17.7	15.9
80-84	9.1	3.5	10.0	3.0	2.8	2.4	3.7	7.1	6.5
85+	2.2	0.9	2.7	0.7	0.5	0.5	1.3	0.4	1.6
Not stated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>All ages</b>									
Rate <sup>b</sup>	36.1	31.7	37.4	31.8	32.9	36.5	36.6	30.7	34.5
ASR(A) <sup>c</sup>	37.1	32.6	38.3	32.9	34.6	38.1	37.0	31.3	35.6
95% <sup>d</sup>	37.1-37.2	32.5-32.7	38.2-38.4	32.8-33.1	34.5-34.8	37.7-38.4	36.6-37.5	30.6-32.0	35.5-35.7
<b>50-69</b>									
Rate <sup>b</sup>	52.5	55.5	52.7	54.6	59.4	58.2	58.9	50.8	54.3
ASR(A) <sup>c</sup>	52.6	55.4	52.7	54.6	59.5	58.2	58.9	48.6	54.3
95% <sup>d</sup>	52.4-52.8	55.2-55.6	52.5-52.9	54.2-54.9	59.2-59.9	57.6-58.8	58.0-59.7	47.4-49.9	54.2-54.4

<sup>a</sup> Only five of the 11 BreastScreen services had been in operation five or more years. <sup>b</sup> Rate of participation not adjusted for differences in age-profiles across jurisdictions. <sup>c</sup> Age standardised rate based on Australian 1991 population profile. <sup>d</sup> 95 per cent confidence interval.

Source: AIHW (unpublished data).

Table 6A.2 Detection rate of small diameter, invasive breast cancers, 1998 (number per 10 000 women screened)

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
40-44	na	1.5	4.8	0.0	2.9	0.0	10.5	0.0	na
45-49	na	10.3	5.7	5.5	5.6	5.8	0.0	14.3	na
50-54	na	13.2	10.1	9.1	11.1	22.1	16.8	8.3	na
55-59	na	15.2	10.3	18.2	14.3	10.8	24.0	15.9	na
60-64	na	24.2	18.8	18.3	19.7	29.2	14.0	59.0	na
65-69	na	22.2	15.1	31.5	15.9	27.3	19.1	0.0	na
70-74	na	28.3	35.8	20.9	30.1	0.0	0.0	0.0	na
75-79	na	28.7	36.4	31.8	25.0	94.6	0.0	344.8	na
80-84	na	64.7	30.6	84.0	129.4	0.0	0.0	0.0	na
85+	na	0.0	101.3	0.0	0.0	666.7	0.0	0.0	na
<b>All ages</b>									
Rate <sup>a</sup>	na	18.4	13.7	15.4	14.7	17.6	13.6	18.8	na
ASR(A) <sup>b</sup>	na	16.4	16.3	15.7	16.6	32.2	10.4	31.8	na
95% <sup>c</sup>	na	14.3-18.9	13.6-19.0	12.8-63.2	12.4-21.4	12.7-63.0	5.8-15.9	10.6-58.1	na
<b>Ages 50-69</b>									
Rate <sup>a</sup>	na	18.0	12.9	17.7	14.8	21.6	18.6	16.6	na
ASR(A) <sup>b</sup>	na	18.4	13.4	18.7	15.1	22.3	18.4	20.8	na
95% <sup>c</sup>	na	16.3-20.5	11.3-15.5	15.9-29.3	12.0-18.0	15.6-29.2	10.3-27.7	3.9-41.2	na

<sup>a</sup> Rate of participation not adjusted for differences in age-profiles across jurisdictions. <sup>b</sup> Age standardised rate based on Australian 1991 population profile. <sup>c</sup> 95 per cent confidence interval.

Source: AIHW (unpublished data).

## Overall performance

### Effectiveness

**Table 6A.3 Age-specific and age-standardised mortality rates from breast cancer (number) per 100 000 women<sup>a</sup>**

Age group	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
20–24	0.0	0.2	0.0	0.3	0.1	0.0	0.1	0.1	0.0	0.1	0.3
25–29	0.7	1.0	0.8	1.7	0.6	0.3	0.3	0.7	1.3	0.8	1.0
30–34	4.1	5.2	3.9	3.7	4.7	5.5	2.6	3.6	4.0	5.2	4.0
35–39	10.6	10.5	9.7	12.2	12.0	10.9	12.8	8.1	12.6	11.3	9.1
40–44	21.4	23.5	24.6	23.9	21.7	18.2	21.6	18.3	20.5	19.5	18.2
45–49	35.6	37.9	35.7	36.0	37.1	36.0	36.1	34.2	30.2	33.0	31.7
50–54	54.6	55.5	58.1	57.4	50.9	53.0	53.9	47.5	47.2	50.7	46.5
55–59	66.8	61.2	61.0	64.7	60.9	68.4	65.9	64.0	60.1	56.7	53.1
60–64	80.3	79.1	77.7	71.1	66.0	78.4	74.8	76.5	73.7	65.9	69.2
65–69	89.9	88.4	96.1	88.8	78.8	90.6	83.5	91.2	83.2	81.3	72.0
70–74	95.7	96.3	97.2	110.2	100.2	88.6	99.0	91.0	92.3	91.4	81.2
75–79	125.8	123.8	117.4	112.6	113.1	132.2	122.9	123.0	116.9	110.7	112.3
80–84	145.7	156.2	150.0	147.9	143.3	165.5	152.5	153.1	145.5	137.5	129.4
85+	227.4	235.4	211.2	212.7	217.9	224.1	217.2	212.9	197.0	177.0	192.3
<i>All ages</i>											
ASR (A)	26.9	27.2	26.9	27.0	25.4	26.9	26.5	25.6	25.0	24.2	23.0
<i>50–69</i>											
ASR (A)	71.9	70.1	72.2	69.6	63.3	71.5	68.6	68.5	65	62.8	59.4

<sup>a</sup> Rates were age standardised to the Australian 1991 population.

Source: AIHW (unpublished data).

**Table 6A.4 Mortality rate from breast cancer (number per 100 000 women)<sup>a</sup>**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
1998	26.8	29.1	25.6	23.0	31.9	25.9	25.2	8.9	25.1

<sup>a</sup> Estimated resident population at 30 June.

Sources: ABS *Causes of Death Australia*, 1998 (cat. no. 3303.0); ABS, *Estimated Resident Population by Age* (cat. no. 3201.0).

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## 6A.2 Single jurisdiction data — breast cancer management

### New South Wales

#### *Effectiveness*

Table 6A.5 **Participation rate of Indigenous women and women from culturally and linguistically diverse backgrounds in BreastScreen programs, 1998-99**

	<i>Per cent</i>
<i>Indigenous women</i>	
Aged 40–49	9
Aged 50–69	18
Aged 70+	11
<i>Women from culturally and linguistically diverse backgrounds</i>	
Aged 40–49	9
Aged 50–69	23
Aged 70+	11

<sup>a</sup> The number of women screened, which is used to calculate the participation rate, differs slightly from the total number of screens because a small number of women had more than one screen during the year.

#### *Efficiency*

Table 6A.6 **Cost per woman for breast screening services, 1998-99 (dollars)<sup>a, b</sup>**

Without capital expenditure	87.40
With capital expenditure	90.88

<sup>a</sup> The cost per woman screened is the total cost of providing breast screening services divided by the number of women screened. The total cost is defined as the cost of providing the BreastScreen NSW Program (screen taking, reading of X-rays, assessment, recruitment, data collection and service management) in addition to the cost of providing the program to women (HDWA 1997-98). <sup>b</sup> Data are estimates only. The definition does not specifically include capital purchases and recurrent provision for capital. Calculations do not account for subsidies, depreciation and overheads, and exclude expenditures against special project funding and funding rolled over from previous years.

