# 11 Primary and community health

This chapter covers general practice, primary healthcare services for Indigenous people, drug and alcohol treatment, public dental services, maternal and child health, the Pharmaceutical Benefits Scheme (PBS) and a range of other community health services. The scope of this chapter does not extend to:

- Home and Community Care program services (see chapter 13, 'Aged care')
- public hospital emergency departments and outpatient services (see chapter 10, 'Public hospitals')
- community mental health services (see chapter 12, 'Health management issues').

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

Descriptive information about primary and community health services is contained in section 11.1. A framework of performance indicators is presented in section 11.2, and key performance indicator results are discussed in section 11.3. Future directions for reporting are covered in section 11.4, and relevant terms are defined in section 11.5. Section 11.6 lists the attachment tables for this chapter. Attachment tables are identified in references throughout the chapter by an 'A' suffix (for example, table 11A.3 is table 3 in the attachment). Attachment tables are available on the CD-ROM enclosed with the Report or from the Review website: www.pc.gov.au/gsp. Section 11.7 lists references used in this chapter.

The following improvements have been made in the reporting of primary and community health in this Report:

- data are reported for a new indicator of equity of access, 'early detection and early treatment for Indigenous people'
- data for both Australian general practice accrediting bodies are reported against the indicator 'general practices with accreditation' (data have previously been available for only one accrediting body).

## 11.1 Profile of primary and community health

### Definitions, roles and responsibilities

General practitioners (GPs) are a significant 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.* 2008). Most of the data in this chapter include two types of medical practitioner who provide GP services:

- vocationally recognised general practitioners (GPs) — medical practitioners who are vocationally recognised under s.3F of the *Health Insurance Act 1973* (Cwlth), hold Fellowship of the RACGP or equivalent (Fellowship of the RACGP has been required since 1996, to achieve vocational recognition) or hold a recognised training placement
- other medical practitioners (OMP) — medical practitioners who are not vocationally recognised GPs.

While the majority of GPs provide services as part of a general practice, some GPs are employed by hospitals or other organisations in full time or part time capacities. General practice is the business structure within which one or more GPs and other staff, such as practice nurses, provide and supervise healthcare for patients presenting to the practice. General practices are predominantly privately owned, by either the GPs or corporate entities. In Australia, general practices are an important source of primary healthcare. 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 healthcare services (DHFS 1996). Definitions for common health terms are provided in section 11.5.

A patient's ability to access GP services can influence demand for other health services, for example, a lack of GP services in a particular area can be related to high use of emergency departments. Not having a regular GP, or dissatisfaction with the usual sources of primary health care, may also lead to increased use of emergency departments (Van Konkelenberg, Esterman, Van Konkelenberg 2003). In some of these cases, the use of an emergency department may not be appropriate for the patient's condition, which could be better treated by a GP or some other form of primary care. Inappropriate attendance at an emergency department has

been found to be related to the patient's proximity to, or convenience of, the emergency department. It is also related to the patient's trust and regard for the emergency department staff (Van Konkelenberg, Esterman, Van Konkelenberg 2003).

The Australian Government provides the majority of general practice income through Medicare 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 provide additional incentives for GPs to locate in rural and remote areas.

The Australian Government also subsidises the cost of many prescription medicines through the PBS. The PBS aims to provide all Australians affordable, reliable and timely access to prescription medicines. Around 80 per cent of prescriptions dispensed in Australia are subsidised under the PBS (DoHA 2007a). Users make a co-payment, with the Australian Government paying the remaining cost for drugs eligible for subsidy. For concession card holders the co-payment is currently $4.90. For other people (general consumers), the co-payment is currently $30.70. These amounts are normally adjusted in line with inflation on 1 January each year. Both concession card holders and general consumers are subject to a safety net threshold. Once spending within a calendar year has reached the relevant threshold, PBS medicines will generally be cheaper or free for the rest of the calendar year for these people. The 2007 safety net threshold is $1059.00 for general patients and $274.40 for people holding a concession card (DoHA 2007b).

The Repatriation Pharmaceutical Benefits Scheme (RPBS) provides subsidised pharmaceuticals to war veterans and war widows. Unlike the PBS, which is a universal scheme, the RPBS provides access to additional pharmaceutical items and dressings for entitled veterans and war widows. The RPBS is administered by the Department of Veterans' Affairs (DVA). The drugs eligible for subsidy under the RPBS differ from those eligible under the PBS, and drugs eligible for subsidy under the RPBS may not be eligible under the PBS.

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 (including local governments) or funded by government and managed by a local health service or 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 health services for Indigenous people.

The Australian Government also supports patients with chronic conditions and complex care needs through access to certain allied health services under Medicare. From 1 July 2005, eligible patients were able to receive a Medicare rebate for up to five allied health and three dental services per twelve month period, on referral from a GP. The dental services component was considerably expanded in November 2007.

The Australian Government and the states and territories play different roles in supporting dental services in Australia's mixed system of public and private dental health care. The Australian Government supports the provision of dental services primarily through the 30 per cent private health insurance rebate. The Australian Government also provides Medicare funding for dental services for patients with chronic conditions and complex care needs, and for a limited range of medical services of an oral surgical nature. In addition, the Australian Government provides funding for the dental care of war veterans and full-time and part-time members of the Australian Defence Force. It also has a role in the provision of dental services through Community Controlled Aboriginal Medical Services. The states and territories have the main responsibility for the delivery of the major public dental health care programs, primarily directed at children and disadvantaged adults. Each jurisdiction determines its own eligibility requirements for accessing public dental services, usually requiring a person to hold a concession card issued by Centrelink.

## Funding

### *General practice*

Almost all of the services provided by private GPs are at least partly funded by the Australian Government through Medicare and the DVA. This is illustrated by data from the annual Bettering the Evaluation and Care of Health (BEACH) survey of general practice activity in Australia. The BEACH survey found that 94.4 per cent of all encounters with GPs in 2006-07 were for services at least partly funded by Medicare or the DVA (table 11.1). The Australian Government also provides payments to GPs through the Practice Incentives Program (PIP) and the General Practice Immunisation Incentives Scheme (GPII) (DHAC 2000). These payments are included in the data for Australian Government expenditure presented in figure 11.24. The Australian Government also invests in general practice through the Divisions of General Practice Program.

The Australian Government spent approximately $5.1 billion, or $247 per person, on general practice in 2006-07, including through Medicare, non-Medicare funding, expenditure by the DVA and other funding programs (figure 11.24). This does not give a complete picture of government expenditure on primary health because it does not include expenditure on Indigenous primary health care services, other community health services, and services delivered through hospital accident and emergency departments. These types of primary healthcare are more prevalent in rural and remote areas. Accordingly, expenditure on primary health is understated, particularly in jurisdictions with larger proportions of Indigenous people and people living in rural and remote areas. The Health preface includes expenditure data for Indigenous primary and community health services for 2001-02.

Table 11.1 **GP encounters, by source of funding, 2006-07[a, b, c]**

| | *Number*[d] | *Per cent of all encounters*[e] | *95% LCL* | *95% UCL* |
|---|---|---|---|---|
| GPs participating in the BEACH survey | 930 | .. | .. | .. |
| Total encounters for which BEACH data were recorded | 91 805 | .. | .. | .. |
| Encounters with missing data | 7 167 | .. | .. | .. |
| Direct encounters | 83 106 | 98.2 | 97.9 | 98.4 |
| No charge | 430 | 0.5 | 0.4 | 0.6 |
| Medicare paid[f] | 79 193 | 94.4 | 94.9 | 99.1 |
| Workers compensation | 1 925 | 2.3 | 2.1 | 2.5 |
| Other paid (hospital, State, etc.) | 876 | 1.0 | 0.8 | 1.3 |
| Indirect encounters[g] | 1 531 | 1.8 | 1.6 | 2.1 |

LCL = lower confidence limit. UCL = upper confidence limit. [a] April 2006 to March 2007. [b] An 'encounter' is any professional interchange between a patient and a GP (Britt *et al*. 2008). [c] Data from the BEACH survey may not be directly comparable with the other data on medical practitioners that are reported in this chapter. [d] Number of encounters after post-stratification weighting for GP activity and GP age and sex. [e] Missing data removed. [f] Includes Australian Government payments made through the DVA. [g] Indirect encounters are those at which the patient is not seen by the GP but that generate a prescription, a referral, a certificate or another service. .. Not applicable.

*Source*: Britt *et al.* (2008); table 11A.1.

State and Territory governments provide funding for general practice through a number of programs. Generally, this funding is provided indirectly through support services for GPs (such as assistance with housing and relocation, education programs, and employment assistance for spouses and family members of doctors in rural areas), or education and support services for public health issues such as diabetes management, smoking cessation, sexual health, and mental health and counselling. Non-government sources — insurance schemes (such as private health insurance, workers compensation and third party insurance) and private individuals — also provide payments to GPs.

### *Pharmaceutical Benefits Scheme and Repatriation Pharmaceutical Benefits Scheme*

Expenditure on the PBS and RPBS was around $5.9 billion, or $284 per person, in 2006-07. Expenditure on the PBS was around $5.5 billion in 2006-07, 80.4 per cent of which was expenditure on concessional patients (table 11.2). Data on government expenditure on pharmaceuticals is also presented in the 'Health preface.'

Table 11.2 **PBS and RPBS expenditure, 2006-07 ($ million)[a]**

| | *NSW* | *Vic* | *Qld* | *WA* | *SA* | *Tas* | *ACT* | *NT* | *Aust* |
|---|---|---|---|---|---|---|---|---|---|
| PBS general[b] | 359.0 | 259.9 | 206.1 | 107.8 | 81.2 | 21.9 | 22.4 | 6.1 | 1 064.4 |
| PBS concessional[c] | 1 529.6 | 1 105.3 | 832.3 | 367.9 | 382.9 | 124.6 | 45.4 | 13.4 | 4 401.4 |
| PBS doctor's bag | 3.9 | 2.6 | 2.3 | 0.7 | 0.8 | 0.2 | 0.1 | – | 10.7 |
| PBS total | 1 892.4 | 1 367.8 | 1 040.7 | 476.4 | 464.9 | 146.7 | 68.0 | 19.5 | 5 476.5 |
| RPBS total[d] | 154.4 | 96.5 | 99.2 | 34.4 | 34.3 | 13.2 | 6.4 | 0.8 | 439.3 |
| **Total** | **2 046.8** | **1 464.3** | **1 139.9** | **510.7** | **499.3** | **160.0** | **74.4** | **20.3** | **5 915.7** |
| $ per capita | 298.6 | 283.5 | 275.9 | 245.4 | 316.8 | 325.3 | 221.1 | 95.7 | 283.7 |

**a** State and Territory level data are only available on a cash basis for general, concessional and doctor's bag categories. These figures are not directly comparable to those published in the DoHA annual report which are prepared on an accrual accounting basis and also include other categories administered under special arrangements (such as dispensing conducted under S100 of the *National Health Act 1953* [Cwlth]). **b** Includes PBS general ordinary and safety net. **c** Includes concessional ordinary and concessional free safety net. **d** Includes RPBS ordinary and RPBS safety net. – Nil or rounded to zero.

*Source*: DoHA (unpublished).

### *Community health services*

Expenditure data that precisely match the community health services covered in this chapter are not available. The Australian Institute of Health and Welfare (AIHW) publishes expenditure data on community and public health, and dental services. However, the former category includes public health activities that are not covered in this chapter, such as food safety regulation 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 2005-06, government expenditure on community and public health was around $5.0 billion, with State, Territory and local government providing 75.7 per cent and the Australian Government providing 24.3 per cent of this expenditure (table 11.3). Australian Government direct outlay expenditure on dental services was $96 million in 2005-06, and State, Territory and local government expenditure was $515 million (table 11.3). In some states and territories, additional expenditure is incurred through schemes that fund the provision by private practitioners of public dental health services for eligible people.

