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## 10 Primary and community health

Previous reports have included a chapter on general practice. This year, the chapter has been expanded to include community health, to achieve a more comprehensive coverage of the primary health services supported by government. The expanded coverage includes (in addition to general practice) Indigenous primary health care, drug and alcohol treatment, public dental, maternal and child health, and a range of other community health services. The scope of this chapter does not extend to:

- Home and Community Care program services (which are covered in the Aged care chapter)
- public hospital emergency departments and outpatient services (which are covered in the Public hospitals chapter)
- community mental health services (which are covered in the Health management issues chapter)
- government funding of pharmacies.

The primary and community health sector is the part of the healthcare system most frequently accessed by Australians. It is important in providing preventative care, diagnosis and treatment of illness, and referral to other health care services. The sector includes general practice and community health services.

This year, the Report includes the following additional performance indicators:

- use of the care planning and case conferencing Enhanced Primary Care Medicare items
- health assessments for older people
- influenzae vaccination coverage for older people
- vaccine preventable hospitalisations
- hospitalisations for selected acute conditions
- hospitalisations for selected chronic conditions
- hospitalisations of older people for falls.

In addition, a comparison of hospitalisation rates for diabetes for Indigenous and non-Indigenous people is presented. The new indicators provide more

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comprehensive reporting on the outcomes of the primary and community health sector.

Descriptive information about primary and community health services is contained in section 10.1. Policy developments are discussed in section 10.2, a framework of performance indicators is presented in section 10.3, and key results are discussed in section 10.4. Future directions for reporting are covered in section 10.5, and relevant terms are defined in section 10.6.

### *Supporting tables*

Supporting tables for chapter 10 are provided on the CD-ROM enclosed with the Report. The files are provided in Microsoft Excel 97 format as \Publications\Reports\2004\Attach10A.xls and in Adobe PDF format as \Publications\Reports\2004\Attach10A.pdf.

Supporting tables are identified in references throughout this chapter by an 'A' suffix (for example, table 10A.3 is table 3 in the electronic files). These files can be found on the Review web page ([www.pc.gov.au/gsp/2004/index.html](http://www.pc.gov.au/gsp/2004/index.html)). Users without Internet access can contact the Secretariat to obtain these tables (see details on the inside front cover of the Report).

## **10.1 Profile of primary and community health**

### **Definitions, roles and responsibilities**

General practitioners (GPs) form part of the medical practitioner workforce. The medical practitioner workforce comprises doctors trained in a specialty (including general practice) and other medical practitioners (OMPs). The Royal Australian College of General Practitioners (RACGP) defines a GP as 'a medical practitioner who provides primary, comprehensive and continuing care to patients and their families within the community' (Britt *et al.* 1999, p. xxxv). For the purposes of Medicare, GPs are medical practitioners who are vocationally registered under section 3F of the *Health Insurance Act 1973* (Cwlth), hold fellowship of the RACGP or equivalent, or hold a recognised training placement (Britt *et al.* 1999). Since 1996, fellowship of the RACGP has been required to achieve vocational registration. While the majority of GPs provide services as part of a general practice, they may also be employed by hospitals or other organisations in full time or part time capacities.

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General practice is the business structure within which one or more general practitioners provide and supervise health care for a group of patients. General practices are predominantly privately owned, either by the practitioners or by corporate entities. Over recent years, there has been an emerging trend of corporate entities purchasing general practices and, in some cases, amalgamating these practices into medical centres that provide other health services. In Australia, general practices are an important source of primary health care. The services they provide include: diagnosing and treating illness (both chronic and acute); providing preventative care through to palliative care; referring patients to consultants, allied health professionals, community health services and hospitals; and acting as gatekeepers for other health care services (DHFS 1996). Some general practices provide care only during normal business hours, while others also provide after hours care. Definitions for common health terms are provided in section 10.6.

The Australian Government provides the majority of general practice income through fee-for-service and other payments, with the remainder coming from insurance schemes, patient contributions, and State and Territory government programs. Through its funding role, the Australian Government seeks to influence the supply, regional distribution and quality of general practice services. State and Territory governments are responsible for registering and licensing GPs in their jurisdiction. Some State and Territory governments also provide incentives for GPs to locate in rural and remote areas.

Community health services usually consist of multidisciplinary teams of salaried health professionals who aim to protect and promote the health of particular communities (Quality Improvement Council 1998). They are either provided directly by governments, or government funded with management by a local community organisation. State and Territory governments are responsible for most community health services. There is no national strategy for community health and there is considerable variation in the services provided across jurisdictions. The Australian Government's main role in the community health services covered in this chapter is in the area of Indigenous health.

## **Funding**

### *General practice*

Almost all of the services provided by private GPs are partly funded by the Australian Government through Medicare and the Department of Veterans' Affairs (DVA). This is illustrated by data from the Bettering the Evaluation and Care of Health (BEACH) study of general practice activity in Australia. The BEACH study

found that 95.0 per cent of all encounters with GPs in 2002-03, were for services funded by Medicare or the DVA (table 10.1).

Table 10.1 **GP encounters, by source of funding, 2002-03<sup>a, b</sup>**

	Number <sup>c</sup>	Rate per 100 encounters <sup>d</sup>	95% LCL	95% UCL
GPs participating in the BEACH study	1 008	..	..	..
Total encounters for which BEACH data were recorded	100 987	..	..	..
Encounters with missing data	7 190	..	..	..
Direct consultations <sup>e</sup>	92 256	98.4	98.2	98.6
No charge	485	0.5	0.2	0.8
Medicare paid <sup>f</sup>	89 068	95.0	94.6	95.3
Workers compensation	1 806	1.9	1.6	2.2
Other paid (hospital, State, etc.)	899	1.0	0.2	1.8
Indirect consultations <sup>g</sup>	1 542	1.6	1.2	2.0

UCL = upper confidence limit. LCL = lower confidence limit. <sup>a</sup> April 2002 to March 2003. <sup>b</sup> An 'encounter' is any professional interchange between a patient and a GP (Britt *et al.* 2000). <sup>c</sup> Number of encounters after post-stratification weighting for GP activity and GP age and sex. <sup>d</sup> Missing data removed. Percentage base (N = 93 797). <sup>e</sup> Categories do not add up to total direct consultations because there is overlap in some cases. <sup>f</sup> Includes Australian Government payments made through DVA. <sup>g</sup> Indirect consultations are those at which the patient is not seen by the GP but which generate a prescription, a referral, a certificate or other service. They are usually the result of a phone call by a patient. .. Not applicable.

Source: Britt *et al.* (2003); table 10A.1.

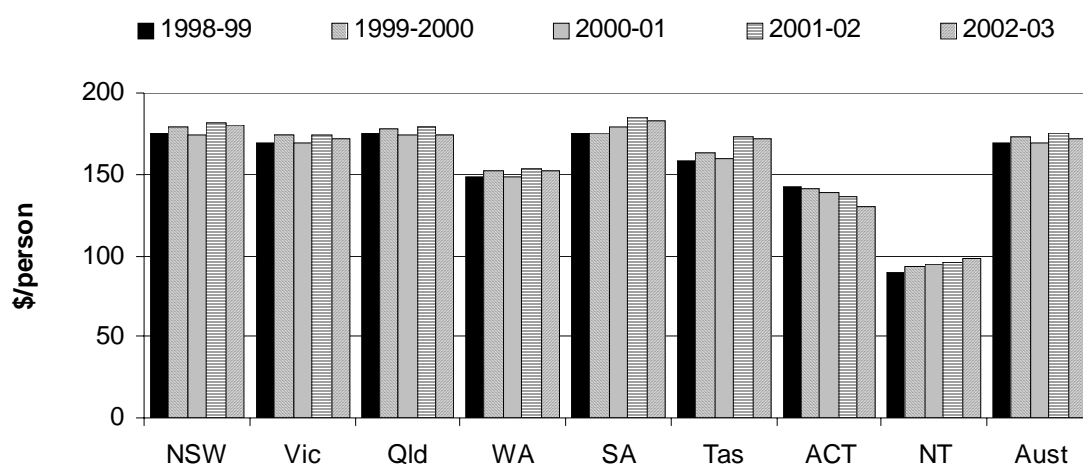
Medicare fee-for-service payments comprised 81.7 per cent of Australian Government expenditure on GPs in 1998-99 (and 63.1 per cent of total expenditure on GPs from all sources) (table 10A.2). The Australian Government also provided payments for GPs through the DVA local medical officer arrangements,<sup>1</sup> the Divisions of General Practice Program, the Practice Incentives Program (PIP) and the GP Immunisation Incentives Scheme (DHAC 2000). Non-government sources contributed 22.8 per cent of total expenditure on GPs in 1998-99, comprising payments by insurance schemes (including private health insurance, workers compensation and third party insurance) and private individuals (table 10A.2).

The cost to the Australian Government of general practice was approximately \$3.4 billion in 2002-03, including non-Medicare funding and expenditure by the DVA. This was equivalent to expenditure of \$172 per person in 2002-03 (figure 10.1). Figure 10.1 does not give a complete picture of government expenditure on primary health because it generally does not include expenditure on Aboriginal Community Controlled Health Services (ACCHSs), other community health services, and services delivered through hospital accident and emergency

<sup>1</sup> Local medical officers are GPs who are registered with the DVA to provide services to veterans and other DVA beneficiaries.

departments. These types of primary health care are more prevalent in rural and remote areas. Accordingly, figure 10.1 particularly understates expenditure on primary health in jurisdictions with larger proportions of Indigenous people and people living in rural and remote areas.

Figure 10.1 **Australian Government real expenditure per person on general practice (2002-03 dollars)<sup>a</sup>**



<sup>a</sup> The data used include Medicare, PIP, DVA, Divisions of General Practice and General Practice Immunisation Incentives Scheme data.

Source: Department of Health and Ageing (DHA) (unpublished); table 10A.3.

State and Territory governments also provide funding for general practice in a number of areas. Generally, this funding is provided indirectly through mechanisms such as support services for GPs. Expenditure on rural programs for general practice is one of the main areas funded by States and Territories. Examples include assistance with housing and relocation, education programs and assistance with employment for spouses and family members of doctors in rural areas. Other types of expenditure are directed towards providing education and support services in areas such as diabetes management, smoking cessation, sexual health, and mental health and counselling. Funding in these areas is often provided through grants to bodies such as secretariats that help coordinate and deliver these support services to GPs and the community.

### *Community health services*

Expenditure data that relate directly to the community health services covered in this chapter are not currently available. The Australian Institute of Health and Welfare (AIHW) publishes expenditure data on community and public health, and dental services. The former category includes public health activities that are not

covered in this chapter, such as the regulation of food safety and media campaigns to promote health awareness. The dental services category includes private dental services (funded by insurance premium rebates and non-government expenditure) that are also not reported in this chapter. In 2001-02, government expenditure on community and public health was \$3.3 billion, with State, Territory and local government providing 80.6 per cent and the Australian Government providing 19.4 per cent (table 10.2). Australian Government direct outlay expenditure on dental services was \$75 million in 2001-02, and State, Territory and local government expenditure was \$365 million (table 10.2).

**Table 10.2 Estimated expenditure on community and public health, and dental services, 2001-02 (\$ million)<sup>a, b</sup>**

	Australian Government						Total
	Direct outlays	Premium rebates	Total	State and local govt	Total govt	Non-govt	
Community and public health	644	1	645	2671	3316	5	3321
Dental services	75	262	337	365	702	2987	3689

<sup>a</sup> Preliminary estimates. <sup>b</sup> Government expenditure on premium rebates relate to private health and dental services that are not within the scope of this chapter.

Source: AIHW (2003a).

## Size and scope of sector

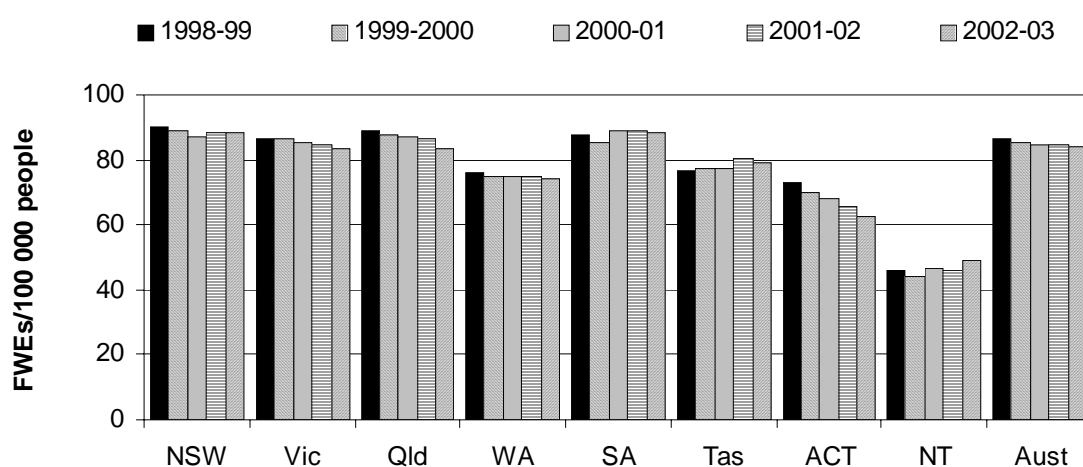
### *General practice*

In 2002-03, there were 24 260 GPs and OMPs billing Medicare in Australia. On a full time workload equivalent (FWE) basis, there were 16 709 GPs and OMPs, which represents 83.9 per 100 000 people — a decline from 86.3 per 100 000 in 1998-99 (table 10A.4). An FWE is calculated for each doctor by dividing the doctor's Medicare billing (schedule fee value of claims processed by the Health Insurance Commission during the reference period) by the mean schedule fee billing of full time doctors. The data exclude services provided by medical practitioners working with the Royal Flying Doctor Service, some doctors working in ACCHSs and salaried doctors working in public hospitals without the right of private practice. In addition, the data are based on doctors' Medicare claims, which for some doctors (particularly in rural areas) represent only part of their workload. Compared with metropolitan GPs, those in rural or remote areas spend more of their time working in local hospitals. Figure 10.2 presents the distribution of full time

workload equivalent GPs across jurisdictions. The highest number per 100 000 was in NSW (88.6) and the lowest was in the NT (48.8) (figure 10.2).

A national survey conducted by the Australian Bureau of Statistics (ABS) in 2001 found that 24 per cent of people had consulted a general practitioner in the two weeks before the survey. This was an increase from 23 per cent in 1995 and from 20 per cent in 1989-90 (ABS 2002a). The average consultation with a GP lasts just under 15 minutes (box 10.1).

**Figure 10.2 GPs (full time workload equivalent) per 100 000 people**



Source: DHA (unpublished); table 10A.4.

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### Box 10.1 'Time for care'

According to a study, the average GP consultation lasts just under 15 minutes. The study also showed that consultations with female GPs are longer on average (15.9 minutes) than those with male GPs (average 14.3 minutes). This finding was consistent with previous research that suggested female GPs deal with more psychological problems (such as depression) and more social problems. It was also found that younger male doctors (aged under 45 years) practising in metropolitan areas had the shortest average consultations (a little over 13 minutes). The GPs with the longest consultations (averaging 16.7 minutes) were rural female GPs aged 55 years and over.

The study was based on the timed length of 31 000 consultations for which a Medicare item number was claimed, from a random sample of 926 GPs. The study was undertaken between April 2000 and March 2001. The study showed that the average length of consultations varies greatly among different GPs, ranging from less than 10 minutes to more than 30 minutes. Consultations with a few GPs averaged less than 10 minutes, but the data showed that the great majority of doctors are not in this category.