## Victoria

### Effectiveness

**Table 6A.7 Participation rate of Indigenous women and women from culturally and linguistically diverse backgrounds in BreastScreen programs, 1997**

	<i>Per cent</i>
<i>Indigenous women</i>	
Aged 40–49	7
Aged 50–69	36
Aged 70+	32
<i>Women from culturally and linguistically diverse backgrounds</i>	
Aged 40–49	9
Aged 50–69	52
Aged 70+	24

**Table 6A.8 Size and grade of detected cancers, 1997**

<i>Tumour grade</i>	<i>Size of invasive cancer</i>				<i>Total</i>
	<i>0–10 mm</i>	<i>11–15 mm</i>	<i>&gt;15 mm</i>	<i>Unknown</i>	
<i>Grades unknown</i>	19	8	19	11	57
<i>Grades known</i>					
<i>Well differentiated</i>					
Number	92	66	34	7	199
Per cent of subtotal	40.4	36.3	17.4	36.8	31.9
<i>Moderately differentiated</i>					
Number	115	88	92	8	303
Per cent of subtotal	50.4	48.4	47.2	42.1	48.6
<i>Poorly differentiated</i>					
Number	21	28	69	4	122
Per cent of subtotal	9.2	15.4	35.4	21.1	19.6
<i>Subtotal</i>					
Number	228	182	195	19	624
Per cent	100.0	100.0	100.0	100.0	100.0

**Table 6A.9 Interval cancer rate, 1997<sup>a</sup>**

	<i>Unit</i>	<i>Age groups</i>			
		<i>40–49</i>	<i>50–59</i>	<i>60–69</i>	<i>70+</i>
<i>0–&lt;12 Months</i>					
Symptomatic status		22.36	14.33	29.49	33.47
Cancers	no.	7	6	7	4

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Table 6A.9 (Continued)

	Unit	Age groups			
		40–49	50–59	60–69	70+
Women screened	no.	3130	4188	2374	1195
Rate per 10 000 women screened	%	22.36	14.33	29.49	33.47
Asymptomatic status					
Cancers	no.	9	30	15	2
Women screened	no.	15 025	40 719	32 015	11 729
Rate per 10 000 women screened	%	5.99	7.37	4.69	1.71
12–<24 Months					
Symptomatic status					
Cancers	no.	5	13	3	1
Women screened	no.	3 120	4 176	2 364	1 188
Rate per 10 000 women screened	%	16.03	31.13	12.69	8.42
Asymptomatic status					
Cancers	no.	17	56	44	21
Women screened	no.	15 009	40 651	31 961	11 701
Rate per 10 000 women screened	%	11.33	13.78	13.77	19.69
0–<24 Months					
Symptomatic status					
Cancers	no.	13	19	10	5
Women screened	no.	6 250	8 364	4 738	2 383
Rate per 10 000 women screened	%	20.80	22.72	21.11	20.98
Asymptomatic status					
Cancers	no.	26	86	59	23
Women screened	no.	30 034	31 370	63 976	23 430
Rate per 10 000 women screened	%	8.66	27.40	9.22	9.82

<sup>a</sup> Definition: Rate of interval invasive breast cancers per 10 000 women years. Stratification: By age group and symptomatic status. Definitions are taken from NHMRC, *The Ascertainment and Reporting of Interval Cancers within the BreastScreen Australia Program* (1999, p. 28). Stratification of variables is also taken from the above report. Numerator: Number of interval invasive breast cancers diagnosed in the time since screening. Denominator: Number of women 'at risk' for the time since screening.

### Efficiency

Table 6A.10 Cost per woman (\$) for breast screening services, 1997 (dollars)<sup>a</sup>

Rural	112
Urban	90
Total	202

<sup>a</sup> The cost per woman screened is the total cost of providing breast screening services divided by the number of women screened. The total cost includes the cost of providing the BreastScreen Victoria program (screen taking, reading of X-rays, assessment, recruitment, data collection and service management) in addition to the cost of providing the program to women (HDWA 1997-98).



## Queensland

### Effectiveness

**Table 6A.11 Participation rate of Indigenous women and women from culturally and linguistically diverse backgrounds in BreastScreen programs, 1997-98**

	<i>Per cent</i>
<i>Indigenous women</i>	
Aged 40–49	28
Aged 50–69	46
Aged 70–74	30
<i>Women from culturally and linguistically diverse backgrounds</i>	
Aged 40–49	33
Aged 50–69	61
Aged 70–79	30

**Table 6A.12 Small cancer detection rate, 1998 (number per 10 000 women screened)**

Women aged 50–69	12.9
All women	13.5

**Table 6A.13 Size and grade of detected cancers, 1998**

<i>Tumour grade</i>	<i>Size of invasive cancer</i>				<i>Total</i>
	<i>0–10 mm</i>	<i>11–15 mm</i>	<i>&gt;15 mm</i>	<i>Unknown</i>	
<i>Grade unknown</i>	12	7	11	2	32
<i>Grade known</i>					
<i>Well differentiated</i>					
Number	80	53	41	1	175
Per cent of subtotal	43	32.7	19.5	33.3	31.2
<i>Moderately differentiated</i>					
Number	73	83	108	2	266
Per cent of subtotal	39.2	51.2	51.4	66.7	47.4
<i>Poorly differentiated</i>					
Number	33	26	61	0	120
Per cent of subtotal	17.7	16.0	29.0	0	21.4
<i>Subtotal</i>					
Number	186	162	210	3	561
Per cent	100	100	100	100	100
<b>Total invasive cancers</b>	<b>198</b>	<b>169</b>	<b>221</b>	<b>5</b>	<b>593</b>

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## Efficiency

**Table 6A.14 Cost per woman for breast screening services, 1998-99 (dollars)<sup>a</sup>**

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Cost per woman screened	108
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<sup>a</sup> The cost per woman screened is the total cost of providing breast screening services divided by the number of women screened. The total cost includes the cost of providing the BreastScreen Queensland Program (screen taking, reading of X-rays, assessment, recruitment, data collection and service management) in addition to the cost of providing the program to women (HDWA 1997-98). Calculations incorporate all cash expenditure, including capital expenditure and one-off special project expenditure.

## Western Australia

### Effectiveness

**Table 6A.15 Participation rates in breast screening programs for women in the target age group 50–69 years (per cent)<sup>a</sup>**

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	1995-96	1996-97	1997-98
Age group 50–69 years	48	56	60

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<sup>a</sup> The participation rate is the number of women aged 50–69 screened in a 27 month interval divided by the total estimated target population for the same period.

Source: HDWA (1998).