Table 11.3 **Estimated funding on community and public health, and dental services, 2005-06 ($ million)**

| | *Australian Government* | | | | | | |
|---|---|---|---|---|---|---|---|
| | *Direct outlays* | *Premium rebates*[a] | *Total* | *State and local govt* | *Total govt* | *Non-govt* | *Total* |
| Community and public health[b] | 1 217 | – | 1 217 | 3 799 | 5 016 | 360 | 5 376 |
| Dental services[c] | 96 | 384 | 480 | 515 | 995 | 4 342 | 5 337 |

[a] Government expenditure on premium rebates relates to private health and dental services that are not within the scope of this chapter. [b] Includes some expenditure that was previously classified as 'other non-institutional (not elsewhere classified)', as well as expenditure on community and public health services. [c] Australian Government direct outlays on dental services are for services provided to veterans through DVA. – Nil or rounded to zero.

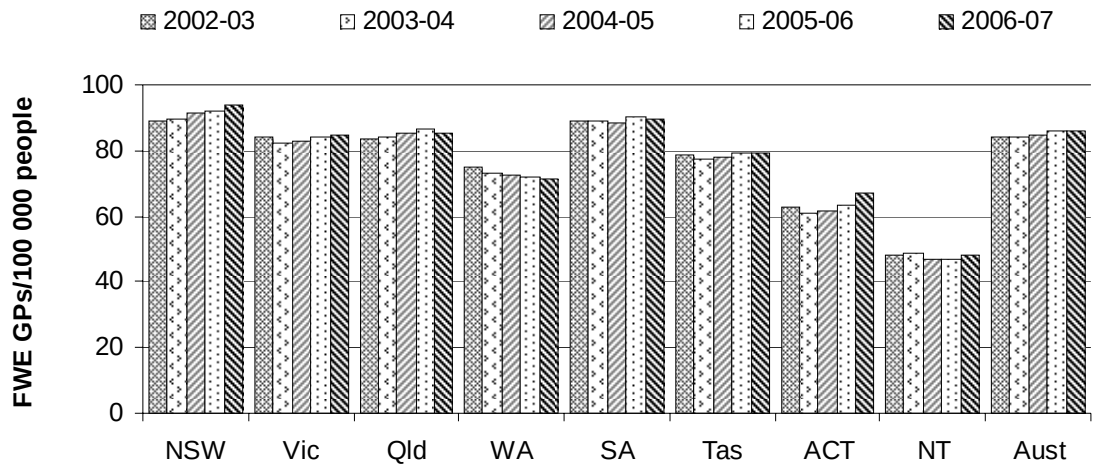
*Source*: AIHW (2007c).

## Size and scope

### *General practice*

There were 25 564 vocationally recognised GPs and OMPs billing Medicare in Australia in 2006-07. On a full time workload equivalent (FWE) basis, there were 18 091 vocationally recognised GPs and OMPs (see section 11.5 for a definition of FWE). This was equal to 86.1 FWE recognised GPs and OMPs per 100 000 people (table 11A.3). These data exclude services provided by GPs working with the Royal Flying Doctor Service and GPs working in Indigenous-specific primary health care services and public hospitals. In addition, the data are based on Medicare claims, which for some GPs (particularly in rural areas) pay for only part of their workload. Compared with metropolitan GPs, those in rural or remote areas spend more of their time working in local hospitals, for which they are not paid through Medicare. The numbers of FWE vocationally recognised GPs and OMPs per 100 000 people across jurisdictions are shown in figure 11.1.

Figure 11.1 **Availability of GPs (full time workload equivalent)[a]**




**a** Data include vocationally recognised GPs and OMPs who are allocated to a jurisdiction based on the postcode of their major practice.

*Source*: DoHA (unpublished); table 11A.3.

### *Pharmaceutical Benefits Scheme and Repatriation Pharmaceutical Benefits Scheme*

There were around 183 million services provided under the PBS and RPBS in 2006-07, amounting to 8.8 scripts per person. There were around 169 million services provided under the PBS in 2006-07, of which 85.2 per cent were concessional (table 11.4).

Table 11.4 **PBS and RPBS services, 2006-07 (million services)**

| | *NSW* | *Vic* | *Qld* | *WA* | *SA* | *Tas* | *ACT* | *NT* | *Aust* |
|---|---|---|---|---|---|---|---|---|---|
| PBS general[a] | 8.3 | 6.1 | 4.8 | 2.5 | 1.8 | 0.5 | 0.5 | 0.1 | 24.6 |
| PBS concessional[b] | 49.6 | 36.4 | 27.2 | 12.1 | 12.3 | 4.2 | 1.4 | 0.4 | 143.6 |
| PBS doctor's bag | 0.1 | 0.1 | 0.1 | – | – | – | – | – | 0.4 |
| PBS total | 58.1 | 42.6 | 32.0 | 14.6 | 14.1 | 4.7 | 1.9 | 0.6 | 168.5 |
| RPBS total[c] | 5.2 | 3.3 | 3.3 | 1.2 | 1.1 | 0.5 | 0.2 | – | 14.8 |
| **Total** | **63.2** | **45.9** | **35.3** | **15.7** | **15.3** | **5.2** | **2.1** | **0.6** | **183.4** |
| Services per capita | 9.2 | 8.9 | 8.5 | 7.6 | 9.7 | 10.6 | 6.2 | 2.8 | 8.8 |

**a** Includes PBS general ordinary and safety net. **b** Includes concessional ordinary and concessional free safety net. **c** Includes RPBS ordinary and RPBS safety net. – Nil or rounded to zero.

*Source*: DoHA (unpublished).

### *Community health services*

The range of community health services available varies considerably across jurisdictions. Tables 11A.47–11A.55 provide information on community health programs in each jurisdiction. The more significant of these programs are described below. Other community health programs provided by some jurisdictions include:

- women's health services that provide 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.

Community health programs that address mental health, home and community care, and aged care assessments are reported in chapters 12 (Health management) and 13 (Aged care).

### *Maternal and child health*

All jurisdictions provide maternal and child health services through their community health programs. These services include: parenting support programs (including antenatal and postnatal programs); early childhood nursing programs; disease prevention programs (including childhood immunisations); and early intervention and treatment programs related to child development and health. Some jurisdictions also provide specialist programs through child health services, including hearing screening programs, and mothers and babies residential programs. Performance indicators for maternity services in public hospitals are reported in chapter 10 (Public hospitals).

### *Public dental services*

All jurisdictions provide some form of public dental service for primary school children. Some jurisdictions also provide dental services to secondary school students. In WA, SA, Tasmania, and the NT, for example, general dental care (including preventative care) is provided for school children up to 18 years of age (tables 11A.51 [WA], 11A.52 [SA], 11A.53 [Tasmania] and 11A.55 [NT]).

States and territories also provide some general dental services and a limited range of specialist dental services to disadvantaged adults (holders of concession cards issued by Centrelink). In some jurisdictions, specialist dental services are provided mainly by qualified dental specialists; in others, they are provided in dental teaching

hospitals as part of training programs for dental specialists (National Advisory Committee on Oral Health 2004). A number of jurisdictions indicated to the Review that they provided public dental services in 2006-07 targeted at disadvantaged people (tables 11A.47–11A.55).

*Alcohol and other drug treatment*

Alcohol and other drug treatment activities range from a brief intervention to long term residential treatment. Types of treatment include detoxification, pharmacological treatment (also known as substitution or maintenance treatment), counselling and rehabilitation. The data included here have been sourced from a report on the Alcohol and Other Drug Treatment Services National Minimum Data Set (AIHW 2007a). Treatment activities excluded from that report include opioid pharmacotherapy treatment where no other treatment is provided, the majority of services for Indigenous people that are funded by the Australian Government, treatment services within the correctional system, and treatment units associated with acute care and psychiatric hospitals.

A total of 664 alcohol and other drug treatment services contributed 2005-06 data for the National Minimum Data Set. Of these, 285 (42.9 per cent) identified as government providers and 379 (57.1 per cent) identified as non-government providers (table 11A.8). All of the non-government providers received some government funding for 2005-06. There were 151 362 reported closed treatment episodes in 2005-06 (see section 11.5 for a definition of closed treatment episode). Clients seeking treatment for their own substance use, of whom 67.2 per cent were male, accounted for 144 963 closed treatment episodes (AIHW 2007a).

Alcohol was the most commonly reported principal drug of concern in closed treatment episodes for clients seeking treatment for their own substance abuse (38.7 per cent). Cannabis was the next most common drug of concern (24.6 per cent), followed by heroin (13.6 per cent) and amphetamines (11.0 per cent) (AIHW 2007a). Further information on alcohol and other drug treatment services funded by governments is included in tables 11A.47–11A.55.

*Indigenous community healthcare services*

Indigenous Australians use a range of primary health care services, including private general practitioners and Aboriginal and Torres Strait Islander Community Controlled Primary Health Care Services. There are Aboriginal and Torres Strait Islander Community Controlled Primary Health Care Services 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 is provided by Australian, State and Territory governments. In addition to these healthcare services, health programs for Indigenous Australians are funded by a number of jurisdictions. In 2006-07 these programs included services such as health information, promotion, education and counselling; alcohol, tobacco and other drug services; sexual health services; allied health services; disease/illness prevention; and improvements to nutrition standards (tables 11A.47–11A.55).

Information on Aboriginal and Torres Strait Islander primary healthcare services that receive funding from the Australian Government is collected through service activity reporting (SAR) questionnaires. Many of these services receive additional funding from State and Territory governments and other sources. The SAR data reported here represent the health-related activities, episodes and workforce funded from all sources.

For 2005-06, SAR data are reported for 150 Indigenous primary healthcare services (table 11A.4). Of these services, 55 (36.7 per cent) were located in remote or very remote areas (table 11A.5). They provided a wide range of primary healthcare services, including the diagnosis and treatment of illness and disease, the management of chronic illness, immunisations and transportation to medical appointments (table 11A.6). An episode of healthcare is defined in the SAR data collection as contact between an individual client and staff of a service to provide healthcare. Nearly 1.7 million episodes of healthcare were provided by participating services in 2005-06 (table 11.5). Of these, around 560 000 (33.3 per cent) were in remote or very remote areas (table 11A.5). The services included in the SAR data collection employed 1920 full time equivalent health staff (as at 30 June 2006). Of these, 1158 were Indigenous (60.3 per cent). The proportions of doctors and nurses employed by surveyed services who were Indigenous were relatively low (4.5 per cent and 13.8 per cent respectively), although for doctors this was considerably higher than for the previous year (0.9 per cent). Caution should be exercised in interpreting this rise, as the number of Indigenous doctors was low in both years (SCRGSP 2007b; table 11A.7).

Table 11.5 **Estimated episodes of healthcare for Indigenous people by services for which SAR data are reported ('000)[a]**

| | *NSW and ACT*[b] | *Vic* | *Qld* | *WA* | *SA* | *Tas* | *NT* | *Aust* |
|---|---|---|---|---|---|---|---|---|
| 2001-02 | 357 | 136 | 214 | 313 | 144 | 18 | 233 | 1 416 |
| 2002-03 | 423 | 130 | 234 | 337 | 140 | 20 | 216 | 1 499 |
| 2003-04 | 430 | 169 | 267 | 302 | 142 | 22 | 280 | 1 612 |
| 2004-05 | 415 | 151 | 254 | 274 | 145 | 23 | 323 | 1 585 |
| 2005-06[c] | 507 | 177 | 240 | 282 | 103 | 29 | 347 | 1 685 |

[a] An episode of healthcare involves contact between an individual client and service staff to provide healthcare. Group work is not included. Transport is included only if it involves provision of healthcare/ information by staff. Outreach provision, for example episodes at outstation visits, park clinics and satellite clinics, is included. Episodes of health care delivered over the phone are included. [b] Data for NSW and the ACT have been combined for confidentiality purposes. [c] 2005-06 data are preliminary results.

*Source*: DoHA (unpublished).

## 11.2 Framework of performance indicators

The performance indicator framework is based on the shared government objectives for primary and community health (box 11.1). The framework provides information on equity, effectiveness and efficiency, and distinguishes outputs from outcomes. This approach is consistent with the general performance indicator framework for this Review that has been agreed by the Steering Committee (see chapter 1). The framework will evolve 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 and report against more indicators relating to community health services.