*Source: Britt et al. (2002).*

### *Community health services*

The range of community health services available varies considerably across jurisdictions. Tables 10A.40–10A.48 provide information on community health programs in each jurisdiction. Community health programs related to mental health, home and community care, and aged care assessments are covered by chapters 11 and 12, and are not reported here.

### *Maternal and child health*

All jurisdictions provide some form of maternal and child health services through their community health programs. Maternal and child health services provided by jurisdictions include: parenting support programs (including antenatal and postnatal programs); early childhood nursing programs; prevention programs (including childhood immunisations); and early intervention and treatment programs related to child development and health. Some jurisdictions also provide a range of specialist programs through child health services including hearing screening programs, and mothers and babies residential programs. In the NT, apart from providing health promotion and education programs, the multidisciplinary health teams also provide food and nutrition services focusing on key areas of maternal and child health.

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Performance indicators for maternity services in public hospitals are reported in chapter 9.

### *Indigenous community health care services*

Primary health care services are delivered to Indigenous people through general practice, ACCHSs and government provided community health services. This section includes information on the latter two categories, while a later section covers the use of general practice services by Indigenous people. The Health preface includes an overview of Indigenous health, which discusses the policy context.

There are ACCHSs in all jurisdictions. These services are planned and governed by local Indigenous communities and aim to deliver holistic and culturally appropriate health and health related services. Funding for ACCHSs is provided by Australian, State and Territory governments. In addition to the ACCHSs, there are specific health programs for Indigenous Australians funded by jurisdictions, as outlined below.

- The Indigenous health services provided by NSW include health information and promotion programs, pre- and post-natal programs, and early childhood nursing programs (table 10A.41).
- Community health services in Victoria are provided through a range of Indigenous specific and mainstream services funded by the Department of Human Services. The areas covered include medical, alcohol and drug, maternity and early childhood services (table 10A.42)
- Queensland provides a range of primary and community health care services and activities — spanning the prevention, management and maintenance continuum — that address particular needs of Indigenous communities. Services offered include: health prevention and promotion services; men’s and women’s health programs; child and adolescent health services; alcohol, tobacco and other drug services; sexual health services; allied health services; and patient transport provided to increase access to health care (table 10A.43).
- In WA, Indigenous health services are provided to clients in various age groups (table 10A.44).
- South Australia provides a range of services including: strategies to improve birthing outcomes for Indigenous babies; Indigenous home support; and programs provided by multidisciplinary teams from community settings (table 10A.45).

- In Tasmania, population and health priorities programs are implemented to prevent and manage chronic conditions, and promote nutrition, physical activity and injury prevention in identified population groups such as the Indigenous population (table 10A.46).
- Primary care for the Indigenous population in the NT is provided by the NT Government and community controlled Aboriginal Medical Services. The NT also provides services to promote Indigenous community awareness on Aboriginal Hearing Health (table 10A.48).

Since 1997-98, information on service activity in Australian Government funded Aboriginal and Torres Strait Islander primary health care services has been collected through service activity reporting (SAR) surveys. Many of the surveyed services receive additional funding from State and Territory governments and other sources. The SAR data reported here represent the health related activities, episodes and staffing resulting from all funding sources.

In 2000-01, 124 Indigenous primary health care services provided SAR data. Of these services, 51 (41.1 per cent) were located in remote or very remote areas. The number of services by jurisdiction and by remoteness category are shown in tables 10A.5 and 10A.6 respectively. A wide range of primary health care services are provided, including the diagnosis and treatment of illness and disease, the management of chronic illness and immunisation (table 10A.7).

An episode of health care is defined in the SAR data collection as contact between an individual client and a service by one or more staff to provide health care. Estimated episodes of health care provided by participating services are shown in table 10.3. Estimated episodes are shown by remoteness category in table 10A.6.

**Table 10.3 Estimated episodes of care by surveyed services**

	<i>NSW &amp; ACT</i>	<i>Vic &amp; Tas</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>NT</i>	<i>Aust</i>
1997-98	228 749	76 592	107 173	228 998	107 827	110 062	859 401
1998-99	265 783	143 492	149 251	247 112	131 433	124 186	1 061 257
1999-2000	286 775	172 471	176 265	295 025	129 651	163 027	1 223 214
2000-01	348 592	143 537	186 884	326 703	147 383	189 372	1 342 471

*Source:* DHA SAR (unpublished).

At 30 June 2001, services included in the SAR data collection employed approximately 2300 full time equivalent staff, including 1477 health staff. Of the health staff, 985 were Indigenous (66.7 per cent). The proportions of Indigenous doctors (2.5 per cent of doctors) and nurses (12.8 per cent of nurses) employed by surveyed services, however, were relatively low (table 10A.8). In addition, 200 full time equivalent staff worked at, but were not paid by, the services. Most services

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(70 per cent) had access to medical specialists or allied health professionals who were not paid by the service.

### *Public dental services*

Most jurisdictions provide some form of public dental service for particular population groups within their communities. In Victoria, WA, SA, Tasmania, the ACT and the NT, for example, general dental care (including preventative care) is provided for school children under 18 years of age. These jurisdictions also provide some types of dental service (such as general, emergency and specialist dental care) for eligible adults (for example, holders of health care cards or pensioner concession cards). In addition, Victoria and SA, in association with students of the University of Melbourne and the University of Adelaide, provide specialist dental services for concession card holders. WA has a program for providing free oral examination to residents of aged care facilities along with a specific program of oral health care for Indigenous people (run in collaboration with Aboriginal Medical Services through an arrangement with the University of Western Australia). Public dental services are delivered in several different ways, including through public dental hospitals, public dental clinics and school visits.

### *Alcohol and other drug treatment*

Alcohol and other drug treatment activities range from a brief intervention to long term residential treatment. The types of treatment include detoxification, pharmacological treatment (also known as substitution treatment), counselling and rehabilitation. The data included here have been sourced from the first report on the Alcohol and Other Drug Treatment Services National Minimum Data Set (AIHW 2002). This report does not include data for Queensland and excludes some treatment activities, including opioid pharmacotherapy treatment where it is the only treatment provided. The report also excludes data for the majority of Australian Government funded Indigenous substance use services and Indigenous community health care services that also provide alcohol and other drug treatment services.

A total of 393 alcohol and other drug treatment services contributed data for 2000-01, with 190 (48.3 per cent) identified as government providers and 203 (51.7 per cent) identified as non-government providers (table 10A.9). All of the non-government providers received some government funding for 2000-01. A total of 83 529 clients were registered for treatment in 2000-01, 63.5 per cent of whom were male (AIHW 2002). Alcohol was the most common principal drug of concern (33.6 per cent) for which clients sought treatment. Heroin was the next most

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common (28.4 per cent) and then cannabis (14.0 per cent) and amphetamines (9.1 per cent) (AIHW 2002). Further information on alcohol and other drug treatment funded by individual jurisdictions is included in tables 10A.41–10A.47.

### *Other*

A range of other community health services are offered across jurisdictions (tables 10A.40–10A.48), including:

- women’s health services, covering services and health promotion programs for women across a range of health related areas
- men’s health programs, including mainly promotional and educational programs
- allied health services
- community rehabilitation programs.

## **Use of general practice services by Indigenous people**

An overview of Indigenous health is provided in the Health preface. Two key points for the purposes of this chapter are as follows:

- Based on data from 1998-99, expenditure per person on Medicare and the Pharmaceutical Benefits Scheme (PBS) was much lower for Indigenous people than for non-Indigenous people — about 39 per cent (AIHW 2001, table E.1).
- Indigenous Australians are using secondary/tertiary care at a higher rate than they are using primary care.

These conclusions are based in part on BEACH survey data collected from 1998 to 2000, adjusted for under identification of Indigenous people. The reliability of these data is affected by the sample frame used not being designed to produce statistically significant results for Indigenous Australians. However, no more recent or more reliable data are available on expenditure on health services for Indigenous people.

Annual BEACH data indicate the nature of encounters between Indigenous people and GPs. The BEACH study includes questions to identify encounters between Indigenous patients and participating GPs, but these data should be treated with care for the reasons mentioned above. Further the Indigenous Australians included in the BEACH survey do not necessarily have the same characteristics as other Indigenous Australians. The 2003 BEACH study also included Indigenous data aggregated over a five year period to improve reliability.

Over the period 1998-99 to 2002-03, 5476 encounters between Indigenous patients and GPs were recorded in the BEACH study (table 10A.10). This represented 1.1 per cent of encounters in the study over this period (compared with the Indigenous proportion of the Australian population which was 2.4 per cent in June 2001 [tables A.2 and A.7 in appendix A]). Extrapolating these results to all GP/patient encounters across Australia suggests there was an average of around 1.1 million encounters between Indigenous patients and GPs annually over the five years to 2002-03 (Britt *et al.* 2003).

The 10 most common health problems managed at encounters with Indigenous people over the five years of the BEACH study are presented in table 10.4, along with comparative data for all encounters. Diabetes was the problem most frequently managed (7.1 per 100 Indigenous encounters, compared with 2.8 per 100 total encounters). Other problems with significantly higher management rates at Indigenous encounters include acute otitis media and pre- and post-natal care. Further information on BEACH study encounters between Indigenous patients and GPs is included in tables 10A.11, 10A.12 and 10A.13.

Table 10.4 **Health problems managed for Indigenous encounters and all encounters, 1998-99 to 2002-03**

<i>Problems managed</i>	<i>Indigenous encounters</i>			<i>All encounters</i>		
	<i>Rate per 100 encounters (n=5476)</i>	<i>95% LCL</i>	<i>95% UCL</i>	<i>Rate per 100 encounters (n=502 100)</i>	<i>95% LCL</i>	<i>95% UCL</i>
Diabetes <sup>a</sup>	7.1	6.0	8.2	2.8	2.7	2.9
Hypertension <sup>a</sup>	6.7	5.7	7.7	8.8	8.6	9.0
Upper respiratory tract infection	5.7	4.8	6.5	6.0	5.9	6.2
Asthma	4.3	3.6	5.0	2.9	2.8	3.0
Acute bronchitis/ bronchiolitis	3.8	3.2	4.5	2.8	2.7	2.8
Depression <sup>a</sup>	3.4	2.9	3.9	3.8	3.7	3.9
Immunisation (all) <sup>a</sup>	3.3	2.6	3.9	4.8	4.6	5.0
Acute otitis media/ myringitis	3.1	2.5	3.6	1.4	1.4	1.5
Back complaint <sup>a</sup>	2.2	1.7	2.6	2.6	2.5	2.7
Pre- and post-natal check <sup>a</sup>	2.1	1.5	2.5	1.0	0.9	1.0
Subtotal	41.7	..	..	..	..	..
<b>Total problems</b>	<b>147.7</b>	<b>143.7</b>	<b>151.6</b>	<b>148.1</b>	<b>147.3</b>	<b>148.9</b>

LCL = lower confidence level. UCL = upper confidence level. <sup>a</sup> Includes multiple primary care classification codes. .. Not applicable.

Source: Britt *et al.* (2003); table 10A.10.

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## 10.2 Policy developments in general practice

Recent policy developments relating to the programs or indicators discussed later in the chapter are outlined below. The programs are described with the relevant indicator.

### *General practice workforce*

There have been significant shifts in the medical workforce, particularly in the past decade. More recently, the overall workforce situation has moved to one of shortage and, despite some improvements, distribution of the workforce remains an issue. In relation to the workforce shortage, the Australian Government announced initiatives in the 2003-04 budget that include increases in medical school places, more training places for GP registrars and funding for nurses to be employed in general practices. (The aim of support for practice nurses and other health professionals is to allow GPs to concentrate on patients who specifically require the services of a GP.) Measures to deal with workforce distribution include requirements for a proportion of medical school graduates to work in areas of workforce shortage, incentives for GPs to relocate to undersupplied outer metropolitan areas, support for the employment of practice nurses in rural and remote practices, and financial incentives for rural GPs.

### *Focus on prevention*

Recent Australian Government initiatives are designed to incorporate disease prevention into the core business of the primary health care system. Specific measures introduced in the 2003-04 budget are intended to deliver systematic, integrated primary health care for people with or at risk of chronic and complex conditions, such as asthma, diabetes and chronic heart disease. Funds are available over four years to set up a system to help primary care providers — including GPs, nurses, pharmacists and allied health professionals — to work together to improve clinical outcomes, reduce lifestyle risk factors, and help those with chronic conditions maintain good health. In addition, a community awareness and infrastructure initiative is being implemented, aimed at promoting the preventive role of general practice both to GPs and the community. It will include the development of a national approach to lifestyle prescriptions, which GPs can use to encourage healthy lifestyles that involve not smoking, drinking in moderation, eating healthily and being physically active.

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### *Practice Incentives Program*

In May 2003, the Diabetes Outcomes payment was made for the first time, including a backpayment to November 2002. This is the final component of the 2001-02 budget initiative — the Integrated National Diabetes Program — that was introduced to encourage improved levels of care for patients with diabetes, and to assist general practices to detect people with diabetes in the community.

The Cervical Outcomes payment was introduced in August 2003 and included a backpayment to November 2002. This is the final component of the 2001-02 budget initiative — Cervical Screening Incentives for General Practitioners — designed to improve the overall levels of cervical screening of women aged 20–69 years old.

## **10.3 Framework of performance indicators**

The performance indicator framework is based on the shared government objectives for primary and community health (box 10.2). For the 2004 Report, the framework has been revised to provide information on equity, effectiveness and efficiency, and to distinguish outputs from outcomes. This approach is consistent with the revised general performance indicator framework and service process diagram in chapter 1 that have been agreed by the Steering Committee. In addition, new indicators have been included this year to reflect the expansion in scope from general practice to primary and community health. The framework is evolving as better indicators are developed and as the focus and objectives for primary and community health change. In particular, the Steering Committee plans to develop more indicators relating to community health services.