**Table 6A.16 Participation rate of Indigenous women and women from culturally and linguistically diverse backgrounds in BreastScreen programs, 1997-98**

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	<i>Per cent</i>
<i>Indigenous women</i>	
Aged 40–49	14
Aged 50–69	36
Aged 70+	13
<i>Women from culturally and linguistically diverse backgrounds</i>	
Aged 40–49	15
Aged 50–69	47
Aged 70+	6

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**Table 6A.17 Size and grade of detected cancers, January 1996 – December 1998**

<i>Tumour grade</i>	<i>Size of invasive cancer</i>				<i>Total</i>
	<i>0–10 mm</i>	<i>11–15 mm</i>	<i>&gt;15 mm</i>	<i>Unknown</i>	
<i>Grades unknown</i>	217	131	174	20	542
<i>Grades known</i>					
Well differentiated					
Number	88	59	35		182
Per cent of subtotal	50.3	45.7	22.4		39.6
Moderately differentiated					
Number	71	58	88		217
Per cent of subtotal	40.6	45.0	56.4		47.2
Poorly differentiated					
Number	16	12	33		61
Per cent of subtotal	9.1	9.3	21.2		13.3
Subtotal					
Number	175	129	156		460
Per cent	100.0	100.0	100.0		100.0

**Table 6A.18 Interval cancer rate 1996–98<sup>a</sup>**

	<i>Unit</i>	<i>Age groups</i>			
		<i>40–49</i>	<i>50–59</i>	<i>60–69</i>	<i>70+</i>
<i>0–&lt;12 Months</i>					
Symptomatic status		None <sup>b</sup>			
Cancers	no.				
Women screened	no.				
Rate per 10 000 women screened	%				
Asymptomatic status					
Cancers <sup>c</sup>	no.	5	6	1	0
Women screened <sup>d</sup>	no.	9 658	8 718	4 451	1 189
Rate per 10 000 women screened	%	5.2	6.9	2.2	0
<i>12–&lt;24 Months</i>					
Symptomatic status		None <sup>b</sup>			
Cancers	no.				
Women screened	no.				
Rate per 10 000 women screened	%				
Asymptomatic status					
Cancers <sup>c</sup>	no.	12	12	5	1
Women screened <sup>d</sup>	no.	8 709	7 902	3 953	1 014
Rate per 10 000 women screened	%	13.8	15.2	12.6	9.9

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Table 6A.18 (Continued)

	Unit	Age groups				
		40–49	50–59	60–69	70+	
0–<24 Months						
Symptomatic status		None <sup>b</sup>				
Cancers	no.					
Women screened	no.					
Rate per 10 000 women screened	%					
Asymptomatic status						
Cancers <sup>c</sup>	no.	17	18	6	1	
Women screened <sup>d</sup>	no.	18 367	16 621	8 404	2 203	
Rate per 10 000 women screened	%	9.3	10.8	7.1	4.5	

<sup>a</sup> Definition: Rate of interval invasive breast cancers per 10 000 women years. Stratification: By age group and symptomatic status. Definitions taken from the NHMRC. *The Ascertainment and Reporting of Interval Cancers within the BreastScreen Australia Program* (1999, p. 28). Stratification of variables is also taken from the above report. Numerator: Number of interval invasive breast cancers diagnosed in the time since screening. Denominator: Number of women 'at risk' for the time since screening. <sup>b</sup> Symptomatic women and those with a personal history of cancer are excluded, except if presenting for early re-screen with a symptom. Only first round women were reported to the AIHW and only those women are reported here. <sup>c</sup> All asymptomatic women without a personal history of cancer with an interval cancer detected within 12 months of the first screen where the first screen was in 1996. Women may be one or two yearly re-screens. <sup>d</sup> All women without a personal history of cancer who were first screened in 1996.

Source: Mammography Screening Registry, Women's Cancer Screening Service, HDWA (unpublished data).

### Efficiency

Table 6A.19 Cost per woman screened for breast screening services (dollars)<sup>a</sup>

	1993-94	1994-95	1995-96	1996-97	1997-98 <sup>b</sup>
Cost	128.88	153.67	111.43	113.43	93.75

<sup>a</sup> The cost per woman screened is the total cost of providing breast screening services divided by the number of women screened. The total cost includes the cost of providing BreastScreen WA Program (screen taking, reading of X-rays, assessment, recruitment, data collection and service management) in addition of providing the program to women. <sup>b</sup> The decrease in cost per woman screened is due to an increase in efficiency of providing the service and a reduction in the number of women who were assessed within the program. Two hospitals contracted to provide assessment services could not accommodate the number of women requiring assessment in 1997-98.

Source: HDWA (1998).

## South Australia

### Effectiveness

Table 6A.20 **Participation rate of Indigenous women and women from culturally and linguistically diverse backgrounds in BreastScreen programs, 1997 and 1998**

	<i>Per cent</i>
<i>Indigenous women</i>	
Aged 40–49	12
Aged 50–69	42
Aged 70+	11
<i>Women from culturally and linguistically diverse backgrounds.</i>	
Aged 40–49	15
Aged 50–69	53
Aged 70+	8

Table 6A.21 **Size and grade of detected cancers, 1998**

<i>Tumour grade</i>	<i>Size of invasive cancer</i>				<i>Total</i>
	<i>0–10 mm</i>	<i>11–15 mm</i>	<i>&gt;15 mm</i>	<i>Unknown</i>	
<i>Grades unknown</i>	2	0	3	2	7
<i>Grades known</i>					
<i>Well differentiated</i>					
Number	49	41	23	1	114
Per cent of subtotal	55.7	47.7	26.1	14.3	42.4
<i>Moderately differentiated</i>					
Number	29	32	41	2	104
Per cent of subtotal	33.0	37.2	46.6	28.6	38.7
<i>Poorly differentiated</i>					
Number	6	12	20	0	38
Per cent of subtotal	6.8	14.0	22.7	0.0	14.1
<i>Undifferentiated</i>					
Number	1	0	1	0	2
Per cent of subtotal	1.1	0.0	1.1	0.0	0.7
<i>Not applicable</i>					
Number	2	1	0	1	4
Per cent of subtotal	2.3	1.2	0.0	14.3	1.5
<i>Unknown</i>					
Number	1	0	3	1	5
Per cent of subtotal	1.1	0.0	3.4	14.3	1.9
<i>Subtotal</i>					
Number	88	86	88	7	269
Per cent	100.0	100.0	100.0	100.0	100.0

## Efficiency

Table 6A.22 **Cost per woman (dollars) for breast screening services, 1997-98 (dollars)<sup>a</sup>**

Cost	97
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<sup>a</sup> The cost per woman screened is the total cost of providing breast screening services divided by the number of women screened. The total cost includes the cost of providing the SA BreastScreen program (screen taking, reading of X-rays, assessment, recruitment, data collection and service management) in addition to the cost of providing the program to women (HDWA 1997-98).

## Tasmania

### Effectiveness

Table 6A.23 **Participation rate of Indigenous women and women from culturally and linguistically diverse backgrounds in BreastScreen programs<sup>a</sup>**

	<i>Per cent</i>
<i>Indigenous women</i>	
Aged 40–49	19
Aged 50–69	39
Aged 70+	8
<i>Women from culturally and linguistically diverse backgrounds</i>	
Aged 40–49	na
Aged 50–69	53
Aged 70+	na

<sup>a</sup> Data are from 1 April 1994 to 30 June 1999. **na** Not available.

Table 6A.24 **Size and grade of detected cancers, 1998**

<i>Tumour grade</i>	<i>Size of invasive cancer</i>				<i>Total</i>
	<i>0–10 mm</i>	<i>11–15 mm</i>	<i>&gt;15 mm</i>	<i>Unknown</i>	
<i>Grades unknown</i>	5	1	1	1	8
<i>Grades known</i>	30	20	22	2	74
<i>Well differentiated</i>					
Number	12	7	3	0	22
Per cent of subtotal	40	35	14	0	30
<i>Moderately differentiated</i>					
Number	13	11	14	1	39
Per cent of subtotal	43	55	64	50	53
<i>Poorly differentiated</i>					
Number	5	2	5	1	13
Per cent of subtotal	17	10	23	50	18

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Table 6A.24 (Continued)

<i>Tumour grade</i>	<i>Size of invasive cancer</i>				<i>Total</i>
	<i>0–10 mm</i>	<i>11–15 mm</i>	<i>&gt;15 mm</i>	<i>Unknown</i>	
Subtotal					
Number	30	20	22	2	74
Per cent	100.0	100.0	100.0	100.0	100

*Efficiency*Table 6A.25 **Cost per woman for breast screening services, 1997-98 (dollars)<sup>a</sup>**

Cost	115
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<sup>a</sup> The cost per woman screened is the total cost of providing breast screening services divided by the number of women screened. The total cost includes the cost of providing the BreastScreen Tasmania program (screen taking, reading of X-rays, assessment, recruitment, data collection and service management) in addition to the cost of providing the program to women (HDWA 1997-98).