Box 11.1 **Objectives for primary and community health**

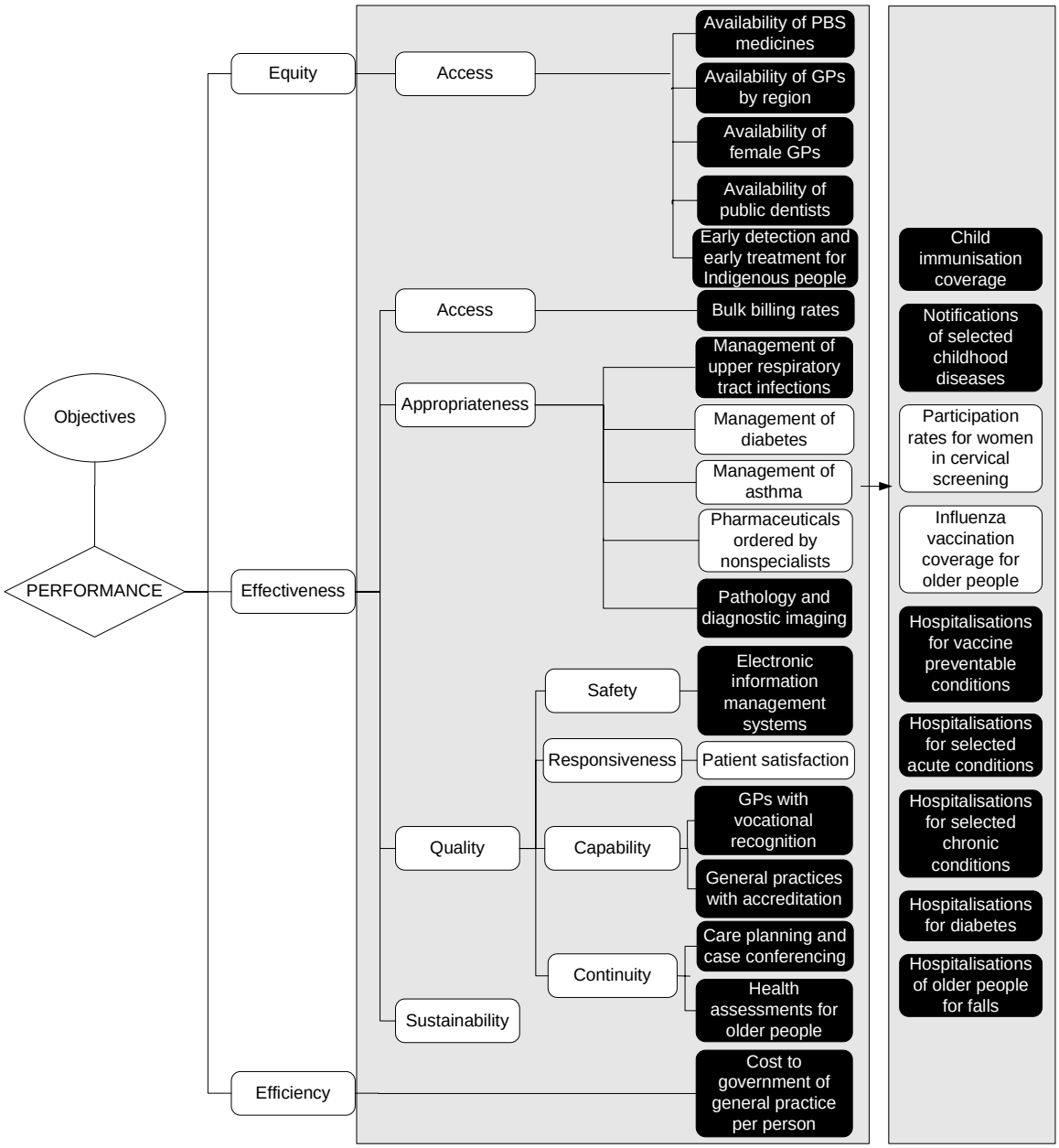
Primary and community health services aim to promote the health of Australians by:

- acting as the first point of entry to the healthcare system
- providing healthcare that promotes changes in lifestyle behaviour and prevents possible illness
- coordinating and integrating healthcare 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 healthcare interventions.

The performance indicator framework shows which data are comparable in the 2008 Report (figure 11.2). For data that are not considered directly comparable, the text includes relevant caveats and supporting commentary. Chapter 1 discusses data comparability from a Report-wide perspective (see section 1.6). The 'Health preface' explains the performance indicator framework for health services as a whole, including the subdimensions for quality and sustainability that have been added to the standard Review framework for health services.

## Figure 11.2 **Performance indicators for primary and community health**



## 11.3 Key performance indicator results

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

### Outputs

Outputs are the actual services delivered (while outcomes are the impact of these services on the status of an individual or group) (see chapter 1, section 1.5).

### Equity

For the purposes of this Report, equity is defined in terms of adequate access to government services for all Australians. Many people experience difficulties in accessing services due to factors such as gender, age, limited English language proficiency, disability, ethnicity or geography (see chapter 1). Such barriers contribute to the generally poor health status of Indigenous people relative to other Australians (see the 'Health Preface' and SCRGSP 2007a). Ensuring adequate access to government services for all Australians requires that barriers experienced by particular groups be addressed.

#### *Access*

Five indicators of equity of access to primary and community health services are reported this year: 'availability of PBS medicines' (box 11.2); 'availability of FWE GPs by region' (box 11.3); 'availability of female GPs' (box 11.4), 'availability of public dentists' (box 11.5) and 'early detection and early treatment for Indigenous people' (box 11.6).

Box 11.2 **Availability of PBS medicines**

Medicines are important in treating illness and can also be important in preventing illness from occurring. The availability of medicines is therefore a significant determinant of people's health and medicines should be available to those who require them regardless of where they live.

Three measures are presented for this indicator:

- People per pharmacy by region
- PBS expenditure per person by region
- The proportion of PBS prescriptions filled at a concessional rate.

A decrease in people per pharmacy indicates improved availability of PBS medicines. An increase in PBS expenditure per person indicates improved availability of PBS medicines. An increase in the proportion of PBS prescriptions filled at a concessional rate indicates an improved access to PBS prescriptions. It is also important that there are not large discrepancies in these measures by region.

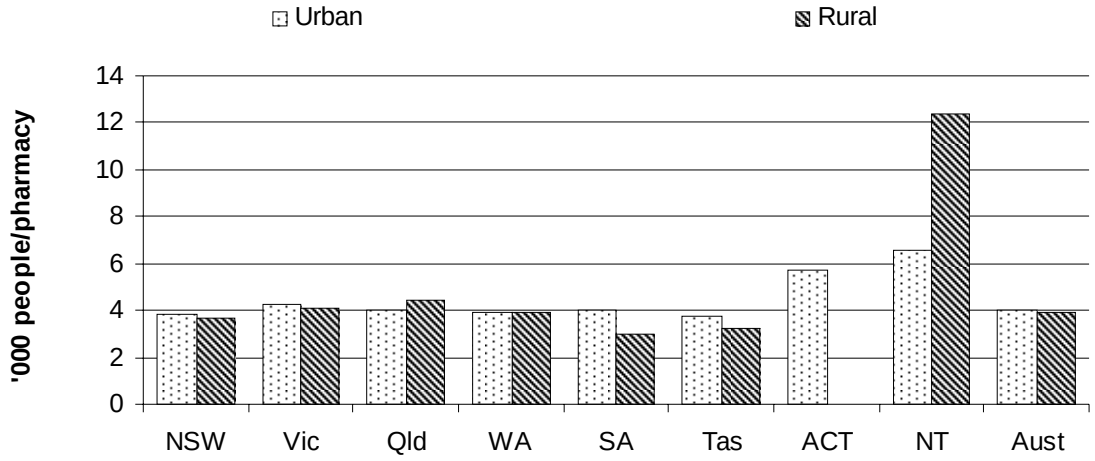
This indicator does not provide information on whether the services are appropriate for the needs of the people receiving them.

The distribution of pharmacies underlies access to the PBS. Across Australia, the number of people per pharmacy in 2006-07 was 4051 in urban areas and 3933 in rural areas. In most states and territories, the number of people per pharmacy was similar or lower in rural areas compared with urban areas (figure 11.3).

In addition to pharmacies, 83 medical practitioners and 198 hospitals — 67 private and 131 public[1] — were approved to supply PBS medicines to the community in 2006-07. There were 83 medical practitioners and 68 hospitals (10 private) located in rural areas (table 11A.10). These additional services may help to improve access to PBS medicines in some locations.

[1] PBS approved private hospitals supply medicines to outpatients, while public hospitals provide medicines only to patients on discharge.

Figure 11.3 **People per pharmacy, 2006-07[a]**

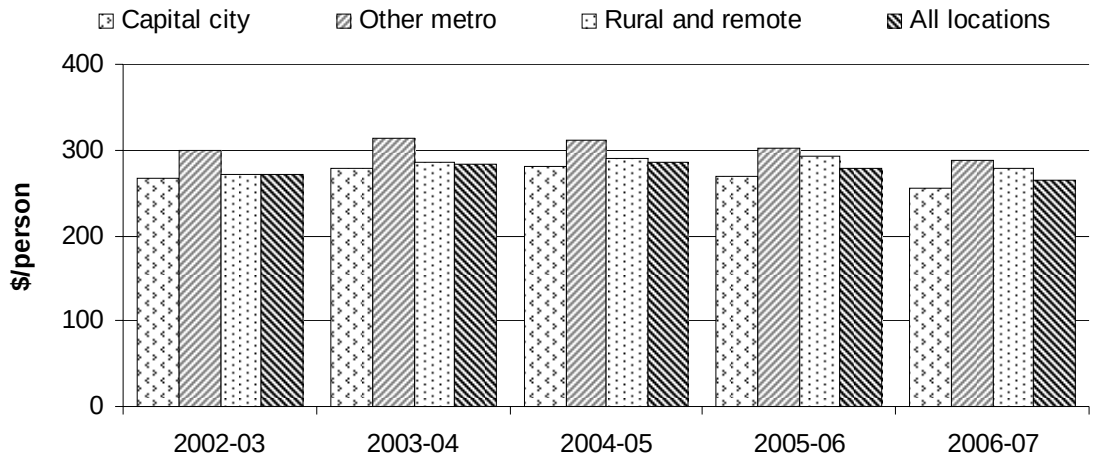



**a** Geolocation based on the Pharmacy Access/Remoteness Index of Australia (PhARIA). Urban = PHARIA 1. Rural = PHARIA 2–6. The ACT has no rural statistical areas.

*Source*: DoHA (unpublished); table 11A.10.

For Australia as a whole, PBS expenditure per person increased each year from 2002-03 to 2004-05 and has since decreased each year to 2006-07 (figure 11.4). PBS expenditure per person has been lowest in capital cities and highest in other metro areas for the period 2002-03 to 2006-07 (in 2006-07 dollars).

Figure 11.4 **PBS expenditure per person (2006-07 dollars)[a]**




**a** Locality level data are only available on a cash basis for general and concessional categories. These figures are not directly comparable to those published in DoHA's annual report which are prepared on an accrual accounting basis and include other categories administered under special arrangements (such as medications dispensed under S100 of the *National Health Act 1953* [Cwlth]).

*Source*: DoHA (unpublished); table 11A.11.

The proportion of PBS prescriptions filled at a concessional rate is reported by State and Territory (although this is not available by regional location) in table 11A.9. Australia-wide, 85.2 per cent of prescriptions subsidised under the PBS were concessional in 2006-07.