### **Box 10.2 Objectives for primary and community health**

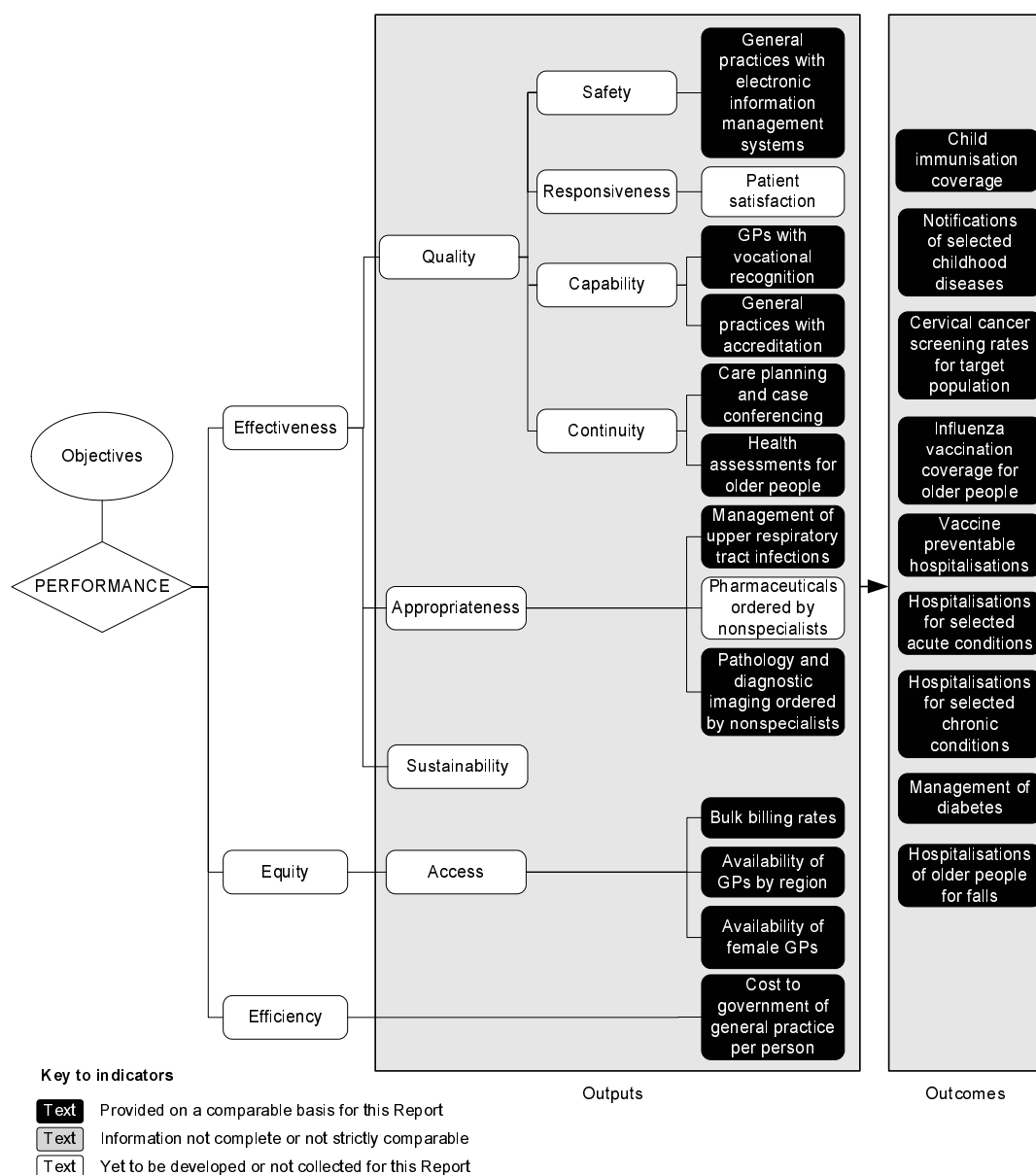
Primary and community health services aim to promote the health of Australians by:

- acting as the first point of entry to the health care system
- providing health care that promotes changes in lifestyle behaviour and prevents possible illness
- coordinating and integrating health care services on behalf of clients
- providing continuity of care

in an equitable and efficient manner based on the best available evidence of the effectiveness of health care interventions.

The performance indicator framework shows which data are comparable in the 2004 Report (figure 10.3). For data that are not considered strictly comparable, the text includes relevant caveats and supporting commentary. Chapter 1 discusses data comparability from a Report-wide perspective (see section 1.6).

Figure 10.3 Performance indicators for primary and community health



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## 10.4 Key performance indicator results

Different delivery contexts, locations and types of client may affect the effectiveness, equity 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.

### Effectiveness

#### *Quality — safety*

##### *General practices with electronic information management systems*

The proportion of general practices with electronic information management systems is included as a safety indicator because such systems can reduce prescribing and dispensing errors. Reductions in these types of error reduce the likelihood of harm to patients from adverse drug reactions. Electronic information management systems can also improve other aspects of quality by providing access to timely clinical data and improving the maintenance of patient health records. Use of such technology can, for example, facilitate the management of screening and other preventive health activities for patients (DHAC 2000).

The PIP provides payments to general practices based on patients' ongoing health care needs (rather than on service volumes), promoting activities such as use of electronic information management systems, after hours care, the teaching of medical students, the employment of practice nurses, and improved chronic disease management. While the PIP does not include all practices in Australia, PIP practices covered around 80 per cent of Australian patients (measured as standardised whole patient equivalents)<sup>2</sup> in May 2003 (DHA unpublished).

Under the PIP Information Management, Information Technology initiative, two incentives encourage the computerisation of practices: (1) the electronic prescribing incentive paid for use of bona fide electronic prescribing software to generate the majority of prescriptions, and (2) an incentive paid for the use of computer systems to send and/or receive clinical information. The data indicate that the proportion of PIP practices nationally that used electronic prescribing systems in May 2003 was 90.5 per cent (an increase from 88.2 per cent in May 2002). The proportion of PIP

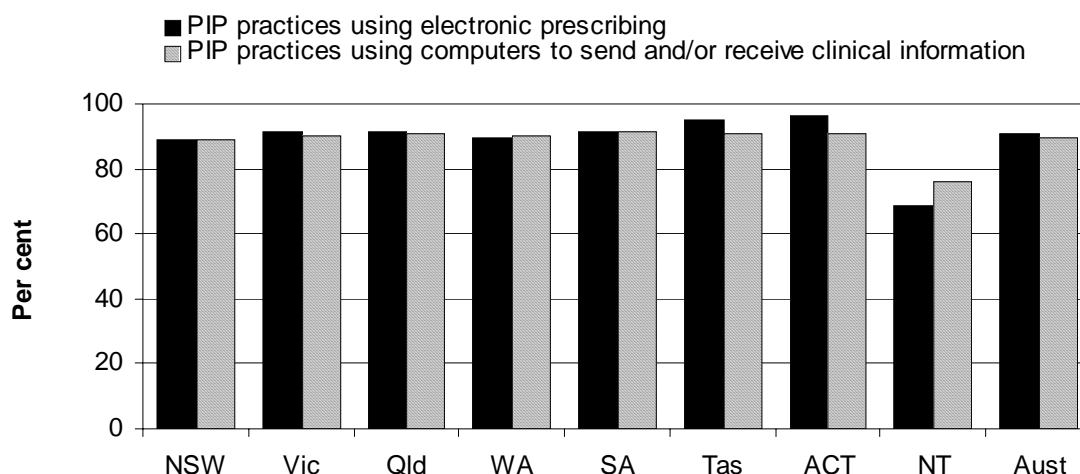
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<sup>2</sup> 'Standardised whole patient equivalent' (SWPE) is an indicator of practice workload based on the number of patients seen. The SWPE value for a jurisdiction is the sum of the fractions of care provided by doctors in that jurisdiction to their patients, weighted for the age and sex of each patient in accordance with national ratios.

practices with the capacity to send and/or receive clinical information via use of computer technology was 89.7 per cent in May 2003 (an increase from 88.1 per cent in May 2002) (table 10A.14).

At May 2003, participating PIP practices in the ACT were most likely to use electronic prescribing software (96.1 per cent), while those in SA were the most likely to use computers to send and/or receive clinical information (91.1 per cent) (figure 10.4). PIP practices in the NT were the least likely to send and/or receive clinical information electronically or to use electronic prescribing software (75.9 per cent and 69.0 per cent respectively) (figure 10.4).

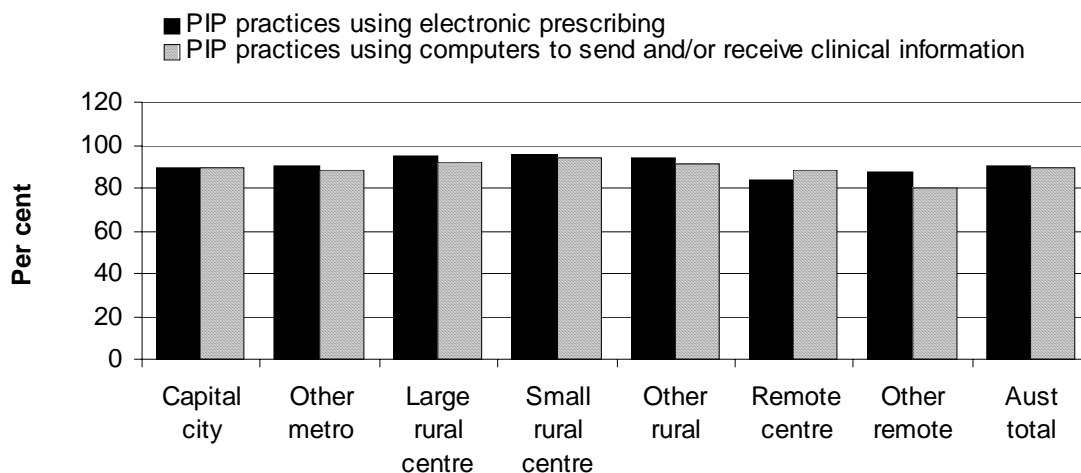
**Figure 10.4 PIP practices using computers for clinical purposes, May 2003**



Source: DHA (unpublished); table 10A.15.

In May 2003, PIP practices in all rural areas were more likely than PIP practices in metropolitan areas or remote areas to use electronic prescribing and to use computers to send and/or receive clinical information. PIP practices in remote areas were least likely to use electronic prescribing systems (figure 10.5). Remote practices in the NT have difficulty meeting the accreditation requirements for accessing the PIP, which affects the coverage of these data.

Figure 10.5 **PIP practices using computers for clinical purposes, by area, May 2003<sup>a</sup>**



<sup>a</sup> Capital city = State and Territory capital city statistical divisions; other metropolitan centre = one or more statistical subdivisions that have an urban centre with a population of 100 000 or more; large rural centre = statistical local areas (SLAs) where most of the population resides in urban centres with a population of 25 000 or more; small rural centre = SLAs in rural zones containing urban centres with populations between 10 000 and 24 999; other rural area = all remaining SLAs in the rural zone; remote centre = SLAs in the remote zone containing populations of 5000 or more; other remote area = all remaining SLAs in the remote zone.

Source: DHA (unpublished); table 10A.14.

### *Quality — responsiveness*

Patient satisfaction has been identified as a responsiveness indicator, but no data are currently available.

### *Quality — capability*

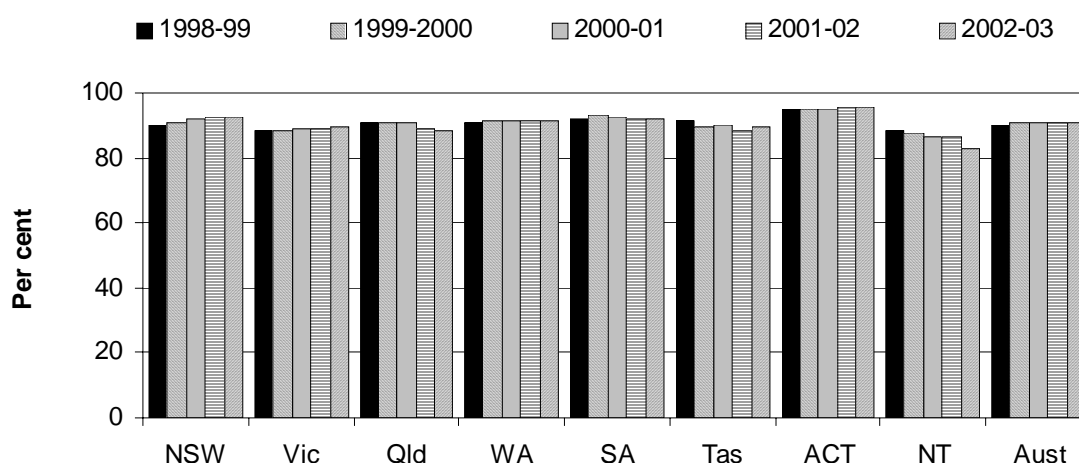
Two indicators of the capability aspect of quality are included — the proportion of GPs with vocational recognition and the proportion of general practices with accreditation.

### *GPs with vocational recognition*

The requirements for vocational recognition for GPs include the completion of a formal general practice training program and the demonstration of ongoing involvement in continuing education and quality assurance activities (DHAC 2000). In 2002-03, the ACT had the highest proportion of GPs with vocational recognition (95.4 per cent) and the NT had the lowest proportion (82.8 per cent) (figure 10.6). The proportion of GPs with vocational recognition remained relatively constant

over the five years to 2002-03 (figure 10.6). The proportion of GPs with vocational recognition is highest in metropolitan areas and lowest in remote areas (table 10A.16).

**Figure 10.6 GPs (full time workload equivalent) with vocational recognition**



Source: DHA (unpublished); table 10A.17.

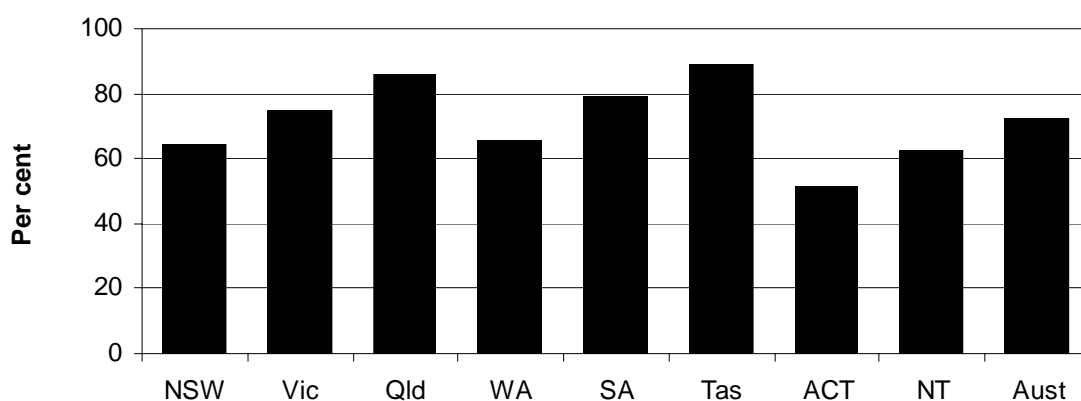
### *General practices with accreditation*

Accreditation of general practices is a systematic way to help identify quality in general practice and to provide GPs with a framework for improving their practices over time. The two providers of general practice accreditation services are: Australian General Practice Accreditation Limited (AGPAL) and General Practice Australia (GPA). These companies provide a peer review process to assess practices against the RACGP Standards for General Practices. GPA is a for-profit private company, and details of the scope of its activities are not publicly available. Accordingly, the indicator includes only the proportion of general practices accredited with AGPAL. In October 2003, 4249 general practices (or 72.1 per cent of those eligible) were accredited with AGPAL. Tasmania had the highest proportion of practices accredited in October 2003 (88.9 per cent) and the ACT had the lowest (51.4 per cent) (figure 10.7).

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Figure 10.7 **General practices accredited with AGPAL, October 2003**

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Source: AGPAL (unpublished); table 10A.18.

### *Quality — continuity*

The continuity aspect of quality relates to the sector's ability to provide uninterrupted, coordinated services across programs, practitioners, organisations and levels over time.

### *Care planning and case conferencing*

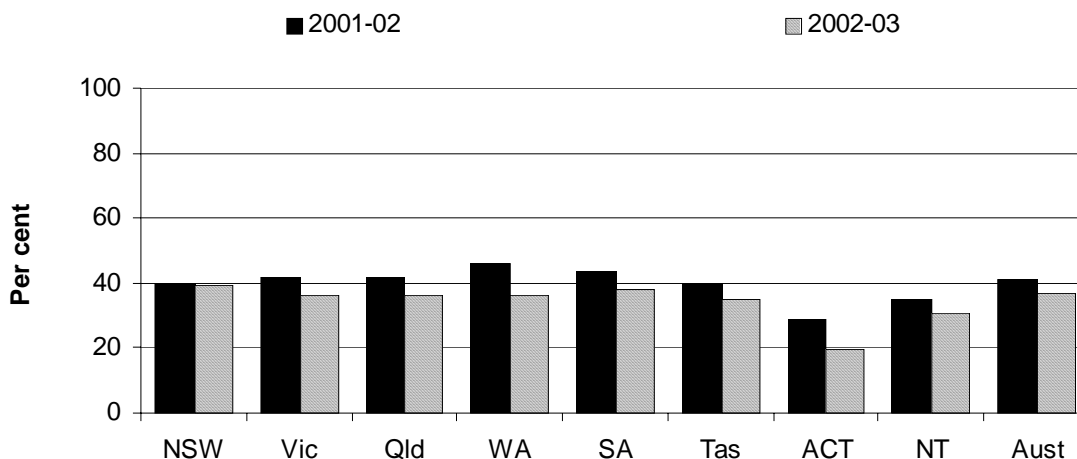
Care planning and case conferencing are Enhanced Primary Care (EPC) items in the Medicare Benefits Schedule. They provide a framework for a multidisciplinary approach to health care for people with chronic conditions and complex, multidisciplinary care needs. The indicator is the proportion of GPs that used the EPC items for care planning and case conferencing at least once during a 12 month period. The rationale for this indicator is that GPs with some experience using care planning and case conferencing are more likely to continue to use these options in situations where they have the potential to improve patient care.