**Australian Capital Territory***Effectiveness*Table 6A.26 **Participation rate of Indigenous women and women from culturally and linguistically diverse backgrounds in BreastScreen programs<sup>a</sup>**

	<i>Per cent</i>
<i>Indigenous women</i>	
Aged 40–49	20
Aged 50–69	50
Aged 70+	17
<i>Women from culturally and linguistically diverse backgrounds</i>	
Aged 40–49	28
Aged 50–69	71
Aged 70+	16

<sup>a</sup> Data are from 1 April 1997 to 30 June 1999.

**Table 6A.27 Size and grade of detected cancers, 1998**

<i>Tumour grade</i>	<i>Size of invasive cancer</i>				<i>Total</i>
	<i>0–10 mm</i>	<i>11–15 mm</i>	<i>&gt;15 mm</i>	<i>Unknown</i>	
<i>Grades unknown</i>	1	1	0	0	2
<i>Grades known</i>					
Well differentiated					
Number	7	3	5	0	15
Per cent of subtotal	54	38	39	0	44
Moderately differentiated					
Number	5	4	5	0	14
Per cent of subtotal	39	50	39	0	41
Poorly differentiated					
Number	1	1	3	0	5
Per cent of subtotal	8	13	23	0	15
Subtotal					
Number	13	8	13	0	34
Per cent	100.0	100.0	10.0	100.0	100.0

*Efficiency*

**Table 6A.28 Cost per woman for breast screening services, 1997-98 (dollars)<sup>a</sup>**

Estimated cost	116
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<sup>a</sup> The cost per woman screened is the total cost of providing breast screening services divided by the number of women screened. The total cost includes the cost of providing the BreastScreen ACT program (screen taking, reading of X-rays, assessment, recruitment, data collection and service management) in addition to the cost of providing the program to women (HDWA 1997-98).

**Northern Territory**

*Effectiveness*

**Table 6A.29 Participation rate of Indigenous women and women from culturally and linguistically diverse backgrounds in BreastScreen programs<sup>a</sup>**

	<i>Per cent</i>
<i>Indigenous women</i>	
Aged 40-49	na
Aged 50-69	57
Aged 70+	na

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Table 6A.29 (Continued)

	<i>Per cent</i>
<i>Women from culturally and linguistically diverse backgrounds</i>	
Aged 40-49	na
Aged 50-69	70
Aged 70+	na

<sup>a</sup> Data are from 1 October 1996 to 31 December 1998. **na** Not available.

### *Efficiency*

Table 6A.30 **Cost per woman for breast screening services, 1998-99 (dollars)<sup>a</sup>**

Rural	235
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<sup>a</sup> The cost per woman screened is the total cost of providing breast screening services divided by the number of women screened. The total cost includes the cost of providing the BreastScreen NT program (screen taking, reading of X-rays, assessment, recruitment, data collection and service management) in addition to the cost of providing the program to women (HDWA 1997-98).

## 6A.3 All jurisdictions' data — mental health services

### Descriptors

Table 6A.31 **Recurrent expenditure on mental health services, by source (in 1996-97 dollars)**

	<i>Unit</i>	<i>State and Territory government</i>	<i>Commonwealth Government</i>	<i>Private health insurance funds<sup>a</sup></i>	<i>Total</i>
1992-93	\$m	1 109.6	437.3	113.6	1 660.5
1993-94	\$m	1 097.3	498.6	125.9	1 721.8
1994-95	\$m	1 131.7	583.7	138.6	1 854.0
1995-96	\$m	1 178.8	675.0	146.4	2 000.2
1996-97	\$m	1 267.1	650.2	156.4	2 073.7
Annual growth rate	%	3.4	10.4	8.3	5.7

<sup>a</sup> Private hospital expenditure for 1994-95 and 1995-96 was significantly overestimated in the 1996 National Mental Health Report. The data are based on re-analysis of the ABS data and update previous estimates. Data for 1996-97 are estimates based on growth from 1992-93 to 1995-96.

Source: DHAC (1999a), based on data collected from the National Survey of Mental Health Services (AIHW).

**Table 6A.32 Recurrent expenditure by States and Territories (adjusted for non-State funds)<sup>a</sup>**

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
1992-93	\$m	319.1	322.2	152.2	101.4	93.3	29.2	14.6	8.9	1 040.9
1993-94	\$m	320.6	305.2	155.5	105.9	96.8	30.8	14.5	9.6	1 038.9
1994-95	\$m	338.6	322.7	165.1	108.8	97.2	32.1	15.7	9.6	1 089.9
1995-96	\$m	358.8	338.2	181.6	120.2	96.7	35.1	17.1	10.9	1 158.3
1996-97	\$m	394.1	349.1	208.3	139.2	109.2	35.8	19.4	12.0	1 267.1
Annual growth rate	%	5.4	2.0	8.2	8.2	4.0	5.2	7.4	7.8	5.0

<sup>a</sup> At current prices.

Source: DHAC (1999a), based on data collected from the National Survey of Mental Health Services (AIHW).

**Table 6A.33 Recurrent expenditure by States and Territories (adjusted for non-State funds) (in 1996-97 dollars)**

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
1992-93	\$m	347.5	337.8	163.9	106.4	97.8	31.4	15.5	9.2	1 109.6
1993-94	\$m	345.1	318.6	165.3	110.6	99.0	32.8	15.2	9.8	1 097.3
1994-95	\$m	355.8	332.6	172.1	113.0	98.1	33.4	16.1	9.7	1 131.7
1995-96	\$m	366.9	343.1	185.2	122.1	96.7	35.7	17.2	11.0	1 178.8
1996-97	\$m	394.1	349.1	208.3	139.2	109.2	35.8	19.4	12.0	1 267.1
Annual growth rate	%	3.2	0.8	6.2	6.9	2.8	3.3	5.8	6.9	3.4

Source: DHAC (1999a), based on data collected from the National Survey of Mental Health Services (AIHW).

**Table 6A.34 Government recurrent expenditure on mental health services per person (in 1996-97 dollars)**

	<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>
1992-93	58.1	75.6	53.4	63.8	67.1	66.6	52.2	54.4	63.1
1993-94	57.2	71.1	52.5	65.3	68.2	69.5	50.6	56.8	61.8
1994-95	58.4	73.9	53.4	65.4	67.4	70.6	53.3	55.2	63.0
1995-96	59.5	75.6	56.1	69.8	66.2	75.4	56.5	60.7	64.8
1996-97	63.1	76.2	61.8	78.1	74.0	75.5	62.8	64.8	68.8
Annual growth rate %	2.1	0.2	3.7	5.2	2.5	3.2	4.7	4.5	2.2

Source: DHAC (1999a), based on data collected from the National Survey of Mental Health Services (AIHW).