*Availability of GPs by region*

Box 11.3 **Availability of GPs by region**

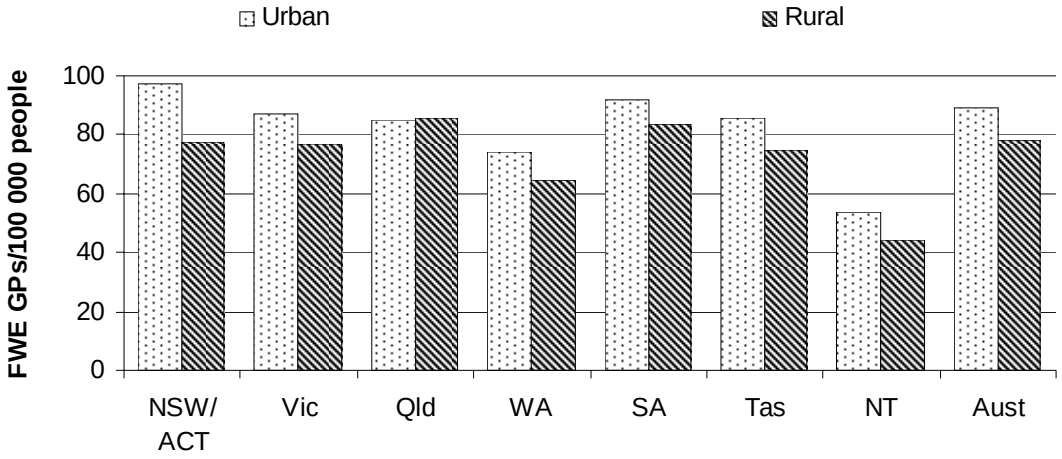
The availability (or supply) of GPs by region affects people's access to general practice services, particularly in rural and remote areas. Low availability can result in increased travel distance to a practice, increased waiting times to see a GP, and difficulty in booking long consultations. Low availability 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.

The indicator is defined as the number of FWE GPs per 100 000 people by region.

An increase in the availability of GPs indicates improved access to GP services. However, this indicator does not provide information on whether people are accessing GP services or whether the services are appropriate for the needs of the people receiving them.

In terms of FWE GPs per 100 000 people, in all states and territories except Queensland there were more GPs available in urban than in rural areas in 2006-07 (figure 11.5). The bulk billed proportion of non-referred attendances was generally lower in rural and remote centres, except other remote areas, than in capital cities or other metropolitan centres (table 11A.20).

Figure 11.5 **Availability of GPs (full time workload equivalent), 2006-07[a, b, c]**




**a** Urban areas consist of capital city and other metro areas. Rural areas consist of large rural centres, small rural centres, other rural areas, remote centres, other remote areas and other areas. **b** FWE GP numbers include vocationally recognised GPs and OMPs, who are allocated to a jurisdiction based on the postcode of their major practice. **c** Data for NSW and the ACT have been combined for confidentiality reasons.

*Source*: DoHA (unpublished); table 11A.12.

## *Availability of female GPs*

Box 11.4 **Availability of female GPs**

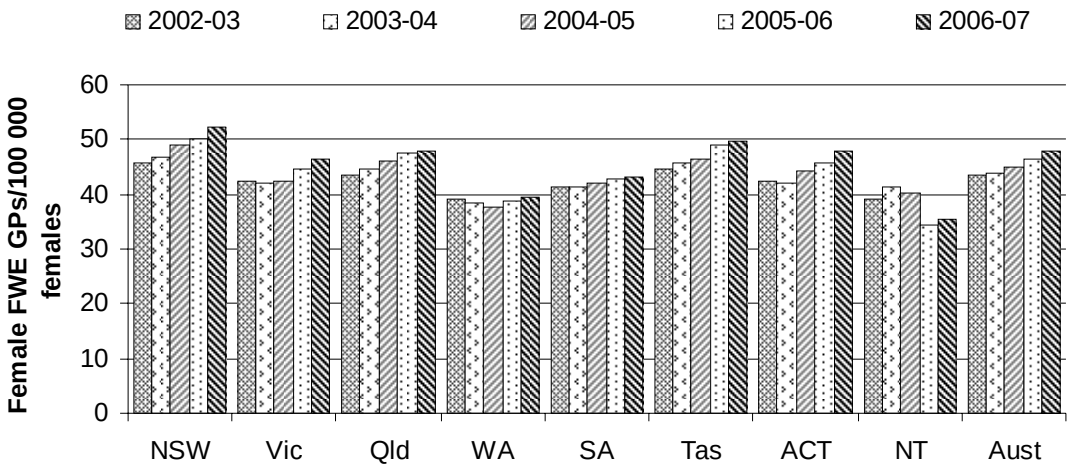
This indicator measures equity of access, recognising that some female patients prefer to discuss health matters with, and to receive primary healthcare from, a female GP.

The indicator is defined as the number of female FWE GPs per 100 000 females.

A higher rate means it is more likely that female patients who prefer to visit female GPs will have their preference met. However, this indicator does not provide information on whether women are accessing female GPs or whether the services are appropriate for the needs of the people receiving them.

In 2006-07, 38.0 per cent of Australia's GPs were female. This represented 27.9 per cent of FWE GPs (tables 11A.3 and 11A.13). In 2006-07, there were 47.8 female FWE GPs per 100 000 females in Australia (figure 11.6).

Figure 11.6 **Availability of female GPs (full time workload equivalent)[a]**




**a** Data relate to vocationally recognised GPs and OMPs.

*Source*: DoHA (unpublished); table 11A.13.

*Availability of public dentists*

Box 11.5 **Availability of public dentists**

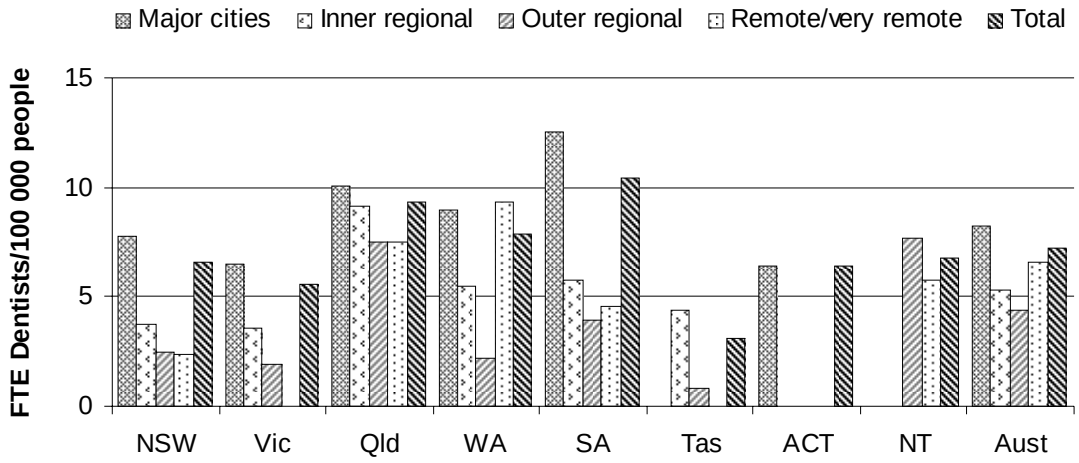
The availability (or supply) of public dentists by region affects people's access to public dental services, particularly in rural and remote areas. Low availability can result in increased travel distance to a dentist and increased waiting times to see a dentist.

The indicator is defined as the number of full time eqivalent (FTE) public dentists per 100 000 people by region.

An increase in the availability of public dentists indicates improved access to dental services. However, this indicator does not provide information on whether people are accessing the service or whether the services are appropriate for the needs of the people receiving them.

In 2005 there were more FTE public dentists per 100 000 people in major cities than in regional or remote areas for all states and territories (figure 11.7; table 11A.14).

Figure 11.7 **Availability of public dentists, 2005[a, b, c]**




**a** FTE based on 40-hour week. **b** There were no public dentists in remote and very remote areas in Victoria or Tasmania. There were no public dentists in inner regional areas in the ACT. **c** Tasmania had no major cities. The ACT had no outer regional, or remote and very remote, areas. The NT had no major cities or inner regional areas.

*Source*: AIHW (unpublished); table 11A.14.

## *Early detection and early treatment for Indigenous people*

### Box 11.6 **Early detection and early treatment for Indigenous people**

The high prevalence of preventable and/or treatable health conditions in the Indigenous population is strongly associated with relatively poor health outcomes for Indigenous people (AIHW 2007d; SCRGSP 2007a). Early detection and early treatment refers to the identification of individuals who are at high risk for, or in the early stages of, such conditions. Early detection and early treatment services provide opportunities for timely prevention and intervention measures to improve and maintain health. Such services have the potential to improve access to appropriate healthcare for Indigenous people.

Voluntary health assessments and checks are Medicare Benefit Schedule (MBS) items that allow GPs to undertake comprehensive examinations of patient health, including physical, psychological and social functioning. They are available for older Australians as well as for Indigenous people of all ages, as the prevalence of preventable and/or treatable conditions is high in both population groups. The availability and uptake of early detection and early treatment services is understood to be a significant determinant of people's health.

(Continued on next page)

Box 11.6 **(Continued)**

Four measures are presented for this indicator:

- Older people who received a voluntary health assessment by Indigenous status
- Older Indigenous people who received a voluntary health assessment, time series
- Indigenous people who received a voluntary health assessment or check by age group
- Aboriginal and Torres Strait Islander primary healthcare services that provided early detection services.

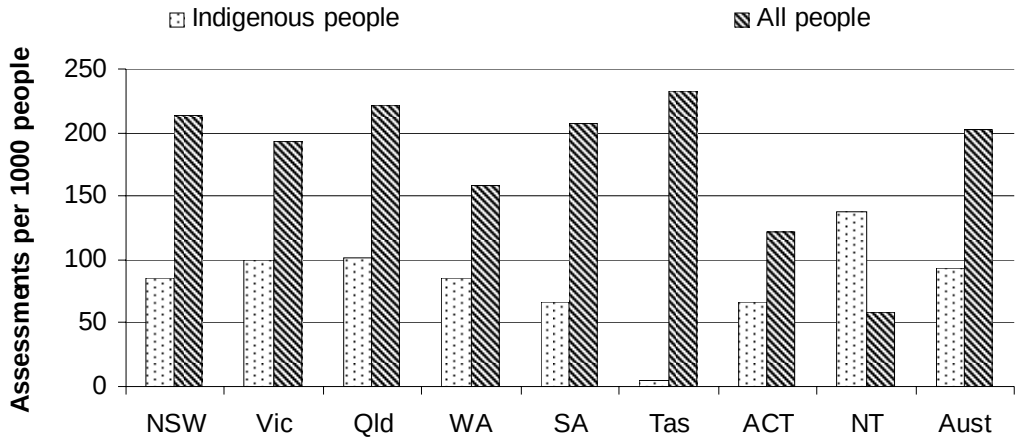
A reduction in the gap between the proportion of all older people and older Indigenous people that received a health assessment indicates improved access to early detection and early treatment services for Indigenous people. An increase in the proportion of Indigenous people that received a health assessment or check indicates improved access to these services. An increase in the proportion of Aboriginal and Torres Strait Islander primary healthcare services providing early detection activities indicates improved access to these services for Indigenous Australians.

This indicator provides no information about early detection and early treatment services that are not provided under Medicare. Such services are provided by salaried GPs in community health settings, hospitals and Indigenous-specific primary health care services, particularly in rural and remote areas. Accordingly, this indicator understates the proportion of people who received early detection and early treatment services.

For this indicator, older people are 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. The larger age range for Indigenous people recognises that they typically face increased health risks at younger ages than most other groups in the population. It also broadly reflects the difference in average life expectancy between the Indigenous and non-Indigenous populations (see the 'Health preface').

Figure 11.8 shows that in 2006-07 the proportion of Indigenous older people who received an annual health assessment was considerably lower than the proportion of all older people who received an annual health assessment. This suggests that access to early detection and early treatment services for older Indigenous people is inequitable.

Figure 11.8 **Older people who received an annual health assessment by Indigenous status, 2006-07[a, b]**

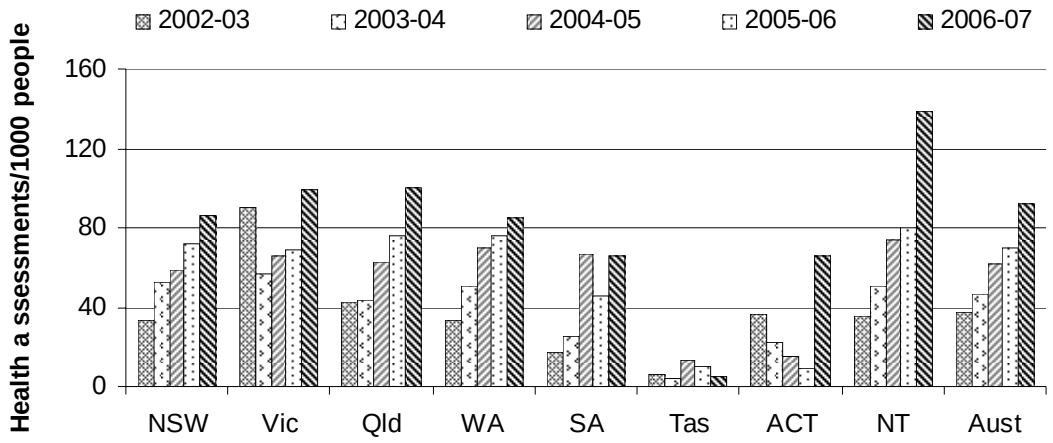



**a** Older people are defined as Indigenous people aged 55 years and over and non-Indigenous people aged 75 years and over. **b** Indigenous status is determined by self-identification. Indigenous people aged 75 years or over may have received a health assessment under the 'all older people' MBS items. This is considered unlikely to affect the overall proportions significantly, due to the relatively low average life expectancy of Indigenous people.