In 2002-03, the proportion of GPs who used the EPC items for care planning and case conferencing was highest in NSW (39.5 per cent) and lowest in the ACT (19.6 per cent). Nationally, the proportion declined from 41.3 per cent in 2001-02 to 37.0 per cent in 2002-03 (figure 10.8).<sup>3</sup>

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<sup>3</sup> Two policy changes occurred during this period: (1) the clarification of the Medicare requirements for care planning services in May 2002 and (2) the withdrawal of a specific care planning incentive payment under the PIP from November 2002.

Figure 10.8 **GPs who used the EPC items for care planning and case conferencing<sup>a</sup>**



<sup>a</sup> Includes GPs and OMPs who claimed 375 or more non-referred attendances on average per quarter for the financial year.

Source: DHA (unpublished); Table 10A.19.

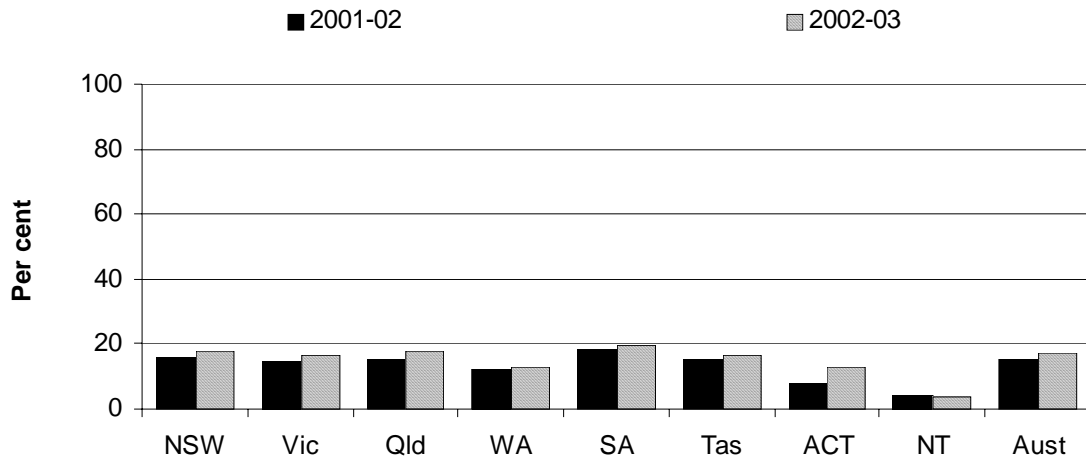
### *Health assessments for older people*

In November 1999, new Medicare Benefits Schedule items were introduced to provide for annual voluntary health assessments for older people that allow a GP to undertake an indepth assessment of a patient's health. Health assessments cover the patient's medical, physical, psychological and social function, and aim to facilitate more timely preventive actions or treatments to enhance the health of the patient.

The eligible population is defined as non-Indigenous people aged 75 years and over and Indigenous people aged 55 years and over, excluding hospital inpatients and people living in aged care facilities. The lower age range for Indigenous people recognises that they face increased health risks at a much earlier age, compared with most other groups in the population: it broadly reflects the difference in average life expectancy for the two population groups.

In 2002-03, the proportion of the eligible population who received a voluntary health assessment was highest in SA (19.8 per cent) and lowest in the NT (3.6 per cent). Nationally the proportion increased from 15.4 per cent in 2001-02 to 17.0 per cent in 2002-03 (figure 10.9).

Figure 10.9 Proportion of the eligible population who received a voluntary health assessment<sup>a</sup>



<sup>a</sup> The eligible population is defined as non-Indigenous people aged 75 years or over and Indigenous people aged 55 years or over, excluding hospital inpatients and people living in aged care facilities.

Source: DHA (unpublished); Table 10A.20.

### Appropriateness

#### *Management of upper respiratory tract infections*

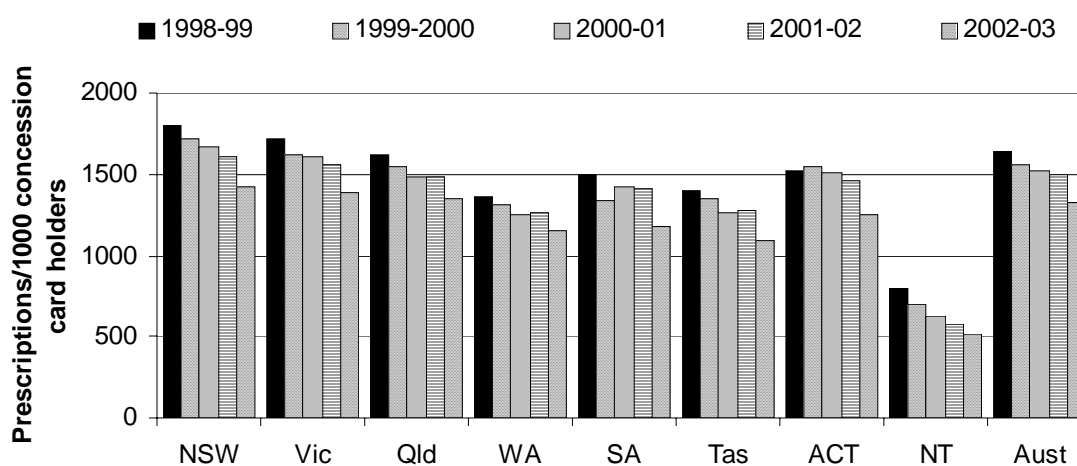
Upper respiratory tract infections without complications are most often caused by viruses. Antibiotics have no efficacy in the treatment of viral infections but are still frequently prescribed when viruses occur. Unnecessarily high antibiotic prescription rates for upper respiratory tract infections have the potential to increase pharmaceutical costs and to increase antibiotic resistance in the community. A reduction in the rate of prescription of those oral antibiotics most commonly used when patients present with upper respiratory tract infections may indicate that GPs are offering more appropriate treatments.

The cost at the pharmacy for most oral antibiotics used to treat upper respiratory tract infections is less than the maximum PBS co-payment. There is generally no Australian Government subsidy for general patients, so particulars of such patients obtaining prescriptions of this nature are not recorded by the Health Insurance Commission. With the data on oral antibiotics available for reporting essentially reflecting the requirements of concession card holders, it is best to eliminate from the numerator any oral antibiotics supplied to general patients, and to use the total number of concession card holders in the denominator. Despite the ongoing population ageing effects that may result in increases in the number of such

beneficiaries and in the complexity of their pharmaceutical needs, the trend in the prescription of oral antibiotics should nevertheless be downwards if GPs more closely follow guidelines for the treatment of upper respiratory tract infections.

Prescriptions per 1000 people with PBS concession cards in 2002-03 were highest in NSW (1421) and lowest in the NT (515) (table 10A.21). Australia-wide, the prescription rate decreased by 19.7 per cent between 1998-99 and 2002-03, with all jurisdictions experiencing a decrease over the five year period (figure 10.10).

**Figure 10.10 Rate of prescription of oral antibiotics for upper respiratory tract infections**



Source: DHA (unpublished); table 10A.21.

#### *Pharmaceuticals ordered by non-specialists*

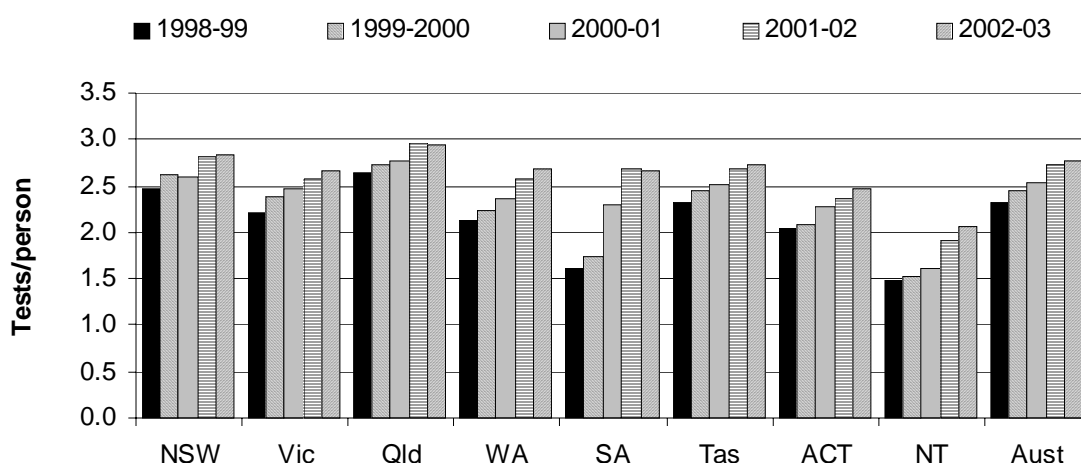
Pharmaceuticals ordered by non-specialists have been identified as an appropriateness indicator, but no data are currently available.

#### *Pathology and diagnostic imaging ordered by non-specialists*

Per person benefits paid for pathology tests and diagnostic imaging ordered by GPs and OMPs are used to report on prescribing and diagnosis patterns. Differences across jurisdictions and over time in the level of benefits paid for pathology tests and diagnostic imaging ordered by GPs may indicate inappropriate use of these services in diagnosis and treatment. While high levels of benefits may indicate GPs' overreliance on these diagnostic tools, it is not possible to determine what the appropriate levels might be. Low levels may also indicate underuse. Reporting these data contributes to the discussion of such issues.

Pathology data are presented for the number of tests ordered per person and paid through Medicare (figure 10.11). In general, Medicare benefits are payable for a maximum of three items of service performed on a specimen. Data on the number of tests performed but not rebated are not available. Pathology services for some areas of WA, SA, the ACT and the NT were, until recently, funded by the Australian Government through health program grants. These grants were discontinued in 2001-02, so the data in figure 10.11 may underestimate orders in some jurisdictions before 2002-03 (although the amounts are relatively insignificant). For testing paid through Medicare in 2002-03, Queensland had the highest rate of pathology tests (2.9 per person) and the NT had the lowest (2.1 per person). Nationally, the number of pathology tests per person increased from 2.3 in 1998-99 to 2.8 in 2002-03 (table 10A.22).

Figure 10.11 Pathology tests ordered by GPs and OMPs per person<sup>a</sup>

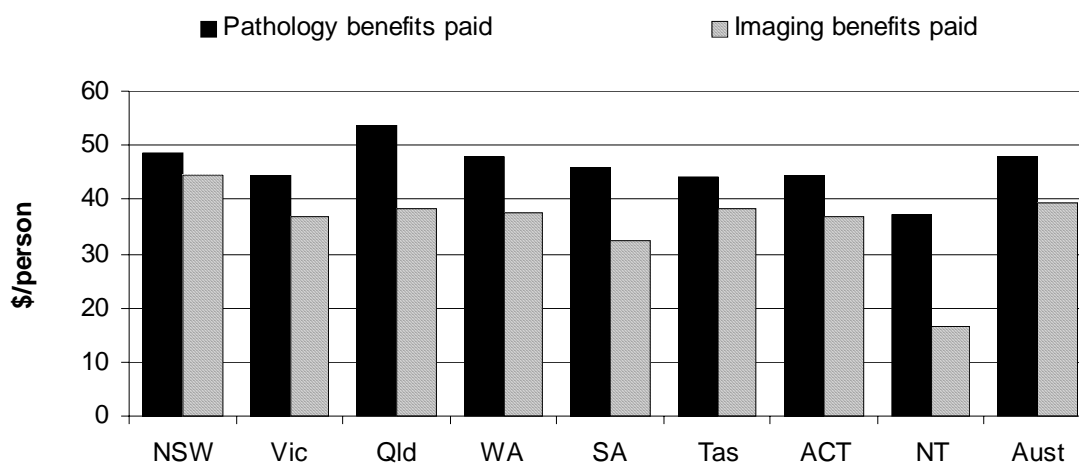


<sup>a</sup> Includes patient episode initiated items and non-patient initiated items.

Source: DHA (unpublished); table 10A.22.

Overall in 2002-03, Australian Government expenditure under Medicare on pathology tests was \$48 per person. Figure 10.12 shows that benefits paid per person for pathology tests in 2002-03 were highest in Queensland (\$54) and lowest in the NT (\$37). Nationally, these benefits paid per person (in real terms) increased by 8.1 per cent over the five years to 2002-03.

Figure 10.12 **Benefits paid per person for pathology tests and diagnostic imaging, 2002-03<sup>a</sup>**

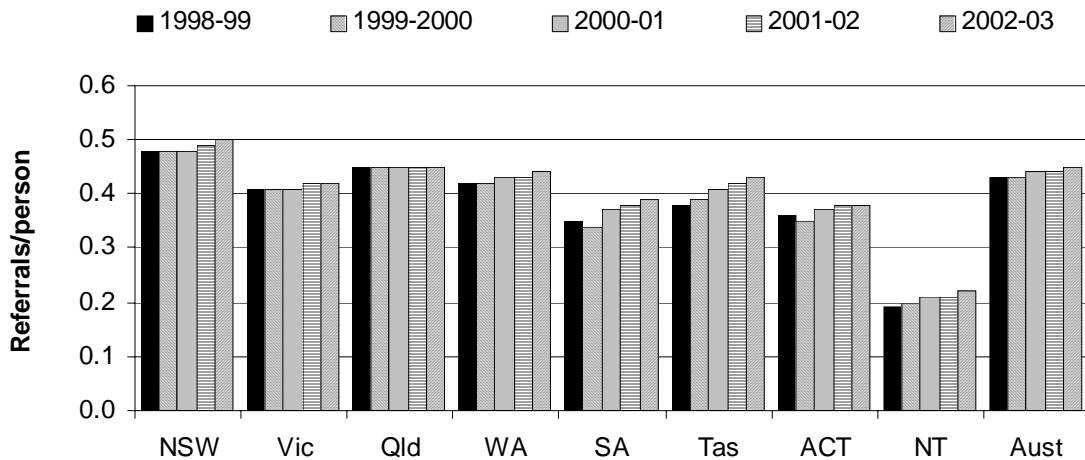


<sup>a</sup> Includes benefits paid for pathology tests ordered by, and diagnostic imaging referred by, GPs and OMPs.  
 Source: DHA (unpublished); tables 10A.22 and 10A.23.

Figure 10.13 provides information on diagnostic imaging referrals by GPs and OMPs per person.<sup>4</sup> In 2002-03, NSW had the highest number of referrals per person (0.50) and the NT had the lowest (0.22). Nationally, the number of diagnostic imaging referrals per person remained relatively constant over the five years to 2002-03 (table 10A.23). Benefits paid per person for diagnostic imaging in 2002-03 were \$39 nationally; across jurisdictions, the benefits paid were highest in NSW (\$44 per person) and lowest in the NT (\$17 per person) (figure 10.12). Nationally, these benefits paid per person (in real terms) decreased by 6.8 per cent over the five years to 2002-03.

<sup>4</sup> Up to three tests may be recorded following a pathology referral, whereas each imaging referral results in only one test.

Figure 10.13 Diagnostic imaging referrals from GPs and OMPs per person



Source: DHA (unpublished); table 10A.23.