**Table 6A.35 Full time equivalent staff employed in specialist mental health services, by service setting (number)**

	NSW	Vic	Qld <sup>a</sup>	WA	SA	Tas	ACT	NT <sup>b</sup>	Aust
<i>Inpatient services</i>									
1993-94	3 882	3 519	2 305	1 668	1 640	408	113	84	13 618
1994-95	3 556	3 014	2 467	1 620	1 268	396	84	84	12 488
1995-96	3 520	2 232	2 371	1 565	1 282	417	99	78	11 566
1996-97	3 441	2 006	2 410	1 572	1 234	350	90	84	11 187
Annual growth rate %	-3.9	-17.1	1.5	-2.0	-9.0	-5.0	-7.3	0.0	-6.3
<i>Ambulatory care</i>									
1993-94	1 210	1 418	532	361	407	128	78	54	4 188
1994-95	1 533	1 593	627	440	531	142	85	56	5 007
1995-96	1 932	1 644	798	596	551	145	97	74	5 836
1996-97	2 050	1 912	889	707	584	135	88	70	6 434
Annual growth rate %	19.2	10.5	18.7	25.1	12.8	1.8	4.1	9.0	15.4
<i>Community residential services</i>									
1993-94	239	294	0	38	16	72	61	0	720
1994-95	313	423	0	34	22	89	65	0	946
1995-96	268	676	0	48	10	88	56	0	1 146
1996-97	277	828	0	47	10	84	57	0	1 303
Annual growth rate %	5.0	41.2	0.0	7.3	-14.5	5.3	-2.2	0.0	21.9
1993-94	5 332	5 231	2 837	2 067	2 063	608	251	138	18 526
1994-95	5 401	5 030	3 094	2 094	1 821	627	235	140	18 442
1995-96	5 720	4 553	3 169	2 209	1 843	650	252	152	18 548
1996-97	5 768	4 746	3 298	2 326	1 828	569	235	154	18 924
Annual growth rate %	2.7	-3.2	5.1	4.0	-4.0	-2.2	-2.2	3.7	0.7

<sup>a</sup> Queensland Health did not provide community residential services in the reported years. It is anticipated that in 2000 it will decentralise some of its extended care inpatient beds to community based services. <sup>b</sup> The NT did not provide community residential services in the reported years.

Source: DHAC (1999a), based on data collected from the National Survey of Mental Health Services (AIHW).

## Effectiveness

### Appropriateness

**Table 6A.36 Average per person real government expenditure on mental health services, by service setting (in 1996-97 dollars)<sup>a</sup>**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
<i>Stand-alone hospitals</i>									
1992-93	26.72	40.97	25.12	32.76	39.45	31.77	0.00	0.00	31.11
1993-94	27.71	33.67	23.85	32.59	38.08	29.38	0.00	0.00	29.15
1994-95	26.14	32.17	23.80	27.66	37.70	26.99	0.00	0.00	27.64

(Continued on next page)

**Table 6A.36 (Continued)**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
1995-96	23.93	19.10	23.77	27.92	35.98	26.23	0.00	0.00	23.47
1996-97	22.65	15.23	24.56	28.87	38.87	24.99	0.00	0.00	22.50
Annual growth rate %	-4.0	-21.9	-0.6	-3.1	-0.4	-5.8	0	0	-7.8
<i>Co-located units</i>									
1992-93	15.32	9.98	16.99	14.03	7.05	13.15	21.26	29.61	13.63
1993-94	13.84	9.52	16.99	13.89	7.63	15.39	19.64	32.96	13.12
1994-95	13.85	9.94	16.27	19.16	8.73	15.19	21.09	30.40	13.71
1995-96	14.55	15.65	15.57	19.00	9.51	16.66	23.07	29.18	15.37
1996-97	15.69	14.12	17.13	21.14	9.71	17.57	26.55	36.70	16.05
Annual growth rate %	0.6	9.1	0.2	10.8	8.3	7.5	5.7	5.5	4.2
<i>Community services<sup>b</sup></i>									
1992-93	17.53	23.70	11.51	16.68	20.29	20.83	29.05	21.76	18.52
1993-94	17.29	27.48	12.07	18.98	21.75	24.67	29.26	21.88	19.91
1994-95	20.67	32.30	14.21	19.24	22.75	28.66	31.14	25.40	22.88
1995-96	22.96	41.15	18.90	24.96	24.53	33.69	33.61	36.77	27.67
1996-97	25.93	47.41	21.19	28.55	26.73	33.65	36.31	34.70	31.19
Annual growth rate %	10.3	18.9	16.5	14.4	7.1	12.7	5.7	12.4	13.9

<sup>a</sup> Estimates of per capita expenditure in each of the service mix categories refer to all mental health services reported by jurisdictions, regardless of source of funds. <sup>b</sup> Comprises ambulatory care, 24-hour residential services and non-government organisations.

Source: DHAC (1999a), based on data collected from the National Survey of Mental Health Services (AIHW).

**Table 6A.37 Patient bed days, by State/Territory and service setting (number)**

	<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>
<i>Stand-alone hospitals</i>									
1992-93	549 673	525 855	331 195	171 561	193 840	58 154	0	0	1 830 278
1993-94	497 719	441 283	313 510	157 762	186 495	52 997	0	0	1 649 766
1994-95	441 759	407 904	289 450	127 163	163 408	53 979	0	0	1 483 663
1995-96	399 343	217 945	267 085	124 430	156 078	53 360	0	0	1 218 241
1996-97	377 710	186 667	263 954	126 573	163 948	39 960	0	0	1 158 812
<i>Co-located units</i>									
1992-93	235 998	98 548	154 686	70 403	33 898	24 089	17 481	10 247	645 350
1993-94	237 244	106 830	165 429	69 264	36 715	20 692	16 171	7 904	660 249
1994-95	242 213	105 393	167 923	101 795	45 787	21 120	17 159	9 247	710 637
1995-96	250 845	145 588	162 104	99 179	50 780	20 873	16 352	8 371	754 092
1996-97	268 929	155 577	162 556	96 020	50 961	22 700	18 975	9 932	785 650
<i>Total bed days</i>									
1992-93	785 670	624 403	485 881	241 964	227 738	82 243	17 481	10 247	2 475 628
1993-94	734 963	548 113	478 939	227 026	223 210	73 689	16 171	7 904	2 310 015
1994-95	683 972	513 297	457 373	228 958	209 195	75 099	17 159	9 247	2 194 300
1995-96	650 188	363 533	429 189	223 609	206 858	74 233	16 352	8 371	1 972 333
1996-97	646 639	342 244	426 510	222 593	214 909	62 660	18 975	9 932	1 944 462

Source: DHAC (1999a), based on data collected from the National Survey of Mental Health Services (AIHW).

**Table 6A.38 Bed days in co-located units as a proportion of total inpatient bed days, by State/Territory**

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
1992-93	no.	30.0	15.8	31.8	29.1	14.9	29.3	100.0	100.0	26.1
1993-94	no.	32.3	19.5	34.5	30.5	16.4	28.1	100.0	100.0	28.6
1994-95	no.	35.4	20.5	36.7	44.5	21.9	28.1	100.0	100.0	32.4
1995-96	no.	38.6	40.0	37.8	44.4	24.5	28.1	100.0	100.0	38.2
1996-97	no.	41.6	45.5	38.1	43.1	23.7	36.2	100.0	100.0	40.4
Annual growth rate	%	8.5	30.3	4.6	10.3	12.3	5.5	0.0	0.0	11.6

Source: table 6A.37.