*Source*: Medicare Australia (unpublished); ABS (2004, 2006a, 2006b) 3238.0; 3101.0; 3222.0; table 11A.16.

Figure 11.9 shows that the proportion of older Indigenous people who received an annual health assessment steadily increased between 2002-03 and 2006-07 in most jurisdictions. This indicates that access to early detection and early treatment services has improved for this population in most jurisdictions.

Figure 11.9 **Older Indigenous people who received an annual health assessment[a]**



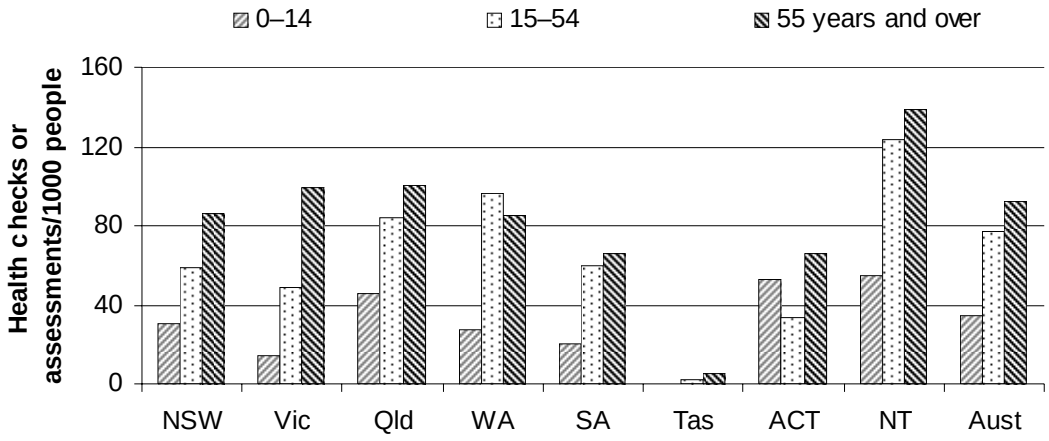

**a** Indigenous status is determined by self-identification. Indigenous people aged 75 years or over may have received a health assessment under the 'all older people' MBS items. This is considered unlikely to significantly affect the overall proportions due to the relatively low average life expectancy of Indigenous people.

*Source*: Medicare Australia (unpublished); ABS Cat. No. 3238.0; table 11A.17.

Health check MBS items were introduced for Indigenous people aged 15–54 years in May 2004, and Indigenous children aged 0–14 years in May 2006. Health checks are available annually for children aged 0–14 years, and biennially for 15–54 year-olds.

Figure 11.10 shows that the proportion of the eligible Indigenous population that received a health assessment or check was highest for older people and lowest for children aged 0–14 years in most jurisdictions. This may in part reflect differences in how long the items have been available, as factors such as awareness and additional administrative requirements affect the uptake of new MBS items (AIHW 2007d).

Figure 11.10 **Indigenous people who received a health check or assessment by age[a, b]**

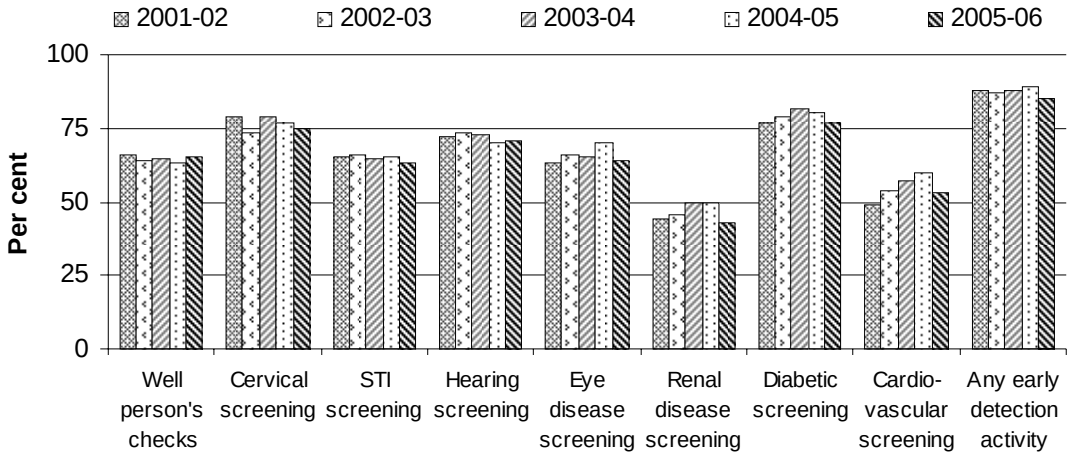



**a** Indigenous status is determined by self-identification. Indigenous people aged 75 years and over may have received a health assessment under the 'all older people' MBS items. This is considered unlikely to significantly affect the overall proportions due to the relatively low average life expectancy of Indigenous people. **b** Health checks for 0–14 year olds, and health assessments for those aged 55 years and over, are available annually. Data for these age groups are for the period 1 July 2006 to 30 June 2007. Health checks for 15–54 year olds are available biennially, and these data are for the period 1 July 2005 to 30 June 2007.

*Source*: Medicare Australia (unpublished); ABS Cat. No. 3238.0; table 11A.18.

Figure 11.11 shows the proportion of Indigenous primary healthcare services for which SAR data are reported that provided various early detection services over the five year period to 2005-06.

Figure 11.11 **Indigenous primary healthcare services for which SAR data are reported that provided early detection services**




*Source*: DoHA (unpublished); table 11A.19.

## Effectiveness

*Access*

'Bulk billing rates' (box 11.7) is currently the only indicator reported against effectiveness and access.

*Bulk billing rates*

Box 11.7 **Bulk billing rates**

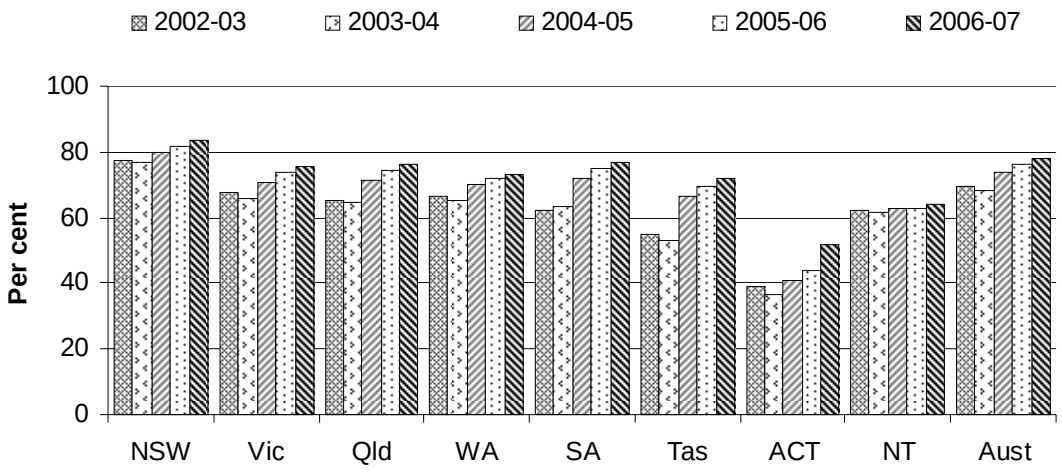
Patient visits to GPs are classed as non-referred attendances under Medicare. Patients are either bulk billed or required to pay part of the cost of the non-referred attendance. Where a patient is bulk billed, the GP bills Medicare Australia directly and since 1 January 2005 receives 100 per cent of the Schedule fee (the patient's rebate) as full payment for the service. The 100 per cent Medicare rebate applies to most services provided by a GP. The patient makes no out-of-pocket contribution. The bulk billed proportion of non-referred attendances indicates the affordability of GP services.

The indicator is defined as the number of non-referred attendances that were bulk billed as a proportion of all non-referred attendances.

A higher proportion of bulk billed attendances indicates greater affordability of GP services. However, this indicator does not provide information on whether the services are appropriate for the needs of the people receiving them.

Australia-wide, the bulk billed proportion of non-referred attendances, including those by practice nurses, was 78.0 per cent in 2006-07. This proportion varied across jurisdictions (figure 11.12). The bulk billed proportion of non-referred attendances was higher in capital cities than in rural areas and remote centres, and similar to that in other remote areas (table 11A.20).

Figure 11.12 **Non-referred attendances that were bulk billed[a]**




**a** Includes attendances by practice nurses since 2003-04.

*Source*: DoHA (unpublished); table 11A.21.

### *Appropriateness*

Two indicators of the appropriateness of GP services are reported: the 'management of upper respiratory tract infections' (box 11.8) and 'pathology tests and diagnostic imaging ordered by non-specialists' (box 11.12). 'Management of diabetes' (box 11.9) has been reported in previous Reports, but data were not available for this indicator for the 2008 Report. The Steering Committee has also identified 'management of asthma' (box 11.10) and 'pharmaceuticals ordered by non-specialists' (box 11.11) as indicators of the appropriateness of GP services. However, data for these indicators were not available for the 2008 Report.

Box 11.8 **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 nevertheless frequently prescribed for viral infections. Unnecessarily high rates of antibiotic prescription for upper respiratory tract infections have the potential to increase pharmaceutical costs and to increase antibiotic resistance in the community.

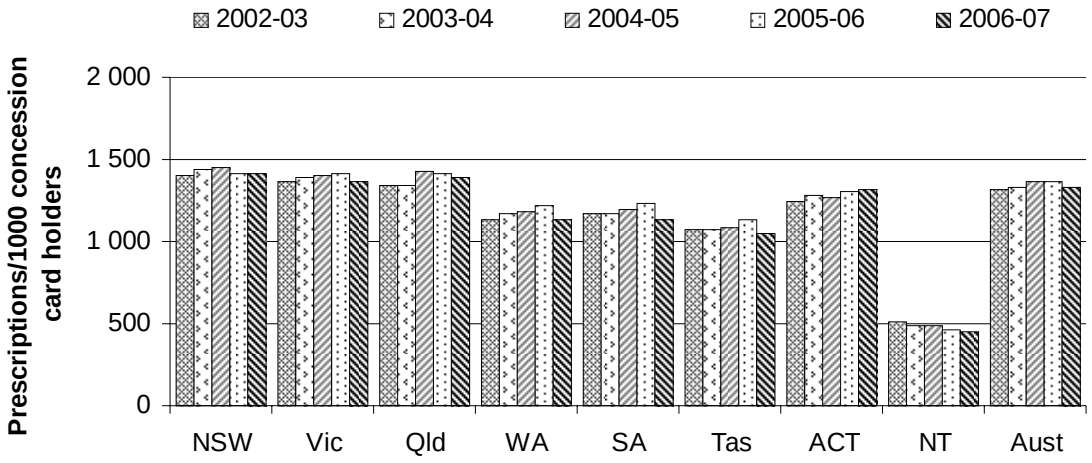
Ideally, this indicator would be based on the total population, but data restrictions mean it is based only on PBS concession card holders. The indicator is defined as the number of prescriptions for those oral antibiotics most commonly prescribed to treat upper respiratory tract infection that are provided to PBS concession card holders per 1000 PBS concession card holders.

A reduction in the prescription rate may indicate that GPs are offering more appropriate treatment for viral infections.