### *Sustainability*

No indicators of sustainability for primary and community health have as yet been identified.

### **Equity**

Barriers to accessing primary health services have been identified as a factor contributing to the generally poor health status of Indigenous people (see the Health preface). Financial, geographic and other barriers can also have an impact on access for other groups, including people with low socioeconomic status and people living in rural and remote areas.

### *Access*

Three indicators are used to measure access and equity in GP service delivery: (1) the proportion of total non-specialist non-referred attendances that are bulk billed, (2) FWE GPs per 100 000 people in rural and remote areas, and (3) the availability of female GPs.

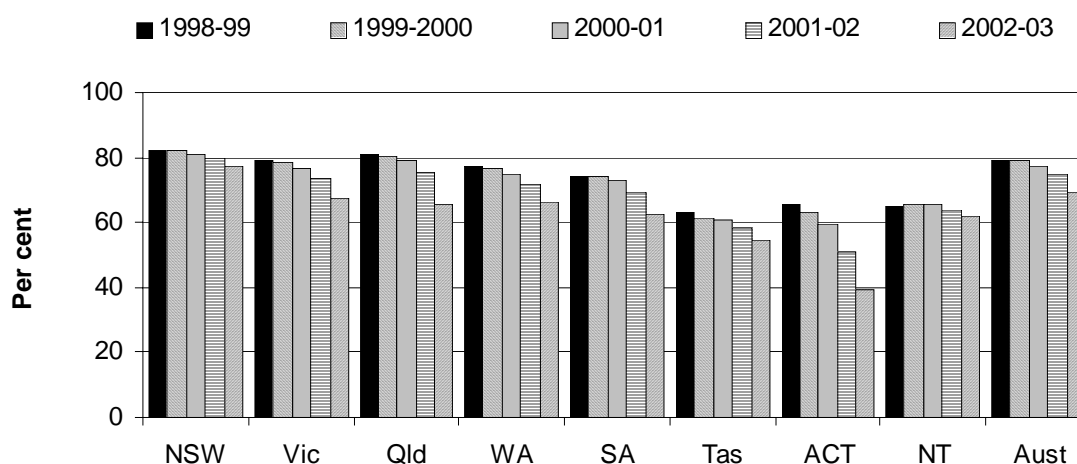
### *Bulk billing rates*

Visits to GPs are classed as non-referred attendances under Medicare. The proportion of total non-referred attendances that are bulk billed indicates the

affordability of GP services. In general practice, patients are: (1) bulk billed for the medical services provided to them and make no out-of-pocket contribution because the general practice bills Medicare direct and receives the schedule fee rebate as full payment for the service; (2) required to pay for the medical service in full and submit their receipt to Medicare for reimbursement to the extent of the schedule fee rebate; or (3) required to pay a patient contribution and sign an authorisation allowing the doctor to submit a claim for payment by cheque for the scheduled fee rebate amount. A high proportion of bulk billed services indicates a greater rate of affordability.

In 2002-03, NSW had the highest proportion of non-referred attendances that were bulk billed (77.2 per cent), while the ACT had the lowest (39.2 per cent) (figure 10.14). Australia-wide, the proportion of non-referred attendances that were bulk billed declined from 80.6 per cent in 1996-97 to 69.5 per cent in 2002-03 (table 10A.24).

**Figure 10.14 Non-referred (GP) attendances that were bulk billed**



Source: DHA (unpublished); table 10A.24.

Bulk billing rates are generally lower in rural and remote centres than in capital cities or other metropolitan centres. In 2002-03, bulk billing rates were 75.0 per cent in capital cities, 53.4 per cent in large rural centres, 57.9 per cent in remote centres and 70.5 per cent in other remote areas (table 10A.25).

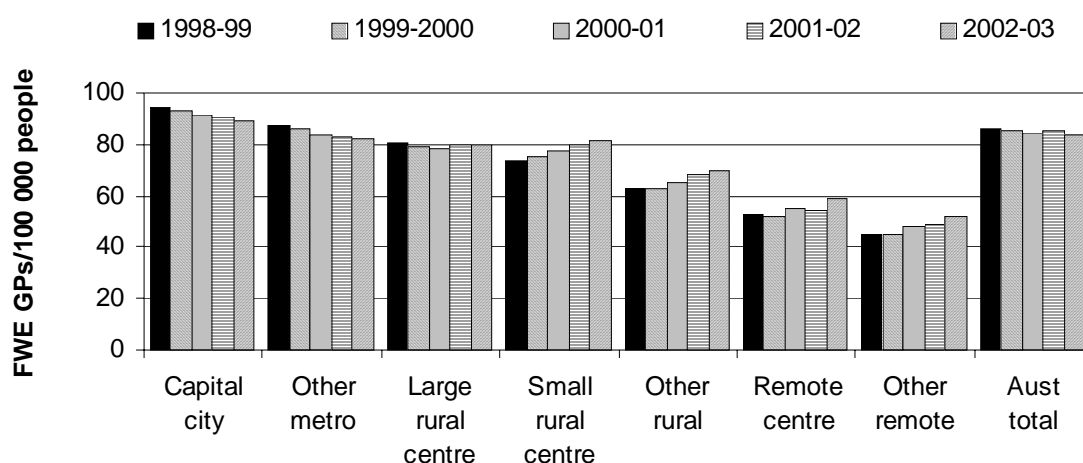
### *Availability of GPs by region*

The availability (or supply) of GPs by region affects people's access to general practice services, particularly in rural and remote areas. Low availability can result

in increased travel distance to a practice, increased waiting times to see a GP and difficulty in booking long consultations. Low availability may also reduce bulk billing rates because there is less competition for patients. Australian, State and Territory governments seek to influence the availability of GPs by providing incentives for the recruitment and retention of GPs in rural and remote areas.

Figure 10.15 shows FWE GPs per 100 000 people by region. There were 83.9 FWE GPs per 100 000 people in Australia in 2002-03: 88.9 per 100 000 in capital cities; 58.9 per 100 000 in remote centres; and 52.3 in other remote areas. Over the five years to 2002-03, FWE GPs per 100 000 people have fallen in metropolitan areas and risen in all rural and remote categories (except in large rural centres where GP availability has remained relatively constant) (figure 10.15).

**Figure 10.15 Full time work load equivalent GPs per 100 000 people, by region<sup>a</sup>**



<sup>a</sup> Capital city = State and Territory capital city statistical divisions; other metropolitan centre = one or more statistical subdivisions that have an urban centre with a population of 100 000 or more; large rural centre = statistical local areas (SLAs) where most of the population resides in urban centres with a population of 25 000 or more; small rural centre = SLAs in rural zones containing urban centres with populations between 10 000 and 24 999; other rural area = all remaining SLAs in the rural zone; remote centre = SLAs in the remote zone containing populations of 5000 or more; other remote area = all remaining SLAs in the remote zone.

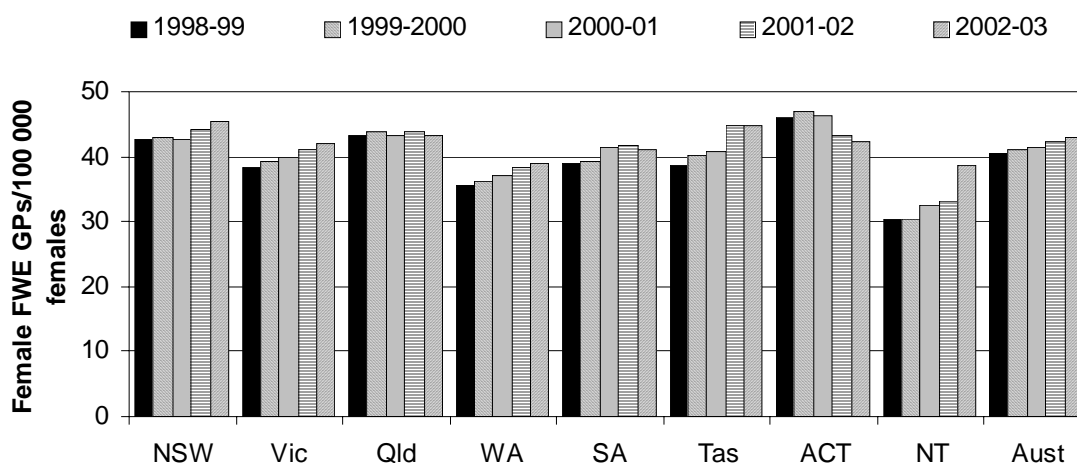
Source: DHA (unpublished); table 10A.26.

### Availability of female GPs

The final access indicator is female FWE GPs per 100 000 female population. As a measure of access, this recognises that some female patients may be uncomfortable discussing health matters with a male GP. Of the 24 260 GPs in 2002-03, 8651 were female. Approximately one third of total GPs are females, representing

approximately one quarter of FWE GPs (tables 10A.4 and 10A.27). In 2002-03, there were 43.0 female FWE GPs per 100 000 females, with the rate highest in NSW (45.4 per 100 000 females) and lowest in WA and the NT (38.9 and 38.8 per 100 000 females) (figure 10.16).

Figure 10.16 Female (full time workload equivalent) GPs per 100 000 females



Source: DHA (unpublished); table 10A.27.

## Efficiency

### *Cost to government of general practice per person*

The cost to government of general practice per person is the only efficiency indicator presented for primary health services.<sup>5</sup> This indicator needs to be interpreted with care, however, because a higher cost per person may reflect service substitution between primary care and hospital services or specialist services (the latter both being potentially higher cost than primary care). As previously mentioned, some primary care services are provided by salaried GPs in community health settings, particularly in rural and remote areas through accident and emergency departments and ACCHSs. Consequently, expenditure reported through Medicare fee-for-service statistics will be understated in jurisdictions with larger proportions of rural and remote populations. Nationally, the annual cost per person was \$172, in 2002-03 (figure 10.1). Australian Government expenditure in that year was highest in SA (\$183 per person) and lowest in the NT (\$99 per person) (table 10A.3).

<sup>5</sup> Includes non-Medicare funding and expenditure by the DVA.

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## Outcomes

The indicators included in this section relate to both intermediate and final outcomes. The child immunisation coverage indicator, for example, relates to the intermediate outcome of immunisation against disease. It is followed by an indicator of the final outcome — notifications of selected childhood diseases — which covers diseases that immunisation can prevent.

### *Child immunisation coverage*

The level of child immunisation coverage has been included in the framework because GPs and community health services are involved in pursuing the objective of achieving high immunisation coverage levels for children. GPs are encouraged to achieve high immunisation coverage levels under the General Practice Immunisation Incentives Scheme, which provides incentives for the immunisation of children in the age group of 0–6 years.

Child immunisation services are delivered by many providers (table 10.5). The Australian Childhood Immunisation Register (ACIR) records suggest GPs have played a major role (since data were first collected in 1996) in immunising children under seven years of age in NSW, Queensland, WA, SA and Tasmania. In Victoria, local governments share the main immunisation provider role with GPs. Territory governments are the significant providers in the ACT and the NT through community health centres (table 10.5). Around 91.2 per cent of Australian children aged 12–15 months at 30 June 2003 were assessed as fully immunised, up from 90.2 per cent at 30 June 2002.<sup>6</sup> In all jurisdictions, between 89.9 and 91.9 per cent of children were fully immunised (figure 10.17).

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<sup>6</sup> Full immunisation at 12 months includes immunisation against diphtheria, tetanus, whooping cough, polio and *Haemophilus influenzae* type b.

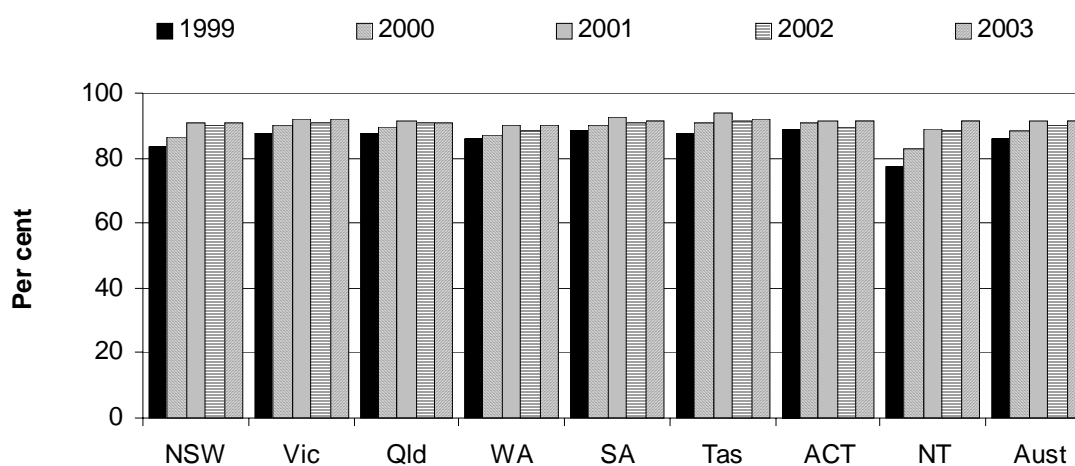
**Table 10.5 Valid vaccinations supplied to children under 7 years of age by the type and State/Territory of the immunising provider, 1996–2003 (per cent)<sup>a</sup>**

<i>Provider</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	83.0	51.3	82.9	63.2	69.3	85.2	37.7	3.2	70.1
Council	6.6	47.6	7.6	7.8	17.2	14.0	–	–	18.1
State and Territory health department	–	–	–	5.2	0.1	0.1	35.2	0.1	1.1
Flying doctor service	–	–	0.4	–	0.2	–	–	–	0.1
Public hospital	2.7	0.3	3.1	5.5	4.3	0.2	1.0	7.4	2.5
Private hospital	0.2	–	–	–	–	–	–	0.9	0.1
Indigenous health service/worker	0.5	0.1	0.6	0.5	0.4	–	0.2	6.8	0.5
Indigenous health worker	–	–	0.6	–	0.1	–	–	0.2	0.1
Community health centre	7.0	0.8	4.9	17.8	8.5	0.5	25.9	81.4	7.5
Community nurse	–	–	–	–	–	–	–	–	–
<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> At 30 June 2003. Data collected since 1 January 1996. – Nil or rounded to zero.

Source: DHA (unpublished); table 10A.28.

**Figure 10.17 Children aged 12–15 months who were fully immunised<sup>a, b, c</sup>**



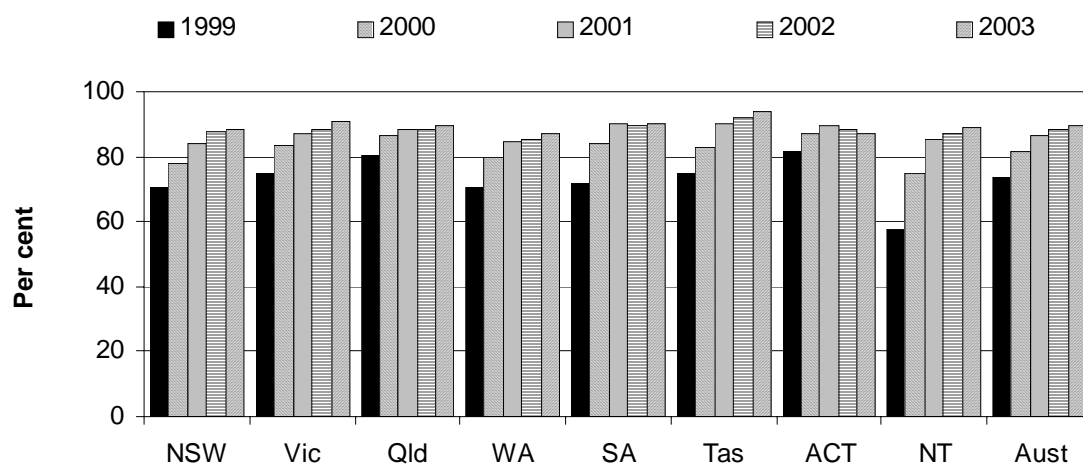
<sup>a</sup> Coverage measured at 30 June for children turning 12 months of age by 31 March. <sup>b</sup> The ACIR includes all children under 7 years of age who are registered with Medicare. By the age of 12 months, over 98 per cent of Australian children have been registered with Medicare (NCIRS 2000). <sup>c</sup> There may be some underreporting by providers, and so vaccine coverage estimates calculated using ACIR data should be considered minimum estimates (NCIRS 2000).