**Table 6A.39 Patient bed days in community based residential services delivering 24-hour specialised mental health care (number)**

	<i>NSW</i>	<i>Vic</i>	<i>Qld<sup>a</sup></i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
<i>General adult psychiatry</i>									
1992-93	49 704	12 302	0	26 061	7 793	4 746	21 243	0	121 849
1993-94	43 863	20 772	0	18 951	8 827	6 889	21 247	0	129 549
1994-95	54 938	24 596	0	17 926	4 638	7 164	21 285	0	130 747
1995-96	48 408	41 579	0	21 898	3 285	7 444	21 733	0	142 309
1996-97	48 137	87 494	0	21 764	3 285	7 444	21 267	0	189 391
<i>Geriatric psychiatry</i>									
1992-93	34 748	86 304	0	0	0	16 299	0	0	137 351
1993-94	39 612	88 997	0	0	0	16 118	0	0	144 727
1994-95	47 873	102 524	0	0	0	16 776	0	0	167 173
1995-96	55 131	130 099	0	0	0	15 751	0	0	200 981
1996-97	53 708	167 764	0	0	0	16 345	0	0	237 817
<i>Total beds</i>									
1992-93	84 452	98 606	0	26 061	7 793	21 045	21 243	0	259 200
1993-94	83 475	109 769	0	18 951	8 827	23 007	21 247	0	265 276
1994-95	102 811	127 120	0	17 926	4 638	23 940	21 485	0	297 920
1995-96	103 539	171 678	0	21 898	4 322	20 120	21 733	0	343 290
1996-97	101 845	255 258	0	21 764	3 285	23 789	21 267	0	427 208
Annual growth rate %	4.8	26.8	0	-4.4	-19.4	3.1	0.0	0	13.3

<sup>a</sup> Queensland Health did not provide these services in the reported years. It is anticipated that in 2000 it will decentralise some the extended care inpatient beds to community based services.

Source: DHAC (1999a), based on data collected from the National Survey of Mental Health Services (AIHW), incorporating adjustments to previous years reported data.

**Table 6A.40 Consumer/carer participation in public sector mental health service organisations (number)**

		<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>
Level 1 participation <sup>a</sup>	1994	8	6	6	1	2	0	0	0	23
	1995	13	4	9	0	5	2	0	0	33
	1996	30	5	8	0	14	3	0	1	61
	1997	43	5	9	1	9	1	0	1	69
Level 2 participation <sup>b</sup>	1994	12	5	4		1				22
	1995	11	6	1	1	1	1	1	1	23
	1996	9	5	10	2	2		1	1	30
	1997	6	2	9	4	3			1	25
Level 3 participation <sup>c</sup>	1994	9	6	4	3	4	2			28
	1995	12	11	1	7	6			1	38
	1996	9	7	2	11	3				32
	1997	5	3	1	4	6	2	1		22
Level 4 participation <sup>d</sup>	1994	14	14	8	12	6	1	2	7	64
	1995	22	14	7	12	16		1	5	77
	1996	12	16	11	13	12		1		65
	1997	13	11	11	17	11		1	3	67
Total number of organisations with valid response	1994	43	31	22	16	13	3	2	7	137
	1995	58	35	18	20	28	3	2	7	171
	1996	60	33	31	26	31	3	2	2	188
	1997	67	21	30	26	29	3	2	5	183

<sup>a</sup> Appointment of a person to represent the interests of consumers and carers on the organisation management committee or a specific consumer/carer advisory group to advise on all aspects of service delivery. <sup>b</sup> Specific consumer/carer advisory group to advise on some aspects of service delivery. <sup>c</sup> Consumers/carers participating on broadly based committees. <sup>d</sup> No specific arrangements for carer and consumer participation.

Source: DHAC (1999a), based on data collected from the National Survey of Mental Health Services (AIHW).

## Outcomes

**Table 6A.41 Prevalence of mental disorders in adults, 1997**

	Number			Share of adults with a mental disorder			Share of total adults		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
	'000	'000	'000	%	%	%	%	%	%
<i>Anxiety disorders</i>									
Panic disorder	36.7	133.8	170.5	3.2	10.9	7.2	0.6	2.0	1.3
Agoraphobia	49.2	101.9	151.1	4.3	8.3	6.3	0.7	1.5	1.1
Social phobia	161.4	207.3	368.7	14.0	16.8	15.5	2.4	3.0	2.7
Generalised anxiety disorder	156.8	256.0	412.8	13.6	20.8	17.3	2.4	3.7	3.1

(Continued on next page)

Table 6A.41 (Continued)

	Number			Share of adults with a mental disorder			Share of total adults		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
	'000	'000	'000	%	%	%	%	%	%
Obsessive compulsive disorder	19.3	29.2	48.6	1.7	2.4	2.0	0.3	0.4	0.4
Post traumatic stress disorder	153.3	285.8	439.2	13.3	23.2	18.4	2.3	4.2	3.3
Total	470.4	829.6	1 299.9	40.8	67.4	54.5	7.1	12.1	9.7
<i>Affective disorders</i>									
Depression	227.6	465.3	692.9	19.8	37.8	29.1	3.4	6.8	5.1
Dysthymia	63.4	88.3	151.7	5.5	7.2	6.4	1.0	1.3	1.1
Total	275.3	503.3	778.6	23.9	40.9	32.7	4.2	7.4	5.8
<i>Substance abuse disorders</i>									
Alcohol harmful use	285.4	123.8	409.2	24.8	10.1	17.2	4.3	1.8	3.0
Alcohol dependence	339.8	126.9	466.7	29.5	10.3	19.6	5.1	1.9	3.5
Drug use	206.9	89.2	296.0	18.0	7.2	12.4	3.1	1.3	2.2
Total	734.3	307.5	1041.8	63.8	25.0	43.7	11.1	4.5	7.7
Total adults with a mental disorder	1 151.6	1 231.5	2 383.1	100.0	100.0	100.0	17.4	18.0	17.7
Total adults in the population	6 627.1	6 837.7	13 464.8	..	..	..	100.0	100.0	100.0

.. Not applicable.

Source: ABS, *Mental Health and Wellbeing: Profile of Adults, Australia, 1997* (cat. no. 4326.0, 1997).

Table 6A.42 Prevalence rates of mental disorders, by age, 1997 (per cent of all adults)

	18–24 years	25–34 years	35–44 years	45–54 years	55–64 years	65 years or more	Total
Anxiety disorders	11.2	9.8	11.4	11.9	7.8	4.5	9.7
Depressive disorders <sup>a</sup>	6.7	6.6	7.2	6.4	5.0	1.7	5.8
Substance abuse disorders	16.1	11.3	8.2	5.3	3.2	1.1	7.7
All conditions	26.6	21.3	19.9	17.5	12.3	6.1	17.7

<sup>a</sup> Includes all affective disorders.

Source: ABS, *Mental Health and Wellbeing: Profile of Adults, Australia, 1997*, (cat. no. 4326.0, 1997).

**Table 6A.43 Prevalence of mental disorders, by geographic location, 1997  
(per cent of all adults)**

	<i>Capital city</i>	<i>Rest of State/Territory</i>	<i>Total</i>
Anxiety disorders	9.4	10.1	9.7
Affective disorders	5.6	6.1	5.8
Substance abuse disorders	7.7	7.8	7.7
All conditions	17.5	18.0	17.7

Source: ABS, *Mental Health and Wellbeing: Profile of Adults, Australia, 1997* (cat. no. 4326.0, 1997).

**Table 6A.44 Suicides and mortality rate, by sex**

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
<i>Suicides (number)</i>											
Males	1 730	1 658	1 735	1 847	1 820	1 687	1 830	1 872	1 931	2 146	2 150
Females	467	438	426	513	474	394	428	495	462	577	533
Persons	2 197	2 096	2 161	2 360	2 294	2 081	2 258	2 367	2 393	2 723	2 683
<i>Mortality rate (number per 100 000 people)<sup>a</sup></i>											
Males	21.0	19.8	20.4	21.4	20.9	19.2	20.6	20.8	21.2	23.3	23.0
Females	5.6	5.2	5.0	5.9	5.4	4.4	4.8	5.5	5.0	6.2	5.7
Persons	13.3	12.5	12.7	13.7	13.1	11.8	12.6	13.1	13.1	14.7	14.3

<sup>a</sup> As 30 June.