Due to the effects of population ageing, the complexity of pharmaceutical needs of concession card holders may increase. In addition, the selected oral antibiotics may be prescribed for illnesses other than upper respiratory tract infections. 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.

Australia-wide, the prescription rate for the oral antibiotics most commonly used to treat upper respiratory tract infection in 2006-07 was 1324.5 per 1000 PBS concession card holders. Prescription rates for these antibiotics fluctuated around the same level in most states and territories between 2002-03 and 2006-07 (figure 11.13).

Figure 11.13 **Rate of prescription of the oral antibiotics used most commonly to treat upper respiratory tract infections**




*Source*: DoHA (unpublished); table 11A.22.

*Management of diabetes*

Data have previously been reported against the indicator 'management of diabetes'. These data were sourced from a project conducted between 2000 and 2002 and can be found in the 2007 Report (SCRGSP 2007b). Current data were not available for this indicator for the 2008 Report (box 11.9).

Box 11.9 **Management of diabetes**

'Management of diabetes' has been identified as an indicator of appropriateness. Data were not available for this indicator for the 2008 Report.

*Management of asthma*

The Steering Committee has identified 'management of asthma' as an indicator of the appropriateness of GP services (box 11.10). Data for this indicator were not available for the 2008 Report.

Box 11.10 **Management of asthma**

'Management of asthma' has been identified as an indicator of appropriateness, but a specific measure has not yet been developed.

*Pharmaceuticals ordered by non-specialists*

The Steering Committee has identified 'pharmaceuticals ordered by non-specialists' as an indicator of the appropriateness of GP services (box 11.11). Data for this indicator were not available for the 2008 Report.

Box 11.11 **Pharmaceuticals ordered by non-specialists**

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

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

Box 11.12 **Pathology tests ordered and diagnostic imaging referrals by non-specialists (vocationally recognised GPs and OMPs)**

The number of pathology tests ordered and diagnostic imaging referrals by vocationally recognised GPs and OMPs that are rebated through Medicare, per person, is used as a proxy for this indicator of the appropriateness of diagnostic and monitoring patterns of GPs.

Four measures are reported:

- pathology tests ordered by vocationally recognised GPs and OMPs, that are rebated through Medicare, per person
- diagnostic imaging referrals by vocationally recognised GPs and OMPs, that are rebated through Medicare, per person
- Medicare benefits paid per person for pathology tests
- Medicare benefits paid per person for diagnostic imaging.

Differences across jurisdictions and over time may reflect variation in the appropriateness of utilisation of these services for diagnosis and treatment decisions. While high levels may indicate GPs' over-reliance on these diagnostic tools, low levels may indicate underuse. Reporting these data contributes to the discussion of such issues.

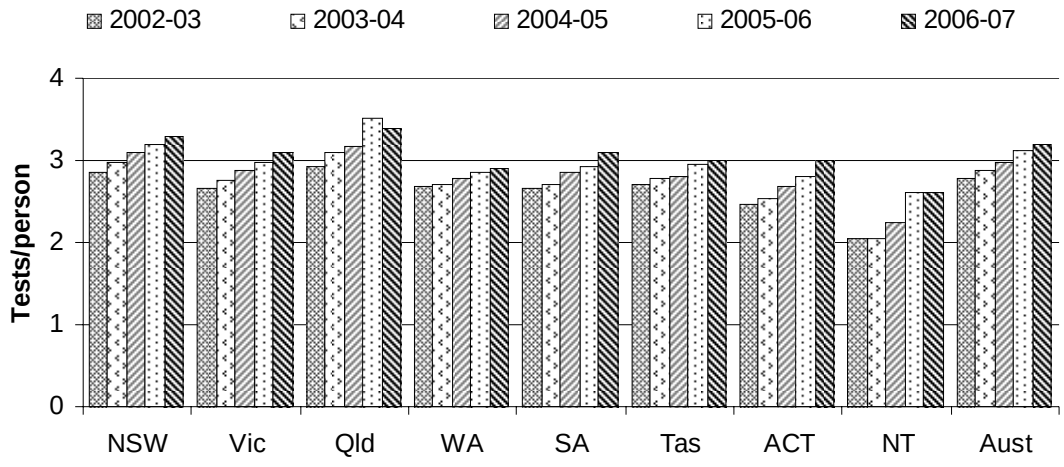
Pathology tests and diagnostic imaging are important tools used by GPs in the diagnosis of many diseases, and in monitoring response to treatment. Their underuse may contribute to the misdiagnosis of disease, and to relatively poor treatment decisions. Excessive use may reflect overreliance of GPs on tools to support the diagnostic process. While what constitutes appropriate levels of use

cannot be determined, reporting of the differences across jurisdictions and over time contributes to the discussion of these issues.

Information on the total number of pathology tests ordered and diagnostic imaging referrals by GPs is not available from Medicare. Information is available only for those that were rebated through Medicare. The number of pathology tests ordered may be higher than the number rebated through Medicare (where multiple tests are ordered, rebates are provided only for the three most expensive tests). Radiologists may identify a need for more or different imaging procedures than patients are referred for. The difference between the number of pathology tests ordered and the number for which rebates are claimed is not available from Medicare. Nor is the difference between the imaging procedures that are ordered by GPs and those for which rebates are claimed. Thus, the information that is available from Medicare is used as a proxy in reporting against this indicator.

Nationally, the number of pathology tests ordered and rebated through Medicare per person increased from 2.8 in 2002-03 to 3.2 in 2006-07 (figure 11.14).

Figure 11.14 **Pathology tests ordered by GPs and rebated through Medicare[a]**

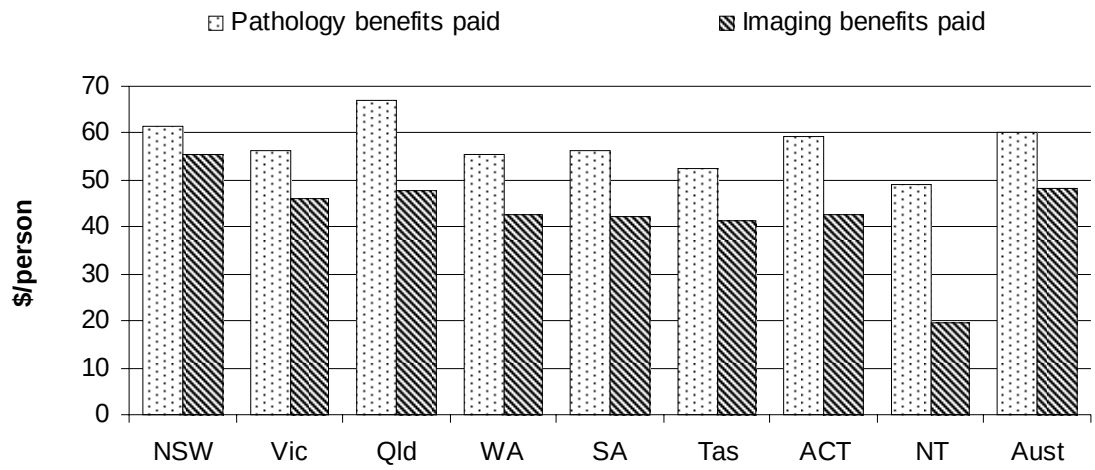



**a** Data include tests ordered by vocationally recognised GPs and OMPs and rebated through Medicare. Data include tests ordered at the request of a patient (patient episode initiated items).

*Source*: DoHA (unpublished); table 11A.23.

Australian Government expenditure (under Medicare) on pathology tests amounted to $1.3 billion in 2006-07, equal to $60 per person. Nationally, Medicare benefits worth $1.0 billion were paid for diagnostic imaging in 2006-07, equal to $48 per person (figure 11.15).

Figure 11.15 **Benefits paid for pathology tests and diagnostic imaging, 2006-07[a]**

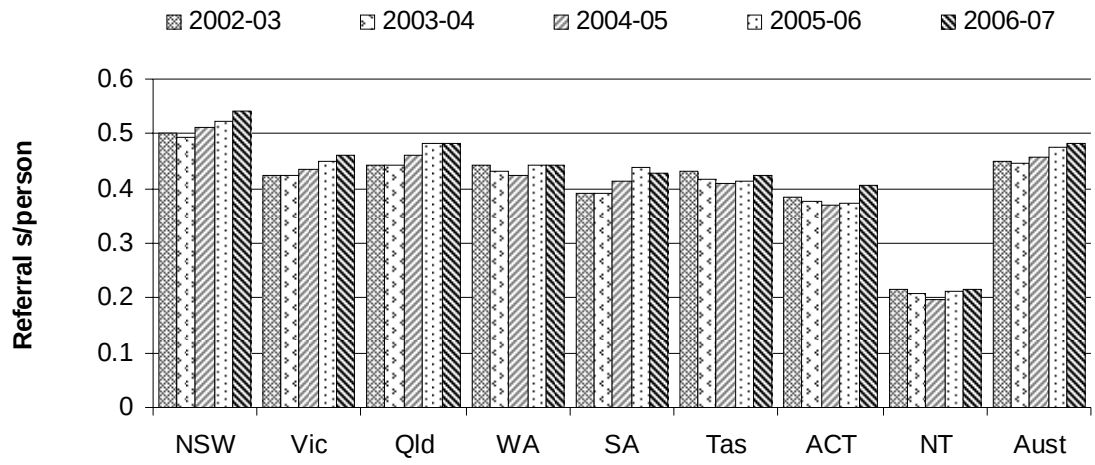



**a** Includes benefits paid through Medicare (including DVA data) for pathology tests ordered, and diagnostic imaging referred, by vocationally recognised GPs and OMPs.

*Source*: DoHA (unpublished); tables 11A.23 and 11A.24.

Nationally, there has been a gradual upward trend in the number of diagnostic imaging referrals per person between 2003-04 and 2006-07 (figure 11.16).

Figure 11.16 **Diagnostic imaging referrals from GPs[a]**




**a** Data relate to vocationally recognised GPs and OMPs.

*Source*: DoHA (unpublished); table 11A.24.

*General practices with electronic information management systems*

The Practice Incentives Program (PIP) provides payments to general practices based on patients' ongoing healthcare needs (rather than on service volumes), promoting activities such as: use of electronic information management systems; after-hours care; teaching medical students; employment of practice nurses; and improved chronic disease management.

The PIP Information Management, Information Technology initiative provides two incentives to encourage the computerisation of practices (box 11.13). The first requires that practices maintain electronic patient records, including clinical data on allergies/sensitivities for the majority of active patients, and implement appropriate information security measures. The second requires that practices, in addition, use electronic patient records to record and store clinical information on the majority of active patients, including current and past major diagnoses and current medications. These replaced previous incentives for electronic prescribing and transmission of clinical data in November 2006. Computerisation of general practices may improve the safety (in terms of quality and effectiveness) of GP services (box 11.13).

Box 11.13 **General practices with electronic clinical information management systems**

The proportion of general practices with electronic information management systems is an indicator of safety, because such systems may reduce prescribing and dispensing errors. Reductions in these types of errors reduce the likelihood of harm to patients from adverse drug reactions. Electronic information management systems may 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 best practice chronic disease management and preventive health activities such as screening (DHAC 2000).

Two measures are presented for this indicator:

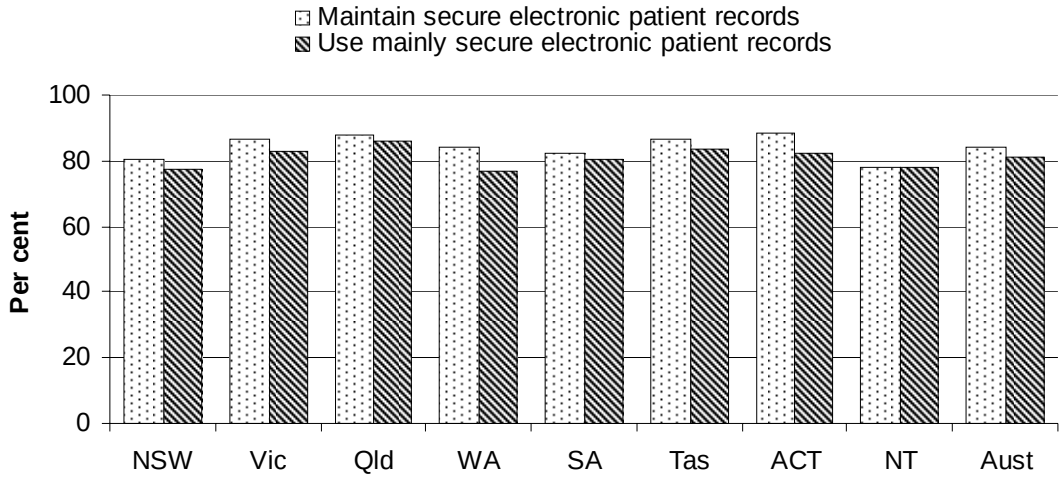
- the proportion of PIP practices that maintain secure electronic patient records
- the proportion of PIP practices that manage patient records predominantly using secure electronic management systems.