Source: DHA (unpublished); table 10A.29.

Nationally, 89.3 per cent of children aged 24–27 months at 30 June 2003 were assessed as being fully immunised — an increase from 88.1 per cent at 30 June

2002 (figure 10.18).<sup>7</sup> Tasmania recorded the highest proportion (93.6 per cent), while ACT recorded the lowest (86.9 per cent).

Figure 10.18 **Children aged 24–27 months who were fully immunised**<sup>a, b, c</sup>



<sup>a</sup> Coverage measured at 30 June. <sup>b</sup> The ACIR includes all children under 7 years of age who are registered with Medicare. By the age of 12 months, over 98 per cent of Australian children have been registered with Medicare (NCIRS 2000). <sup>c</sup> There may be some underreporting by providers, and so vaccine coverage estimates calculated using ACIR data should be considered minimum estimates (NCIRS 2000).

Source: DHA (unpublished); table 10A.30.

### Notifications of selected childhood diseases

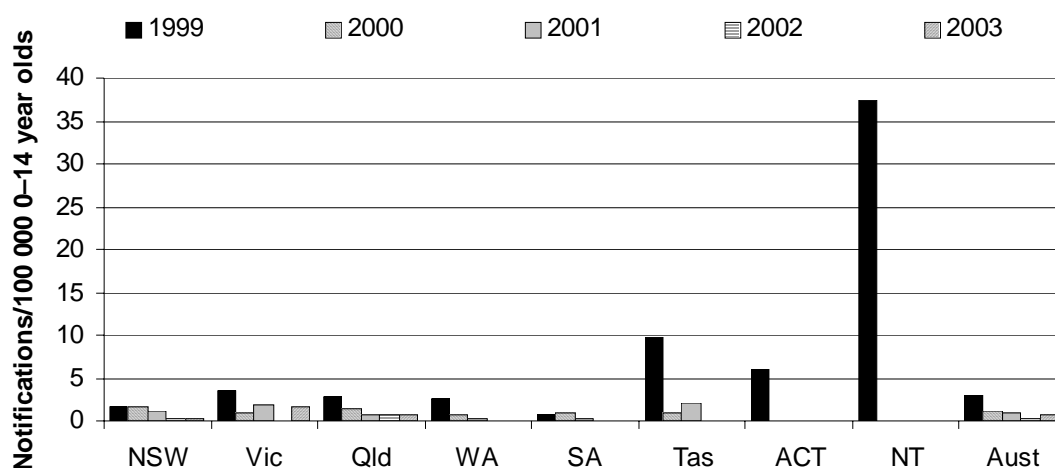
Notification rates for selected childhood vaccine preventable diseases (measles, pertussis [whooping cough] and *Haemophilus influenzae* type b) are used as an indicator because the activities of GPs and community health services can influence the rate of these diseases through immunisation. The debilitating effects of these diseases can be long term or even life threatening. The complications from measles, for example, can include pneumonia, which occurs in one in 25 cases. As part of the Immunise Australia Seven Point Plan, Australia has embarked on a strategy to eliminate measles. The indicator for the rate of notifications for selected childhood diseases reflects the number of notifications for 0–14 year olds per 100 000 children in that age group.

In 2003, the notification rate of measles for 0–14 year olds was 0.7 per 100 000 children in that age group. This rate represents a large decline from the high levels of the early to mid-1990s (table 10A.31). In 1993, for example, there were

<sup>7</sup> Full immunisation at 24 months includes immunisation against diphtheria, tetanus, whooping cough, polio, *Haemophilus influenzae* type b, and measles, mumps and rubella.

3346 notifications of measles for 0–14 year olds, representing a rate of 87.2 per 100 000 children in that age group. In 2003, notification rates for 0–14 year olds for measles were zero in WA, SA, Tasmania, the ACT and the NT, and very low in all other jurisdictions (figure 10.19). All of the notifications for measles in children aged 0–14 years in the NT in 1999 were for East Timorese children evacuated to Darwin.

Figure 10.19 Notification rates for measles among children aged 0–14 years<sup>a</sup>



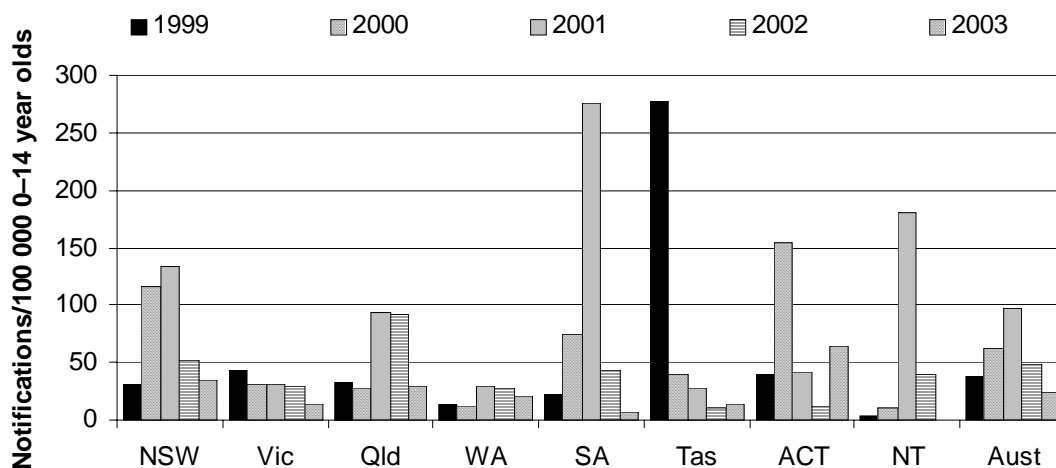
<sup>a</sup> Notifications for 2003 are to June only and have been adjusted to annual rates for comparison.

Source: DHA (unpublished); table 10A.31.

A severe outbreak of pertussis (whooping cough) occurred in 1997 (table 10A.32). The notification rate for Australia in that year was 156.5 notifications for 0–14 year olds per 100 000 people in that age group. As a result of the increased incidence of pertussis, the then Commonwealth Department of Health and Family Services decided to actively encourage the immunisation of all children against the disease. In 2003, the notification rate for 0–14 year olds in Australia was 24.8 (figure 10.20). Across jurisdictions, the highest rate in 2003 was in the ACT (64.7 notifications per 100 000 children aged 0–14 years), while the NT had zero notifications.

In recent years, notification rates for *Haemophilus influenzae* type b have remained low in all jurisdictions (figure 10.21). In 2003, the notification rate Australia-wide was 0.3 per 100 000 children aged 0–14 years. The NT had a rate of 3.9 notifications per 100 000 children aged 0–14 years, while Victoria, WA, Tasmania and the ACT had zero notifications.

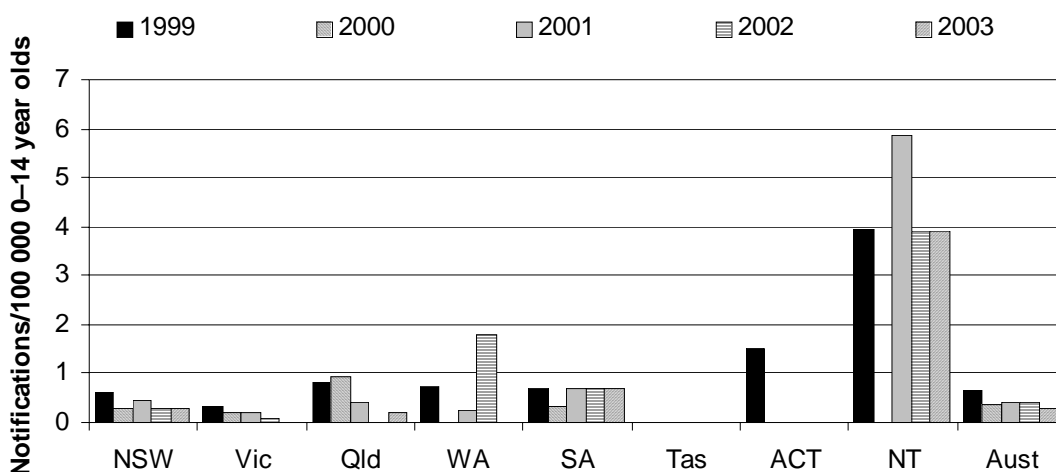
Figure 10.20 Notification rates for pertussis (whooping cough) among children aged 0–14 years<sup>a</sup>



<sup>a</sup> Notifications for 2003 are to June only and have been adjusted to annual rates for comparison.

Source: DHA (unpublished); table 10A.32.

Figure 10.21 Notification rates for *Haemophilus influenzae* type b among children aged 0–14 years<sup>a</sup>



<sup>a</sup> Notifications for 2003 are to June only and have been adjusted to annual rates for comparison.

Source: DHA (unpublished); table 10A.33.

### Cervical screening rates for target population

An outcome indicator for primary and community health is the cervical screening rate for the target population (women aged 20–69 years). Like child immunisation, cervical screening tests (Pap smears) are offered by a range of health care providers

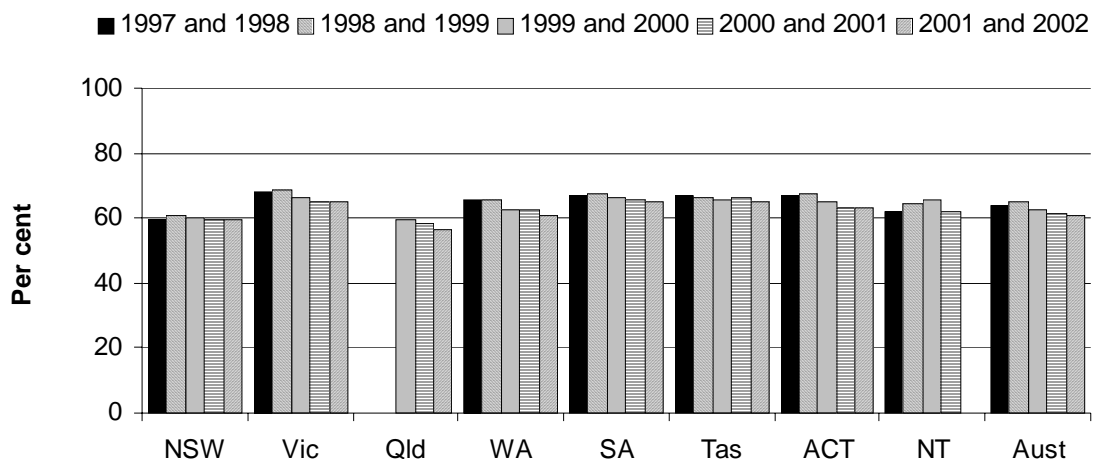
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under the National Cervical Screening Program, including GPs, gynaecologists, family planning clinics and hospital outpatient clinics.

General practitioners play an important role in cervical screening because they are often the first point of contact with the health system and are well placed to provide referrals and support where necessary. Medicare data indicate that GPs take around 80 per cent of smears.

The National Cervical Screening Program targets women aged 20–69 years. The screening interval is two years. Figure 10.22 shows that in the 2001 and 2002 screening period, participation rates by women aged 20–69 years were highest in SA (65.2 per cent) and lowest in Queensland (56.2 per cent) on an age standardised basis. No 2001 and 2002 data were available for the NT. The national screening rate declined from 64.8 per cent in the 1998 and 1999 screening period to 60.9 per cent in the 2001 and 2002 period (figure 10.22). As outlined in the footnotes to figure 10.22, at least part of this decline is likely to be due to changes in the method used to calculate the rates.

Figure 10.22 Participation rates of women aged 20–69 years in cervical screening programs<sup>a, b, c, d, e, f, g</sup>



<sup>a</sup> In 2001, the ABS carried out a full population Census and a National Health Survey. These led to the revision of the ABS estimated resident population (ERP) data, the introduction of a new Australian standard population for use in age standardisation, and the production of new estimates of hysterectomy status among Australian women. The denominators for participation rates for 2001 and 2002 have been calculated using the ABS 2001 National Health Survey hysterectomy fractions and the revised ERP values, and age adjusted using the 2001 Australian standard population. The denominators for the equivalent rates for previous years were calculated using the 1995 ABS National Health Survey hysterectomy fractions and unrevised ERP values and age adjusted using the 1991 Australian standard population. The combined effect of these changes is that participation rates for 2001 and 2002 are on average 1–2 percentage points lower than equivalent rates for previous years. <sup>b</sup> Recent fluctuations in participation rates over time and across jurisdictions may be influenced by improvements in record linkage procedures in the State and Territory screening registers. These allow more accurate tracking of individual screening participants over time and may lead to an apparent decrease in recorded participation rates by up to 3 percentage points. <sup>c</sup> NT data are unavailable for 2002. <sup>d</sup> Rates for Australia before 1999 and 2000 have been calculated excluding Queensland because the Queensland Health Pap Smear Register did not start operating until February 1999. <sup>e</sup> Some State and Territory cervical cytology registers only register women with a valid address in that State or Territory. Victoria began registering resident women from 2000-01, WA registered only resident women up to, and including, 2000-01, while the ACT has consistently only registered women with a valid ACT address. <sup>f</sup> All data are adjusted to remove women who have had a hysterectomy. <sup>g</sup> NSW Cervical Screening Program data indicate the participation rate for women aged 20–69 years up to 2001 is 75.1 per cent over 36 months and 84.2 per cent over 48 months.

Source: AIHW analysis of State and Territory Cervical Cytology Registry data (unpublished); table 10A.34.

### *Influenza vaccination coverage for older people*

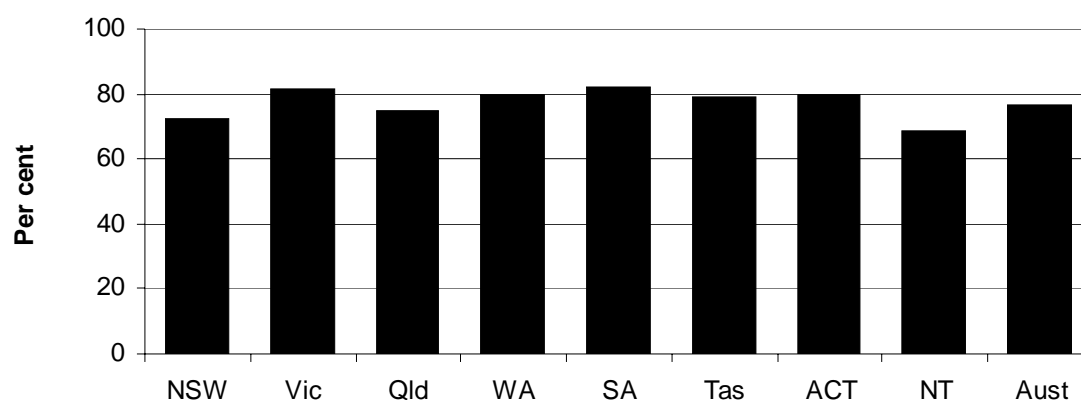
Influenza vaccination for older people has been demonstrated to reduce hospitalisation and death (National Health Performance Committee unpublished). Each year, influenza and its consequences result in many people in this age group being hospitalised, as well as a considerable number of deaths. In 2001, influenza and pneumonia accounted for 2702 deaths in Australia (ABS 2002b). Hospitalisations of older people for influenza are included as a separate indicator.