Sources: ABS, *Causes of Death Australia, 1998* (cat. no. 3303.0, 1999); ABS, *Estimated Resident Population, by Age, 1998* (cat. no. 3201.0).

**Table 6A.45 Mortality rate from suicide, by jurisdiction (number per 100 000 people)<sup>a</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
1998	13.6	12.4	16.8	15.7	16.4	12.5	10.1	22.1	14.3

<sup>a</sup> Estimated resident population at 30 June.

Sources: ABS, *Causes of Death Australia, 1998* (cat. no. 3303.0, 1999); ABS, *Estimated Resident Population, by Age, 1998* (cat. no. 3201.0).

**Table 6A.46 Mortality rate from suicide for people aged 15–24 years by jurisdiction (deaths per 100 000 people)<sup>a</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
1996	14.0	11.8	22.2	17.7	11.8	10.5	13.1	22.8	15.2
1997	19.3	17.7	23.2	16.1	18.4	4.6	20.6	34.8	19.1
1998	16.5	14.2	18.2	20.1	18.0	6.3	11.3	38.7	16.7
Average annual growth rate	8.7	9.7	-9.4	6.7	23.5	-22.8	-7.0	30.3	4.7

<sup>a</sup> Estimated resident population aged 15–24 years at 30 June.

Sources: ABS, *Causes of Death, Australia 1998*, (cat. no. 3303.0, 1999), ABS, *Estimated Resident Population, by Age, 1998* (cat. no. 3201.0).



## Efficiency

Table 6A.47 **Average costs per day for patients with mental illness, by inpatient program type (dollars)<sup>a, b</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
<i>General psychiatry</i>									
1995-96	396	468	290	370	324	357	428	547	376
1996-97	394	403	324	409	344	342	432	666	376
<i>Child/adolescent psychiatry</i>									
1995-96	698	545	600	520	428	0	0	0	575
1996-97	502	641	715	549	546	0	0	0	579
<i>Geriatric psychiatry</i>									
1995-96	340	365	280	330	290	165	0	0	314
1996-97	370	331	297	368	297	276	0	0	333
<i>Forensic psychiatry</i>									
1995-96	161	275	406	478	531	140	0	1 181	291
1996-97	275	393	441	495	424	268	0	750	378
<i>Total</i>									
1995-96	374	430	297	365	321	274	428	626	359
1996-97	384	394	330	405	334	328	432	685	371
Annual growth rate %	2.7	-8.4	11.1	11.0	4.0	19.7	0.9	9.4	3.3

<sup>a</sup> Bed day costs are based on adjusted inpatient expenditure following distribution of indirect amounts. <sup>b</sup> All cells represent weighted averages.

Source: DHAC (1999), based on data collected from the National Survey of Mental Health Services (AIHW).

## 6A.4 Single jurisdiction data — mental health services

The jurisdiction-specific data presented below are not comparable.

### New South Wales

#### Quality

Table 6A.48 **Accredited mental health facilities, 1999<sup>a, b</sup>**

<i>Accredited facilities</i>	<i>Proportion accredited</i>	<i>Accredited beds<sup>c</sup></i>
no.	%	no.
43		1933

<sup>a</sup> Accreditation status of facilities at September 1999. <sup>b</sup> Contains all public mental health inpatient units. Excludes community residential units or authorised private hospital beds. <sup>c</sup> Accreditation status of beds at 30 June 1999.

**Table 6A.49 Unplanned psychiatric re-admissions to hospital within 28 days for the same condition, 1997-98<sup>a, b, c</sup>**

<i>Condition group</i>	<i>Number in condition group</i>	<i>Re-admissions as proportion of condition group</i>	<i>Re-admissions as proportion of selected population</i>
	<i>no.</i>	<i>%</i>	<i>%</i>
Schizophrenia and selected disorders	888	18	5.7
Major depression and selected disorders	7603	20	5
Adjustment and stress reaction	4483	8	1.3
Anxiety and related disorders	2830	19	2
Personality disorders	1372	27	1.3
Childhood disorders	277	22	0.2
Eating disorders (bulimia and anorexia nervosa)	236	24	0.2
Others	2098	4	0.3
<b>Total</b>	<b>27787</b>	<b>16</b>	<b>16</b>

<sup>a</sup> A re-admission flag is set in the inpatient statistics database when a patient has been re-admitted to hospital within 28 days. This may be the same hospital, or another hospital and depends on the report of the service provider. Record matching for individuals is not undertaken. Therefore it is possible that the re-admission may not be for the same psychiatric illness. However, it must be for a psychiatric condition due to the selection criteria for the population under consideration. Conditions have been grouped into clinically similar classes rather than the AN-DRG groups. <sup>b</sup> Includes public hospitals (including psychiatric and general). <sup>c</sup> Excludes same day admissions. Includes patients treated in NSW but residents of another State, but excludes NSW residents treated in another State.

### *Efficiency — unit cost*

**Table 6A.50 Cost per non-admitted occasion of service, 199? (dollars)<sup>a, b, c</sup>**

<i>Hospital type</i>	<i>Emergency</i>	<i>Outpatient</i>	<i>Primary and community based</i>	<i>Same day</i>
All types	80	133	93	342

<sup>a</sup> Estimates based on 1997-98 National Survey of Mental Health Services. <sup>b</sup> Includes direct and indirect costs. <sup>c</sup> The National Survey of Mental Health Services includes same day admissions as ambulatory care. They are included in this estimate.

## **Victoria**

**Table 6A.51 Accredited mental health facilities, 1998<sup>a</sup>**

	<i>Accredited facilities</i>	<i>Proportion accredited</i>	<i>Accredited beds</i>
	<i>no.</i>	<i>%</i>	<i>no.</i>
Acute inpatient facilities	55		1120
Community and residential facilities	39		868

<sup>a</sup> At 30 June 1998.

**Table 6A.52 Unplanned psychiatric re-admissions to hospital within 28 days for the same condition, 1997-98<sup>a</sup>**

<i>Hospital type</i>	<i>Number discharged</i>	<i>Proportion re-admitted</i>
	no.	%
Public acute care	16 037	17.2

<sup>a</sup> The Victorian mental health information system cannot distinguish between unplanned and planned readmissions. The rate includes all 'conditions' but only relates to admissions to an acute inpatient mental health unit.

## Queensland

**Table 6A.53 Percentage of accredited mental health facilities<sup>a</sup>**

<i>Accredited facilities</i>	<i>Proportion accredited</i>	<i>Accredited beds<sup>b</sup></i>
no.	%	no.
12	na	375

<sup>a</sup> At 30 June 1999. Public hospitals only accredited through the ACHS. <sup>b</sup> Acute and non-acute public mental health beds.

## Western Australia

### Quality

**Table 6A.54 People treated under community mental health programs admitted to hospital overnight for psychiatric treatment, by age, gender and Indigenous status (per cent)**

	1993-94	1994-95	1996-97	1997-98
<i>Age group</i>				
0-17	6.5	6.7	7.0	7.3
18-64	23.5	25.0	27.4	28.2
65+	39.7	42.7	41.2	43.2
<i>Indigenous status</i>				
Non-Indigenous	21.8	23.0	24.7	25.4
Indigenous	40.7	40.1	36.9	41.8
<i>Gender</i>				
Male	23.5	24.7	26.5	26.3
Female	20.1	21.3	22.5	24.3
Total	21.7	22.9	24.4	25.3

Source: HDWA (1997-98).