An increase in these proportions may indicate an improvement in the level of safety in patient management by general practices.

The PIP does not include all practices in Australia. PIP practices covered around 81 per cent of Australian patients (measured as standardised whole patient equivalents) in May 2007 (DoHA unpublished; table 11A.25).

Australia-wide, 84.0 per cent of PIP practices maintained secure electronic patient records in May 2007. Patient records were managed predominantly using secure electronic management systems in 80.9 per cent of PIP practices (figure 11.17). In previous Reports, time series data have been reported for PIP practices using computers for clinical purposes by area. As data for previous and current incentives are not comparable, only 2007 data are reported here. Time series data for the previous incentives are reported in tables 11A.25 and 11A.26.

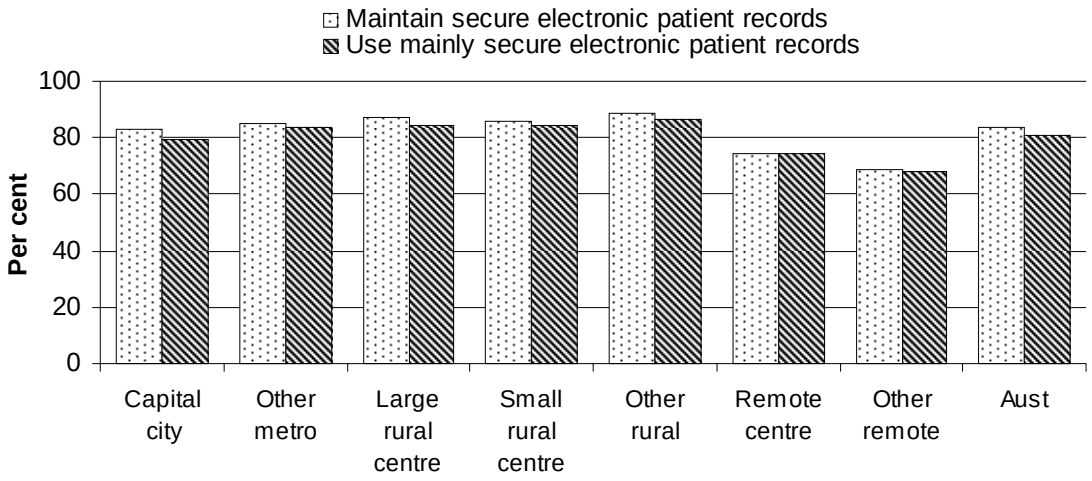
Figure 11.17 **PIP practices using computers for clinical purposes, May 2007**




*Source*: DoHA (unpublished); table 11A.25.

In May 2007, PIP practices in rural areas were more likely than PIP practices in metropolitan areas or remote areas to maintain computerised patient records (figure 11.18). Remote practices in the NT have difficulty meeting the accreditation requirements to qualify for the PIP, which affects the coverage of these data.

Figure 11.18 **PIP practices using computers for clinical purposes by area, May 2007[a]**




**a** Capital city = State and Territory capital city statistical divisions; other metropolitan centre = one or more SLAs that have an urban centre with a population of 100 000 or more; large rural centre = SLAs where most of the population resides in urban centres with a population of 25 000 or more; small rural centre = SLAs in rural zones containing urban centres with populations between 10 000 and 24 999; other rural area = all remaining SLAs in the rural zone; remote centre = SLAs in the remote zone containing populations of 5000 or more; other remote area = all remaining SLAs in the remote zone. SLA = statistical local area. *Source*: DoHA (unpublished); table 11A.26.

### *Quality — responsiveness*

#### *Patient satisfaction*

The Steering Committee has identified 'patient satisfaction' as an indicator of the quality of the responsiveness of GP services to patients (box 11.14). Data for this indicator were not available for the 2008 Report.

Box 11.14 **Patient satisfaction**

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

### *Quality — capability*

Two indicators of the quality of GP services, relating to GPs' capability to provide services, are reported here: the proportion of GPs with vocational registration (box 11.15); and the proportion of general practices with accreditation (box 11.16).

*GPs with vocational registration*

Box 11.15 **GPs with vocational registration**

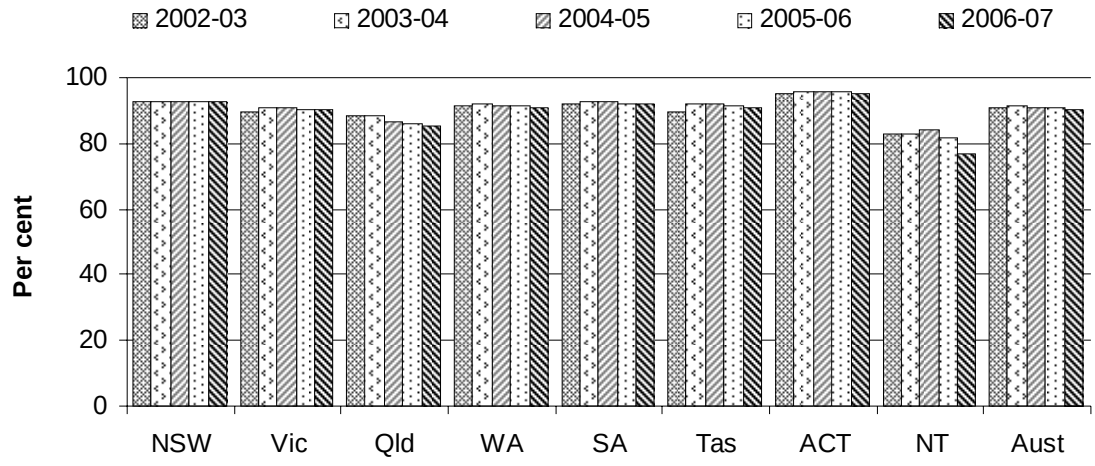
Since 1996, a GP can only achieve vocational registration by attaining Fellowship of the Royal Australian College of General Practitioners (RACGP) or equivalent. GPs can attain Fellowship through the successful completion of a formal general practice training program or through the 'practice eligible' route. Once vocational registration is achieved, GPs must demonstrate ongoing involvement in continuing professional development activities in order to maintain their Fellowship status (DoHA unpublished).

The measure reported is the proportion of FWE GPs with vocational registration.

An increase in the proportion of GPs with vocational registration may indicate an improvement in the capability of the GP workforce to deliver high quality services. However, GPs without vocational registration may deliver services of equally high quality.

The proportion of GPs with vocational registration remained relatively constant over the five years to 2006-07 (figure 11.19). The proportions of GPs with vocational registration were highest in capital cities, other metro centres and large rural centres, and lowest in other remote areas, in 2006-07 (table 11A.27).

Figure 11.19 **GPs (full time workload equivalent) with vocational registration**




*Source*: DoHA (unpublished); table 11A.28.

*General practices with accreditation*

Box 11.16 **General practices with accreditation**

Accreditation of general practice is a voluntary process of peer review that involves the assessment of general practices against a set of standards developed by the RACGP. Accredited practices, therefore, have been assessed as complying with a set of national standards.

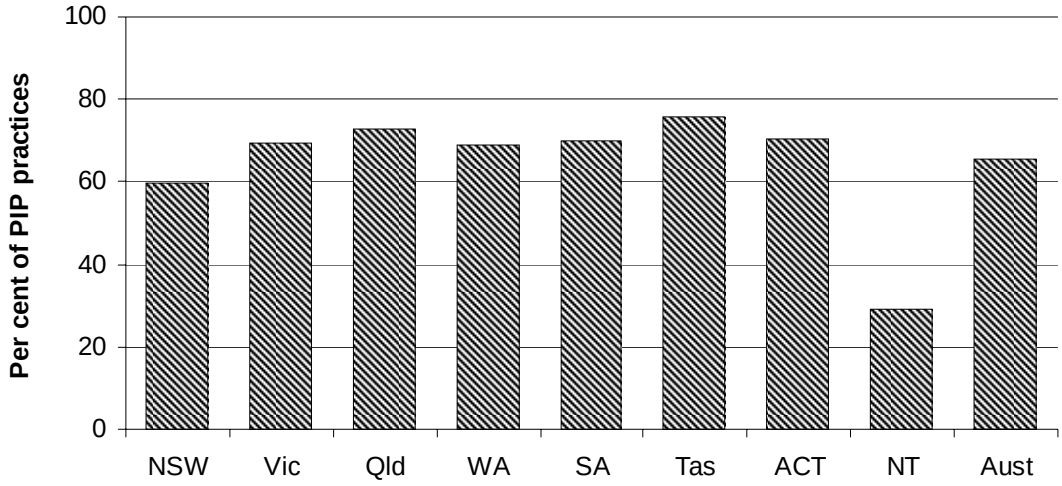
The two providers of general practice accreditation services are Australian General Practice Accreditation Limited (AGPAL) and General Practice Australia ACCREDITATION *plus* (GPA Accreditation *plus*). This indicator is defined as the number of general practices that are accredited by these organisations as a proportion of all general practices in Australia.

An increase in the proportion of practices with accreditation may indicate an improvement in the capacity of general practices to deliver high quality services. However, general practices without accreditation may deliver services of equally high quality. For a particular general practice, the decision to seek accreditation might be influenced by perceived costs and benefits unrelated to its quality standards. Accreditation affects eligibility for some government programs (such as PIP), so there are financial incentives for gaining accreditation.

Reporting against this indicator has improved for the 2008 Report, with the inclusion of data from both accrediting bodies for the first time (data were previously available only from AGPAL). In addition, data for the number of general practices in Australia were for the first time sourced from the Annual Survey of Divisions of General Practice (PHC RIS, DoHA unpublished). Completion of this survey by Divisions is required under contractual agreements with DoHA.

In June 2007, 4835 general practices — representing 65.7 per cent of general practices — were accredited Australia-wide (figure 11.20).

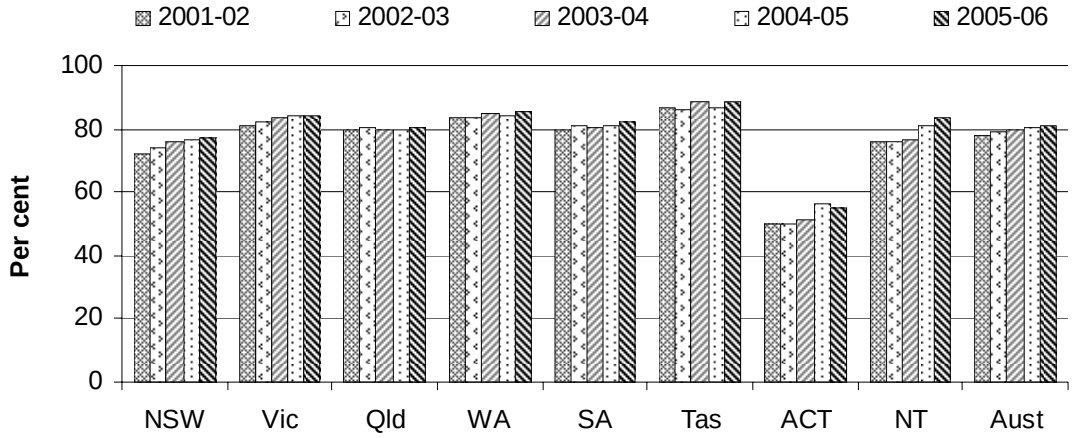
Figure 11.20 **General practices with accreditation, June 2007**




*Source*: AGPAL (unpublished); GPA Accreditation *plus* (unpublished); Primary Health Care Research and Information Service (PHC RIS), DoHA (unpublished); table 11A.29.