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Through the National Influenza Vaccine Program for Older Australians, the Australian Government funds free vaccines for Australians aged over 64 years (AIHW 2003b). The vast majority of influenza vaccinations for older people are provided by general practitioners. A survey conducted in 2002 found that 76.9 per cent of people aged over 64 years were vaccinated against influenza in Australia. Vaccination coverage for this age group was highest in SA (82.0 per cent) and lowest in the NT (68.4 per cent) (figure 10.23).

**Figure 10.23 Influenza vaccination coverage, people aged over 64 years, 2002**

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Source: AIHW (2003b); table 10A.35.

### *Potentially preventable hospitalisations*

The following six outcome indicators relate to potentially preventable hospitalisations for a range of conditions. The rationale for these indicators is that the effectiveness of primary health care has a significant influence on the rates of hospitalisation for these conditions. Accordingly, improving the effectiveness of primary health care in these areas has the potential to improve health outcomes in the community and reduce costs in the hospital system. Population health activities that are not covered in this chapter may also play a role in reducing hospitalisations for some conditions.

The first three indicators — hospitalisations for vaccine preventable conditions, acute conditions and chronic conditions — have been developed by the National Health Performance Committee. Box 10.3 provides further information on the development and rationale for these indicators.

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**Box 10.3    Development and rationale for potentially preventable hospitalisation indicators**

The definitions adopted for vaccine preventable conditions, acute conditions and chronic conditions indicators were based on the Victorian Ambulatory Care Sensitive Conditions Study (Department of Human Services Victoria 2002). This study built on research into ambulatory care sensitive conditions (for example Billings, Anderson and Newman 1996, Bindman *et al.* 1995, Weissman, Gatsonis and Epstein 1992), which were recently the subject of systematic review and empirical analysis.

These studies show that the availability of non-hospital care explains a significant proportion of the variation between geographic areas in hospitalisation rates for the specified conditions. Other explanations for this variation include variation in the underlying prevalence of the conditions, clinical coding standards, and the likelihood patients will be treated on an outpatient rather than admitted patient basis. Potentially preventable hospitalisations will never be entirely eliminated, but the variation across geographic areas demonstrates considerable potential for strengthening the impact of non-hospital care.

*Source:* National Health Performance Committee (unpublished).

### *Vaccine preventable hospitalisations*

This indicator relates in part to the previous indicator (influenza vaccination for older people). As a group, people aged over 64 years are at greater risk than the wider population of hospitalisation from influenza and its consequences. People with certain chronic medical conditions are also at greater risk of hospitalisation from influenza, so are encouraged to be vaccinated. The indicator also covers hospitalisations for other vaccine preventable conditions.

In 2001-02, the standardised hospital separation rate for all vaccine preventable conditions was highest in the NT (202.0 per 100 000 people) and lowest in the ACT (49.2 per 100 000 people). Nationally, influenza and pneumonia accounted for 78.8 per cent of hospitalisations for vaccine preventable conditions (table 10.6).

**Table 10.6 Standardised hospital separation rates for vaccine preventable conditions (per 100 000 people), 2001-02<sup>a, b</sup>**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Influenza and pneumonia	65.6	50.9	73.1	93.9	67.2	67.8	42.9	141.4	66.8
Other conditions	22.3	15.8	14.7	14.4	25.9	10.7	6.3	61.4	18.6
<b>Total</b>	<b>87.8</b>	<b>66.7</b>	<b>87.8</b>	<b>108.1</b>	<b>92.8</b>	<b>78.5</b>	<b>49.2</b>	<b>202.0</b>	<b>85.3</b>

<sup>a</sup> Separation rates are directly age standardised to the Australian population at 30 June 2001. <sup>b</sup> The total will not necessarily equal the sum of the individual conditions because an episode may be included in more than one condition.

Source: AIHW (unpublished).

### *Hospitalisations for selected acute conditions*

Hospitalisation for the acute conditions selected for reporting is considered to be potentially preventable in a significant proportion of cases. The standardised hospital separation rate in 2001-02 for all selected acute conditions was highest in the NT (1455.9 per 100 000 people) and lowest in the ACT (870.7 per 100 000 people). Nationally, the two selected acute conditions having the highest rate of hospitalisation were dental conditions, and dehydration and gastroenteritis (table 10.7).

**Table 10.7 Standardised hospital separation rates for potentially preventable acute conditions (per 100 000 people), 2001-02<sup>a, b</sup>**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Dehydration and gastroenteritis	174.4	196.9	229.5	185.3	193.1	177.3	95.4	127.5	191.0
Pyelonephritis <sup>c</sup>	175.8	183.1	200.7	191.3	179.8	121.4	134.8	239.0	182.5
Perforated/bleeding ulcer	26.8	32.3	25.3	36.8	31.9	24.2	31.3	20.9	29.2
Cellulitis	139.9	135.3	161.0	129.9	121.0	117.1	91.4	294.1	140.8
Pelvic inflammatory disease	32.7	34.4	35.6	29.8	33.6	32.1	30.1	48.9	33.6
Ear, nose and throat infections	160.5	139.3	182.9	184.4	210.6	119.6	106.9	159.9	163.7
Dental conditions	161.7	254.1	244.4	291.3	256.1	164.0	131.6	151.6	219.7
Appendicitis	116.5	113.1	138.0	132.8	112.3	130.0	121.9	109.1	121.4
Convulsions and epilepsy	167.3	150.4	159.9	145.6	143.5	160.7	114.0	261.8	157.9
Gangrene	20.1	26.8	24.1	24.2	16.9	39.2	10.7	39.5	23.2
<b>Total</b>	<b>1179.2</b>	<b>1270.6</b>	<b>1412.5</b>	<b>1360.1</b>	<b>1305.6</b>	<b>1095.1</b>	<b>870.7</b>	<b>1455.9</b>	<b>1269.1</b>

<sup>a</sup> Separation rates are directly age standardised to the Australian population at 30 June 2001. <sup>b</sup> The total will not necessarily equal the sum of the individual conditions because an episode may be included in more than one condition. <sup>c</sup> Kidney inflammation caused by bacterial infection.

Source: AIHW (unpublished).

### *Hospitalisations for selected chronic conditions*

Hospitalisation for the chronic conditions selected for reporting is considered to be potentially preventable in a significant proportion of cases. Diabetes is also in this category but is not included because it is considered in more detail in the following indicator. The standardised hospital separation rate for all selected chronic conditions was highest in the NT (1401.2 per 100 000 people) and lowest in the ACT (752.7 per 100 000 people). Nationally, the two selected chronic conditions having the highest rate of hospitalisation were chronic obstructive pulmonary disease and angina (table 10.8). It is worth noting that the hospitalisation rate for diabetes complications was more than two and a half times higher than for either of these conditions.

**Table 10.8 Standardised hospital separation rates for potentially preventable chronic conditions (per 100 000 people), 2001-02<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>
Asthma	215.4	194.5	183.9	220.4	325.0	137.4	113.7	190.2	209.0
Congestive cardiac failure	211.0	234.1	224.4	204.3	221.7	183.9	167.6	241.9	219.3
Chronic obstructive pulmonary disease	281.3	255.8	300.4	271.4	269.7	288.7	190.2	559.8	277.2
Angina	248.5	245.0	313.2	195.5	217.0	255.4	198.8	301.8	252.0
Iron deficiency anaemia	66.0	104.2	77.8	111.1	75.3	82.6	71.2	81.5	83.3
Hypertension	35.7	28.2	38.1	28.8	31.8	30.6	10.8	20.6	32.7
Nutritional deficiencies	0.5	0.6	0.6	1.3	0.3	0.8	0.5	5.3	0.6
<b>Total</b>	<b>1058.5</b>	<b>1062.3</b>	<b>1138.4</b>	<b>1032.8</b>	<b>1140.9</b>	<b>979.3</b>	<b>752.7</b>	<b>1401.2</b>	<b>1074.1</b>

<sup>a</sup> Separation rates are directly age standardised to the Australian population at 30 June 2001. <sup>b</sup> The total will not necessarily equal the sum of the individual conditions because an episode may be included in more than one condition.

Source: AIHW (unpublished).

### *Management of diabetes*

General practitioners and community health services can play a significant role in the management of diabetes, by diagnosing their patients and enrolling them in structured care, and by following best practice condition management guidelines, including where early intervention is warranted. Over time, good management should start to noticeably affect patients' secondary care requirements, preventing avoidable admissions to hospitals. While good primary health care can limit the development of diabetic complications, patient compliance with measures to

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maintain blood glucose levels within the near normal range (such as medication, diet and physical activity) also plays an important part.

Three measures for the management of diabetes are presented this year:

- hospital separation rates for Type 2 diabetes mellitus as principal diagnosis
- hospital separation rates for Type 2 diabetes mellitus as principal diagnosis with complications (circulatory, renal and ophthalmic)
- hospital separations for lower limb amputations where Type 2 diabetes mellitus was a principal or additional condition.

No new data are available for the following measures that were reported in the 2002 Report:

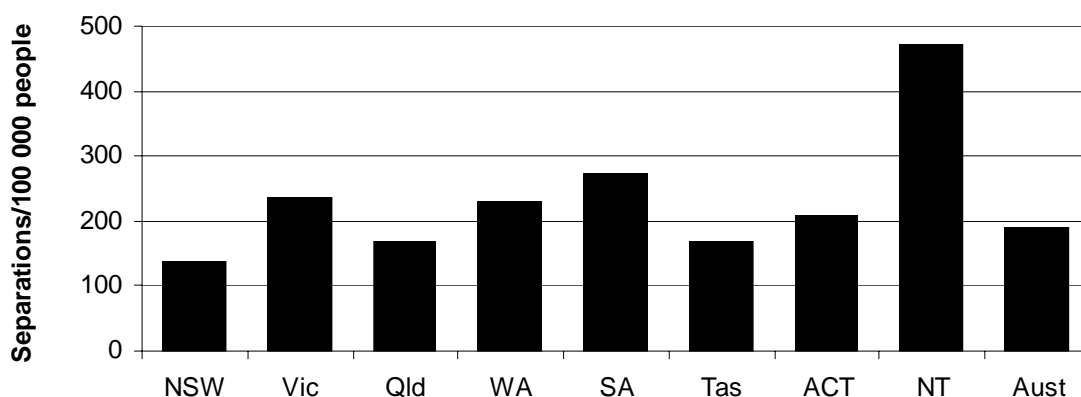
- the proportion of adults with diabetes who have been diagnosed and placed on a diabetes register
- the proportion of registered people with diabetes who have had a glycaemic control assessment and the proportion who tested as seriously at risk of future complications.

These measures were based on data from the National Divisions Diabetes Program Data Collation project carried out in 1999 and 2000. Data are expected to be available for the 2005 Report.

Poorly controlled diabetes mellitus results in the development of various associated conditions, the most common being renal, circulatory and ophthalmic complications that usually require admission to hospital. GPs and some other primary health providers are well placed to both detect diabetes early and provide care that can help prevent or slow the development of the complications of diabetes. Hospital separation rates for Type 2 diabetes and its complications may initially increase as a result of the ageing of the population, increasing longevity, and increasing risk factors, particularly excess weight in recent decades. An extensive program of early diagnosis and management in the primary care sector may lead to a gradual reversal of current trends and continuing reductions in the rates of hospitalisation for diabetes and its complications. It has been difficult to interpret time trends of hospital separation data in the context of diabetes management in the primary care sector, largely because diabetes coding guidelines and practice have been evolving in the past few years.

Age standardised rates for hospital separations in all hospitals in 2001-02 where the principal diagnosis was Type 2 diabetes mellitus are reported in figure 10.24. Separation rates were highest in the NT (473.3 separations per 100 000 people) and lowest in NSW (136.8 separations per 100 000 people).

Figure 10.24 **Hospital separation rates for Type 2 diabetes mellitus as principal diagnosis, all hospitals, 2001-02<sup>a, b, c, d, e, f, g, h, i, j, k, l</sup>**

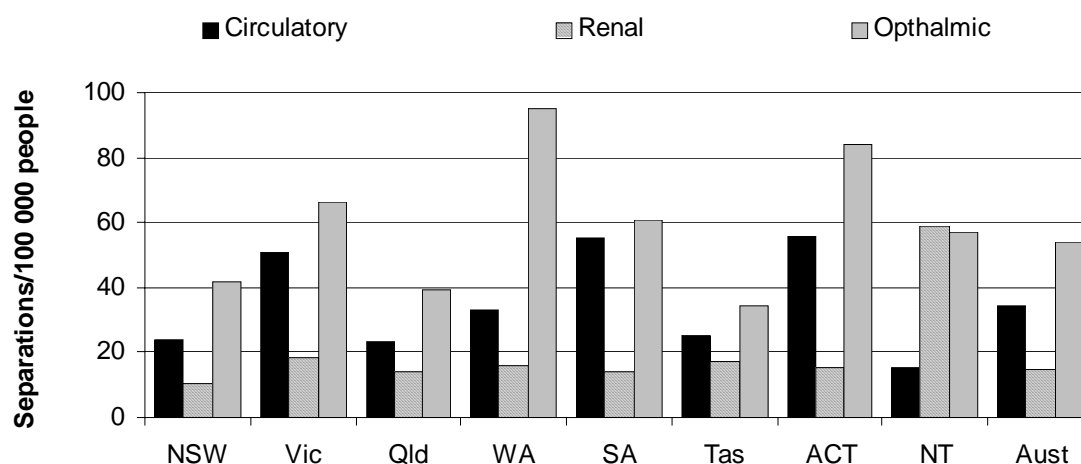


<sup>a</sup> Separation rates are directly age standardised to the Australian population at 30 June 2001. <sup>b</sup> Figures include unspecified diabetes. <sup>c</sup> Totals include separations for unspecified complications. <sup>d</sup> Crude rates for each jurisdiction were calculated using ABS estimated resident population by age group for the respective jurisdiction. <sup>e</sup> The figures are based on the ICD-10-AM classification. The codes are E11.x and E14.x, where x=2 renal complications, x=3 ophthalmic complications, x=5 peripheral circulatory complications, x=7 multiple complications, x=8 unspecified complications, x=9 without complications and x=0,1,4,6 other specified complications. <sup>f</sup> The data are not person based, but episode based. A person who is admitted to hospital, say, three times in the year will be counted three times. <sup>g</sup> The principal diagnosis data are episode based, but the secondary diagnosis data are diagnosis based. A separation is represented three times in secondary diagnosis if given three different diabetes codes. <sup>h</sup> Age standardisation tends to exaggerate the effect of multiple episodes for individual patients, particularly in small populations. <sup>i</sup> Although same day admissions for dialysis are not normally coded with a principal diagnosis of Type 2 diabetes, the data could include miscoded separations in several jurisdictions. The results for small jurisdictions reflect both this type of distortion and unreliability arising from small numbers. <sup>j</sup> Results for individual complications may be affected by small numbers, particularly in the smaller jurisdictions, and need to be interpreted with care. <sup>k</sup> Differences across jurisdictions in policy and practice relating to the admission of patients, the availability of outpatient services and incentives to admit patients rather than treat them as outpatients will affect estimates of hospital separations. <sup>l</sup> Morbidity data are coded under coding standards that may differ over time and across jurisdictions.

Source: AIHW unpublished; table 10A.36.