**Table 6A.55 Accredited mental health facilities, 1998<sup>a</sup>**

<i>Accredited facilities<sup>b</sup></i>	<i>Proportion accredited</i>	<i>Accredited beds</i>
no.	%	no.
16	na	372

<sup>a</sup> At 30 June 1998. <sup>b</sup> Includes authorised hospitals, extended care units and psychiatric wards in public acute care hospitals.

**Table 6A.56 Unplanned psychiatric re-admissions to hospital within 28 days for the same condition, 1997-98 (per cent)<sup>a</sup>**

<i>Hospital type</i>	<i>Proportion re-admitted</i>
Teaching	5.7
Metropolitan non-teaching	5.1
Total	5.5

<sup>a</sup> Re-admissions are overnight stays within 28 days with the same four-digit ICD9-CM diagnosis. ACHS standards were used as endorsed by Royal Australian and New Zealand College of Psychiatrists (*ACHS Clinical Indicators: A User's Manual, Psychiatry Indicators, Vol. 2*).

## Efficiency

**Table 6A.57 Average cost per public patient under community management (dollars)<sup>a</sup>**

	<i>1995-96</i>	<i>1996-97</i>	<i>1997-98</i>
Actual	1 657	2 299	2 132
Real	1 445	2 004	1 859

<sup>a</sup> The figures for this indicator were obtained by dividing the combined gross accrued cost of community based services by the total number of persons who received at least one occasion of service during the period.

Source: Finance and Resource Management, Health Department of Western Australia, Mental Health Information System.

## South Australia

**Table 6A.58 Accredited mental health facilities, 1998<sup>a</sup>**

<i>Accredited facilities</i>	<i>Proportion accredited</i>	<i>Accredited beds<sup>b</sup></i>
no.	%	no.
8	na	183

<sup>a</sup> At 30 June 1998. <sup>b</sup> The public hospitals accredited are those with designated/specialised mental health facilities.

**Table 6A.59 Cost per non-admitted occasion of service (dollars)**

<i>Hospital type</i>	<i>Emergency</i>	<i>Outpatient</i>	<i>Primary and community based</i>
Public hospitals <sup>a</sup>	na	92	na
Community adults <sup>b</sup>	329	na	118
CAMHS–children <sup>c</sup>			184

<sup>a</sup> Data from Coopers & Lybrand outpatient study 1996-97. <sup>b</sup> Direct contacts only, including the elderly; 1997-98 data. <sup>c</sup> Includes community initiatives; 1997-98 data. **na** Not available.

## Tasmania

**Table 6A.60 Accredited mental health facilities, 1999<sup>a</sup>**

<i>Accredited facilities</i>	<i>Proportion accredited</i>	<i>Accredited beds</i>
no.	%	no.
4	na	80

<sup>a</sup> Accreditation commenced at different times for the four facilities in the first six months of 1999.

## Australian Capital Territory

**Table 6A.61 Accredited mental health facilities, 1997-98**

<i>Accredited facilities</i>	<i>Proportion accredited</i>	<i>Accredited beds</i>
no.	%	no.
2	na	52

**Table 6A.62 Unplanned psychiatric re-admissions to hospital within 28 days for the same condition, 1998 (per cent)<sup>a, b</sup>**

<i>Hospital type</i>	<i>Proportion re-admitted</i>
Acute care facility	8.0

<sup>a</sup> Includes patients re-admitted for treatment of the same condition, related condition and complication of the condition for which the patient was previously hospitalised. <sup>b</sup> 1 January to 30 June 1998.

## 6A.5 Definitions

**Table 6A.63 Terms**

<i>Term</i>	<i>Definition</i>
Acute care 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

(Continued on next page)

**Table 6A.63 (Continued)**

<i>Term</i>	<i>Definition</i>
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
Case mix adjustment	Adjustment of data on cases treated to account for the number and type of cases. Cases were sorted into diagnosis related groups which represented a class of patients with similar clinical conditions requiring similar hospital services.
Co-located units	Psychiatric units in general hospitals. Includes ambulatory services, 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
Depression	A state of gloom, despondency or sadness lasting at least two weeks. The person usually suffered from low mood, loss of interest and enjoyment, and reduced energy. Their sleep, appetite and concentration might have been affected.
Dysthymia	Constant or constantly recurring chronic depression of mood, lasting at least two years, which was not sufficiently severe, or whose episodes were not sufficiently prolonged, to qualify as recurrent depressive disorder. The person felt tired and depressed, slept badly and felt inadequate, but was usually able to cope with the basic demands of everyday life.
General practice	A medical practice that offered primary, continuing, comprehensive whole-person care for individuals, families and the community
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 had a tendency to invade healthy or normal tissues
Mental disorder	A diagnosable illness that significantly interferes with an individual's cognitive, emotional or social abilities

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Table 6A.63 (Continued)

<i>Term</i>	<i>Definition</i>
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
Obsessive–compulsive disorder	Obsessions: recurrent, persistent ideas, thoughts, images or impulses that intruded into the person’s consciousness against their will. The person experienced these as being senseless or repugnant, but was unable to ignore or suppress them. Compulsions: recurrent, stereotyped behaviours performed according to certain rules. The person often viewed them as preventing some unlikely event, often involving harm to, or caused by, themselves. The person generally recognised the senselessness of the behaviour, attempted to resist it and did not derive any pleasure from carrying out the activity.
Panic disorder	Panic (anxiety) attacks that occurred suddenly and unpredictably. A panic attack was a discrete episode of intense fear or discomfort.
Post traumatic stress disorder	A delayed and/or protracted response to a psychologically distressing event that was 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
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.
Psychiatrist	Medical practitioner with specialist training in psychiatry
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
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 were staffed by mental health professionals on a 24-hour basis
Stand-alone hospitals	Psychiatric hospitals that were separated from the general health care system
Substance use disorders	Disorders in which drugs 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.

(Continued on next page)

**Table 6A.63 (Continued)**

<i>Term</i>	<i>Definition</i>
Unplanned psychiatric readmissions to hospital within 28 days for the same condition	The total number of unplanned readmissions for the same condition within 28 days of separation, during the time period under study, divided by the total number of separations during the same period. (ACHS, <i>Measurement of Care in Australian Hospitals</i> , vol. 5, Nov. 1998)

**Table 6A.64 Indicators**

<i>Indicator</i>	<i>Definition</i>
Consumer/carer involvement in decision making	Consumer participation arrangements in public sector mental health service organisations according to the scoring hierarchy (levels 1–4) developed for monitoring State and Territory performance under Medicare Agreements Schedule F1 indicators
Cost per patient bed day	The average patient day cost according to the inpatient type
Cost per non-admitted occasion of service	The proportion of expenditure allocated to patients who were not admitted divided by the total number of non-admitted occasions of service
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 Program in each jurisdiction, in addition to the cost of providing the program to women.
Detection rate for small cancers	The rate of small ( $\leq 10$ mm) invasive breast cancers detected per 10 000 women screened
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
Participation rate	Age-specific rates for women participating in breast screening under BreastScreen Australia as a percentage of all women in the population
Participation rate of Indigenous women and women from culturally and linguistically backgrounds	Age-specific rates for women identifying themselves as being of Aboriginal and Torres Strait Islander descent, and for women from a non-English speaking background, participating in breast screening under BreastScreen Australia, as a percentage of their respective population group
Percentage of facilities accredited	The percentage of facilities providing mental health services which are accredited
Prevalence of treated mental disorders	Percentage of people in the population suffering from a mental disorder
Size and grade of detected cancers	The percentage of invasive cancers detected classified according to tumour size and grade