Figure 10.25 shows the age standardised separation rates in 2001-02 for the three largest groups of Type 2 diabetes complications: circulatory, renal and ophthalmic. In all jurisdictions except the NT, ophthalmic complications accounted for the highest separation rates. In the NT, the rate of renal complications was highest, marginally above the rate of ophthalmic complications. The NT also had a high rate for multiple complications (207.2 separations per 100 000 people). One or more of circulatory, renal and ophthalmic complications may be present for diabetes hospitalisations designated as having multiple complications (table 10A.36).

Figure 10.25 Hospital separation rates for Type 2 diabetes mellitus as principal diagnosis with complications, all hospitals, 2001-02<sup>a, b, c, d, e, f, g, h, i, j, k, l</sup>



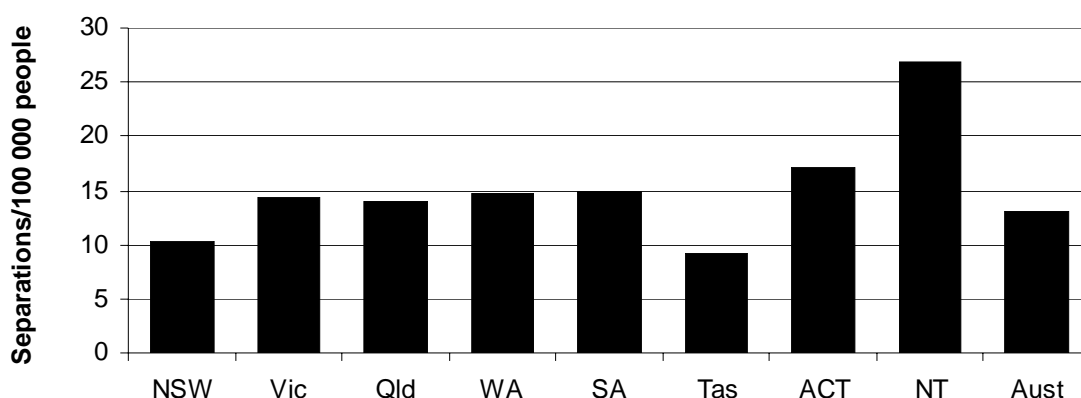
<sup>a</sup> Separation rates are directly age standardised to the Australian population at 30 June 2001. <sup>b</sup> Figures include unspecified diabetes. <sup>c</sup> Totals include separations for unspecified complications. <sup>d</sup> Crude rates for each jurisdiction were calculated using ABS estimated resident population by age group for the respective jurisdiction. <sup>e</sup> The figures are based on the ICD-10-AM classification. The codes are E11.x and E14.x, where x=2 renal complications, x=3 ophthalmic complications, x=5 peripheral circulatory complications, x=7 multiple complications, x=8 unspecified complications, x=9 without complications and x=0,1,4,6 other specified complications. <sup>f</sup> The data are not person based, but episode based. A person who is admitted to hospital, say, three times in the year will be counted three times. <sup>g</sup> The principal diagnosis data are episode based, but the secondary diagnosis data are diagnosis based. A separation is represented three times in secondary diagnosis if given three different diabetes codes. <sup>h</sup> Age standardisation tends to exaggerate the effect of multiple episodes for individual patients, particularly in small populations. <sup>i</sup> Although same day admissions for dialysis are not normally coded with a principal diagnosis of Type 2 diabetes, the data could include miscoded separations in several jurisdictions. The results for small jurisdictions reflect both this type of distortion and unreliability arising from small numbers. <sup>j</sup> Results for individual complications may be affected by small numbers, particularly in the smaller jurisdictions, and need to be interpreted with care. <sup>k</sup> Differences across jurisdictions in policy and practice relating to the admission of patients, the availability of outpatient services and incentives to admit patients rather than treat them as outpatients will affect estimates of hospital separations. <sup>l</sup> Morbidity data are coded under coding standards that may differ over time and across jurisdictions.

Source: AIHW unpublished; table 10A.36.

Treatment for Type 2 diabetes and related conditions is also provided in ambulatory care settings. The number of people accessing ambulatory services is not included in the hospital separations data. Differences across jurisdictions in policy and practice relating to the admission of patients, the availability of outpatient services and incentives to admit patients rather than treat them as outpatients will affect estimates of hospital separations. This is partly reflected in the substantial variation in the proportion of same day separations across jurisdictions. In 2001-02, the NT (45.3 per cent) and SA (44.7 per cent) had relatively high same day separation rates for principal diagnosis of Type 2 diabetes mellitus, while Queensland (31.9 per cent) and NSW (32.1 per cent) had relatively low rates (table 10A.37).

Amputation of a lower limb can be a serious outcome of diabetes related complications. In 2001-02, there were 13.0 hospital separations per 100 000 people (age standardised) for lower limb amputations where Type 2 diabetes mellitus was a principal or additional diagnosis (figure 10.26). Across jurisdictions, this rate was highest in the NT (26.9) and lowest in Tasmania (9.2).

**Figure 10.26 Hospital separation rates for lower limb amputation with principal or additional diagnosis of Type 2 diabetes, all hospitals, 2001-02<sup>a, b</sup>**



<sup>a</sup> Includes unspecified diabetes. Separation rates are directly age standardised to the Australian population at 30 June 2001. The figures are based on the ICD-10-AM classification. The codes are E11.x and E14.x, where x=0-9 for diabetes, and Blocks 1533, 44367, 44370 and 44373 for amputations. <sup>b</sup> The data are not person based, but episode based. A person who is admitted to hospital, say three times in the year, will be counted three times.

Source: AIHW unpublished; table 10A.38

Chapter 9 includes standardised hospital separation ratios for selected conditions that illustrate differences between the rates of Indigenous hospital admissions and those of the total Australian population, taking into account differences in age distributions. For males, there was a marked difference in 2001-02 between Indigenous separation rates and those of the total male population for all diabetes<sup>8</sup> (with Indigenous separation rates being 5.4 times higher than those for all Australians) (figure 9.12). Indigenous females' separation rates were also markedly higher than those for the total female population for all diabetes (with the rate for Indigenous females being 6.7 times the rate for all females) (figure 9.13).

<sup>8</sup> 'All diabetes' refers to separations with either a principal or additional diagnosis of diabetes.

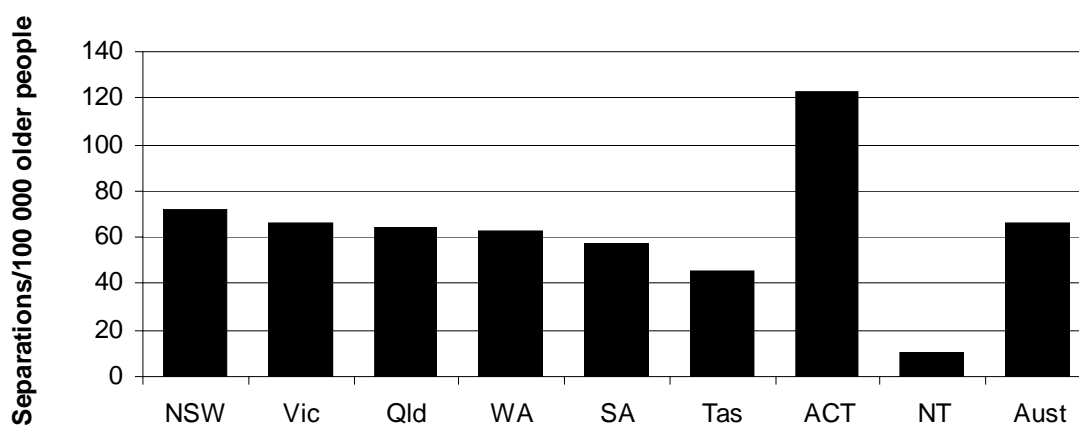
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### *Hospitalisations of older people for falls*

For this indicator, older people are defined as non-Indigenous people aged 75 years or over and Indigenous people aged 55 years or over. Figure 10.27 shows that the age standardised separation rate in 2001-02 for older people for injuries due to falls was highest in the ACT (122.7 per 100 000 older people) and lowest in the NT (10.7 per 100 000 older people). Nationally, the rate was 66.0 per 100 000 older people.

**Figure 10.27 Standardised separation rates for older people for injuries due to falls, 2001-02<sup>a</sup>**

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<sup>a</sup> Older people are defined as non-Indigenous people aged 75 years or over and Indigenous people aged 55 years or over.

Source: AIHW (unpublished); table 10A.39.

## **10.5 Future directions in performance reporting**

Given that this is the first year that the chapter includes primary and community health services beyond those provided by general practices, the indicators still focus heavily on general practice services. This focus partly reflects the lack of information that is available on a nationally consistent basis to support reporting against indicators for other primary and community health services. The National Health Performance Committee has recognised this issue and is working to introduce a broader range of primary and community health indicators. Where appropriate, these indicators will be included in future reports.

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Possible areas where indicators may be available for inclusion in the 2005 Report or future reports include:

- dental health services
- community-based drug and alcohol treatment services
- additional indicators relating to the use of the Medicare Benefits Schedule EPC items.

The scope of the chapter may also be further refined to ensure the widest feasible coverage of primary health services.

### **Indigenous health**

The overview of Indigenous health included in the Health preface identifies barriers to accessing primary health services as a factor contributing to the health status of Indigenous people being generally poorer than that for other Australians. Evidence of access deficiencies includes the apparent low rate of expenditure on these services for Indigenous people. In recognition of this, the Steering Committee has identified primary and community health services for Indigenous people as a priority area for reporting. Accordingly, the feasibility of including indicators of the accessibility of primary and community health services to Indigenous people will be examined. If possible, indicators relating to the capability of the health workforce and other aspects of the health system's capability to address the primary health care needs of Indigenous people will also be developed.

## 10.6 Definitions

Table 10.9 Terms

<i>Term</i>	<i>Definition</i>
Age standardised	Removing the effect of different age distributions (across jurisdictions or over time) when making comparisons, by weighting the age-specific rates for each jurisdiction by the national age distribution.
Ambulatory services	Services provided by an acute care hospital to non-admitted patients.
Casemix adjustment	Adjusting data on cases treated to account for the number and type of cases. Cases are sorted into diagnosis related groups that represent a class of patients with similar clinical conditions requiring similar hospital services.
Cervical screening rates for target population	Proportion of women screened against cervical cancer in the age group 20–69 years.
Community health services	Health services for individuals and groups delivered in a community setting, rather than in hospitals or private facilities.
Consultations	The different types of services provided by GPs.
Cost to government of general practice per person	Cost to the Australian Government of total non-referred attendances by non-specialist medical practitioners per person.
Divisions of General Practice	Geographically based networks of GPs. Currently there are 121 Divisions of General Practice. The Divisions of General Practice Program evolved from the former Divisions and Projects Grants Program established in 1992. The aim of the Divisions of General Practice Program is to improve health outcomes for patients by encouraging GPs to work together and link with other health professionals to upgrade the quality of health service delivery at the local level.
Fully immunised at 12 months	A child who has completed three doses of diphtheria, tetanus, pertussis vaccine, three doses of oral polio vaccine and three doses of HbOC (HibTITER) (or two doses of PRP-OMP [PedvaxHIB])
Fully immunised at 24 months	A child who has received four doses of diphtheria, tetanus, pertussis vaccine, three doses of oral polio vaccine, four doses of HbOC (HibTITER) (or three doses of PRP-OMP [PedvaxHIB]) and one dose of measles, mumps, rubella vaccine.
Full time workload equivalents	A measure of medical practitioner supply based on claims processed by Medicare in a given period, calculated by dividing the practitioner's Medicare billing by the mean billing of full time practitioners for that period. Full time equivalents are calculated in the same way as full time workload equivalents except that full time equivalents are capped at one for each practitioner.
General practice	The organisational structure in which one or more GPs provide and supervise health care for a 'population' of patients. Includes medical practitioners who work solely with one specific population, such as women's health or Indigenous health.

(Continued on next page)

Table 10.9 (Continued)

<i>Term</i>	<i>Definition</i>
General practitioner (GP)	Medical practitioners who, for the purposes of Medicare, are vocationally registered under section 3F of the <i>Health Insurance Act 1973</i> (Cwlth), hold fellowship of the Royal Australian College of General Practitioners or equivalent, hold a recognised training placement or are otherwise entitled to bill Group A1 Medicare Benefits Schedule items. Or other medical practitioners who have at least half of the schedule fee value of their Medicare billing from non-referred attendances, consisting solely or predominantly of Group A2 items.
Health management	An ongoing process beginning with initial client contact and including all actions relating to a client. Includes: assessment/evaluation; education of the person, family or carer(s); diagnosis and treatment; management of problems associated with adherence to treatment; and liaison with or referral to other agencies.
Immunisation coverage	A generic term indicating the proportion of a target population that is fully immunised with a particular vaccine or the specified vaccines from the National Immunisation Program for that age group.
Management of upper respiratory tract infections	Number of prescriptions ordered by GPs for the oral antibiotics most commonly used in the treatment of upper respiratory tract infections per 1000 people with PBS concession cards.
Non-referred attendances	GP services, emergency attendances after hours, other prolonged attendances, group therapy and acupuncture. All attendances for specialist services are excluded because these must be 'referred' to receive Medicare reimbursement.
Non-specialist attendances that are bulk billed	Number of non-referred attendances that are bulk billed and provided by non-specialist medical practitioners, divided by the total number of non-referred attendances.
Non-specialist medical practitioners by region	Number of full time workload equivalent non-specialist medical practitioners practising in capital cities, other metropolitan centres and rural/remote areas, divided by the total number of FWE non-specialists.
Notifications of selected childhood diseases	Number of cases of measles, pertussis and <i>Haemophilus influenzae</i> type b notified by State and Territory health authorities.
Other medical practitioner	A medical practitioner other than a recognised GP who has at least half of the schedule fee value of his/her Medicare billing from non-referred attendance items consisting solely or predominantly of Group A2 items.

(Continued on next page)

**Table 10.9 (Continued)**

<i>Term</i>	<i>Definition</i>
Other specialist	A medical practitioner not classified as a general practitioner, other medical practitioner or recognised specialist who undertakes a majority of specialist work, but who is 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.
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 referred diagnostic imaging	Total benefits paid for diagnostic imaging tests referred by GPs divided by the population.
Primary health care	The primary and community health care sector includes services that: <ul style="list-style-type: none"> <li>• provide the first point of contact with the health system</li> <li>• have a particular focus on prevention of illness or early intervention</li> <li>• are intended to maintain people's independence and maximise their quality of life through care and support at home or in local community settings.</li> </ul>
Prevalence	The proportion of the population suffering from a disorder at a given point in time (point prevalence) or during a given period (period prevalence).
Preventative interventions	Programs designed to decrease the incidence, prevalence and negative outcomes of disorders.
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.
Proportion of GPs with vocational recognition	Number of full time workload equivalent GPs who are vocationally recognised, divided by the total number of full time workload equivalent GPs.
Proportion of general practices registered for accreditation	Number of practices that have registered for accreditation through AGPAL divided by the total number of practices in the Divisions of General Practice.
Proportion of general practices with electronic information management systems	Number of practices with electronic prescribing and/or electronic connectivity that are registered under the Practice Incentives Program, divided by the total number of practices registered.
Public health	The organised, social response to protect and promote health and to prevent illness, injury and disability. The starting point for identifying public health issues, problems and priorities, and for designing and implementing interventions, is the population as a whole or population subgroups. Public health is characterised by a focus on the health of the population (and particular at-risk groups) and complements clinical provision of health care services.

(Continued on next page)

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Table 10.9 (Continued)

<i>Term</i>	<i>Definition</i>
Psychiatrist	A medical practitioner with specialist training in psychiatry.
Reasons for encounter	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 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.
Vocational recognition	GPs who are registered separately for Medicare purposes and who receive higher Medicare benefits for services.

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