The proportion of patients attending accredited practices provides useful additional information relating to accreditation. For this measure, PIP practices provide a proxy for accredited practices, as accreditation is a requirement for PIP registration. Australia-wide, there appears to have been a slight increase in the proportion of patients, measured as standardised whole patient equivalents (SWPEs), seen in PIP practices over the period 2001-02 to 2005-06 (figure 11.21).

Figure 11.21 **Proportion of patients in PIP practices[a]**




**a** Patients are measured as SWPEs. A 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.

*Source*: DoHA (unpublished); table 11A.30.

*Quality — continuity*

The continuity aspect of the quality of primary healthcare services relates to the timely, coordinated provision of services that address the needs of individual patients. For example, chronic disease imposes a significant burden on the health and wellbeing of Australians. Patients may need a range of services from within and outside the health sector. Continuity of care can help prevent or delay the progression of many circulatory, respiratory, endocrine, nutritional and metabolic diseases (NHPAC 2006). Two indicators of this aspect of quality are reported here: the use of care planning and case conferencing (box 11.17); and the use of health assessments for older people (box 11.18).

*Care planning and case conferencing*

Box 11.17 **Care planning and case conferencing**

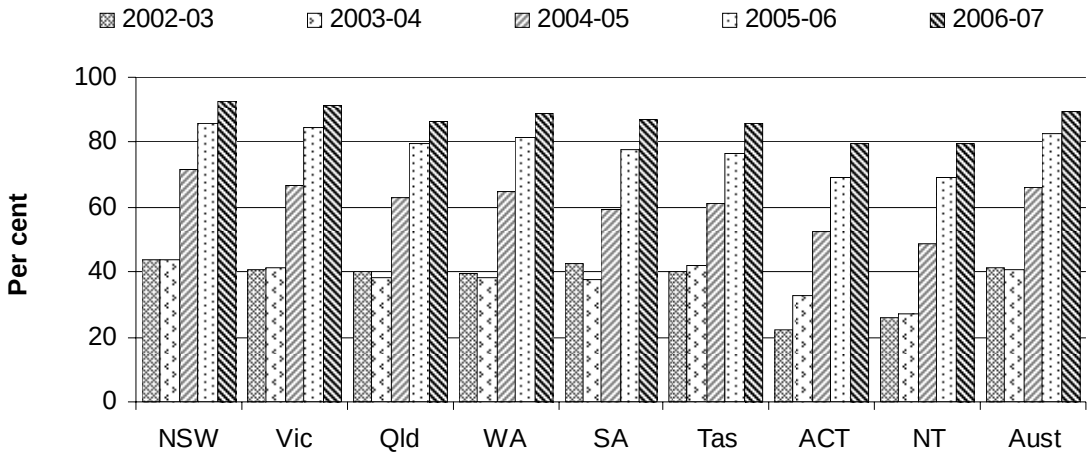
Care planning and case conferencing refer to chronic disease management items in the Medicare Benefits Schedule (MBS). These items allow for the preparation and regular review of care plans for individuals with chronic or terminal medical conditions, through GP managed or multidisciplinary team-based care. The rationale for the indicator is that GPs with some experience using care planning and case conferencing are more likely to continue to use those options when they have the potential to improve patient care.

This indicator is defined as the proportion of GPs who used the chronic disease management items for care planning or case conferencing at least once during a 12 month period.

An increase in the proportion of GPs who use these chronic disease management items may indicate an improvement in the continuity of care provided to people with chronic or terminal medical conditions, including people with complex, multidisciplinary care needs.

Nationally, 89.8 per cent of GPs used the chronic disease management items for care planning or case conferencing in 2006-07 (figure 11.22).

Figure 11.22 **GP use of chronic disease management Medicare items for care planning and case conferencing[a]**




**a** The increase in the number of GPs using chronic disease management MBS items for care planning or case conferencing in 2004-05 may be due to the introduction of the Strengthening Medicare initiative on 1 July 2004. This initiative provided access to a range of allied health and dental care treatments for patients with chronic conditions and complex needs, on referral from a GP. The continued increase in subsequent years may be linked to the introduction of additional chronic disease management MBS items on a number of occasions.

*Source*: DoHA (unpublished); table 11A.31.

## *Health assessments for older people*

Box 11.18 **Health assessments for older people**

An annual voluntary assessment for older people is an MBS item that allows a GP to undertake an in-depth assessment of a patient's health. Health assessments cover the patient's health and physical, psychological and social functioning, and aim to facilitate more timely preventive actions or treatments to enhance the health of the patient (see also box 11.6).

This indicator is defined as the proportion of older people who received a voluntary health assessment. Older people are 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. The larger age range for Indigenous people recognises that they typically face increased health risks at younger ages than most other groups in the population. It also broadly reflects the difference in average life expectancy between the Indigenous and non-Indigenous populations (see the 'Health preface'). Results for Indigenous people are reported under equity indicators (see box 11.6).

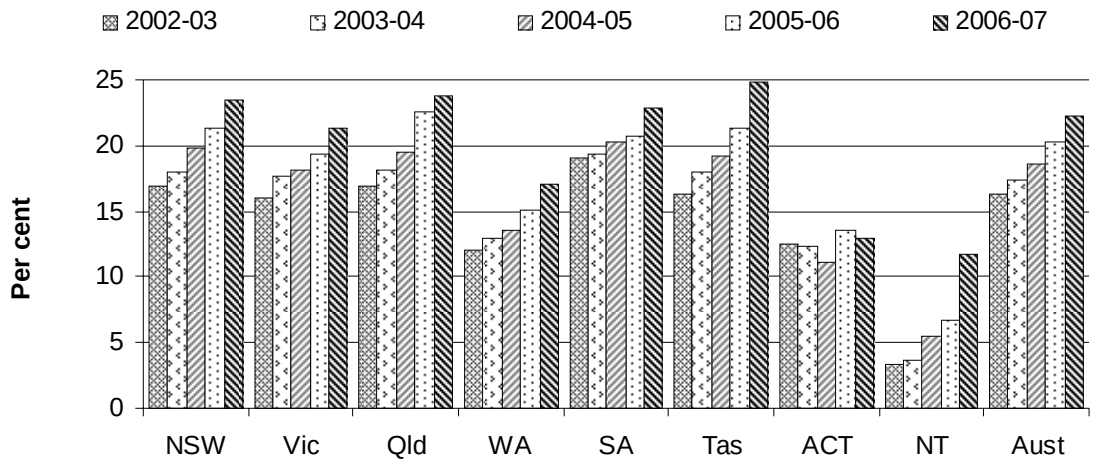
(Continued on next page)

Box 11.18 **(Continued)**

An increase in the proportion of eligible older people who received a voluntary health assessment may indicate a reduction in health risks for older people, through early and timely prevention and intervention measures to improve and maintain health.

Nationally, the proportion of older people who received a voluntary health assessment increased from 18.7 per cent in 2004-05 to 22.2 per cent in 2006-07 (figure 11.23).

Figure 11.23 **Older people who received a voluntary health assessment[a]**




**a** Older people are 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*: DoHA (unpublished); table 11A.32.

### *Sustainability*

The Steering Committee has identified the sustainability of primary and community health as a key area for development in future reports.

## Efficiency

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

The 'cost to government of general practice per person' is one indicator of the efficiency of general practice (box 11.19). Nationally, the recurrent cost to the

Australian Government of general practice was $247 per person in 2006-07 (figure 11.24).

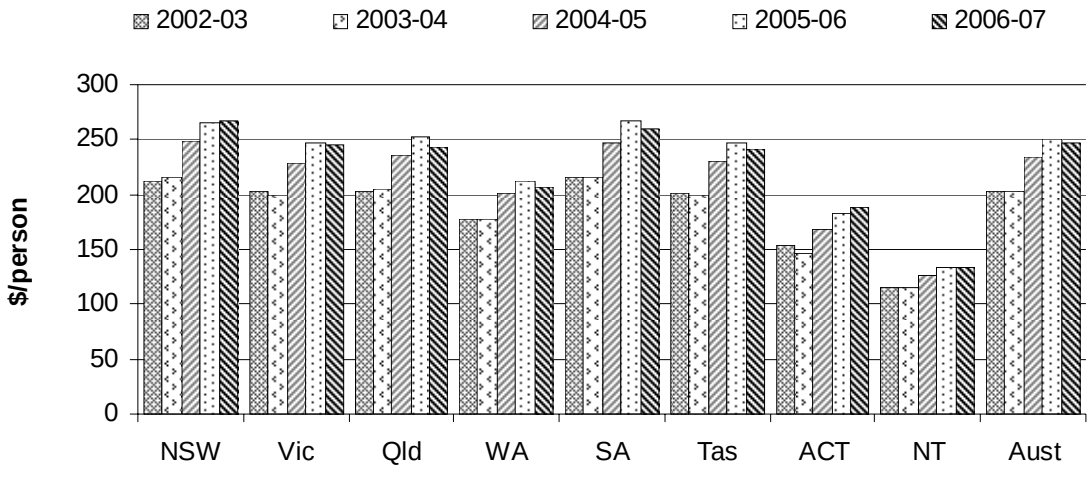
Box 11.19 **Cost to government of general practice per person**

'Cost to government of general practice per person' is an indicator of efficiency. It is defined as the cost to government of general practice (including the cost of Medicare, non-Medicare funding such as for the PIP, and expenditure by the DVA) per person in the population.

A lower cost per person may indicate higher efficiency. However, this is likely to be the case only where the lower cost is associated with services of equal or superior effectiveness.

This indicator needs to be interpreted with care because a lower cost per person may reflect service substitution between primary healthcare and hospital services or specialist services (the latter two both being potentially higher cost than primary care). Further, the indicator does not include costs for all primary healthcare services. Some primary healthcare services are provided by salaried GPs in community health settings, particularly in rural and remote areas, through accident and emergency departments, and Indigenous-specific primary health care services. Consequently, this indicator will understate costs for primary care in jurisdictions with larger proportions of rural and remote populations, where a salaried GP services delivery model is used.

Figure 11.24 **Australian Government real expenditure per person on GPs (2006-07 dollars)[a, b]**




**a** The data include Medicare, PIP, DVA, Divisions of General Practice and General Practice Immunisation Incentives Scheme payments. DVA data cover consultations by local medical officers (LMOs), whether vocationally recognised GPs or not. From available files, it is not possible to extract the amounts paid to LMOs (as opposed to specialists) for procedural items. It is expected, however, that the amounts for these services are small compared with payments for consultations. The Australian Government invests in general practice through the Divisions of General Practice Program.

*Source*: DoHA (unpublished); table 11A.2.

## Outcomes

Outcomes are the impact of services on the status of an individual or group (while outputs are the actual services delivered) (see chapter 1, section 1.5).

Indicators of both *intermediate* and *final* primary and community health outcomes are reported here. 'Child immunisation coverage' indicates the *intermediate* outcome of immunisation against disease (box 11.20). 'Notifications of selected childhood diseases' indicates the *final* outcome — the incidence of diseases — that child immunisation can prevent (box 11.21). The final outcome indicator 'potentially preventable hospitalisations' is also reported (box 11.24). Current data were not available this year for two outcome indicators previously reported — cervical screening (box 11.22) and influenza vaccinations for older people (box 11.23).

### *Child immunisation coverage*

Box 11.20 **Child immunisation coverage**

'Child immunisation coverage' is an indicator of outcomes for primary and community health services, because one of the objectives of GPs and community health services is the achievement of high immunisation coverage levels for children. Many providers deliver child immunisation services (table 11.6). GPs are encouraged to achieve high immunisation coverage levels under the General Practice Immunisation Incentives Scheme, which provides incentives for the immunisation of children under seven years of age.

Two measures are reported for this indicator:

- the proportion of children aged 12 months to less than 15 months who are fully immunised. Children assessed as fully immunised at 12 months are immunised against diphtheria, tetanus, whooping cough, polio, *Haemophilus influenzae* type b and hepatitis B
- the proportion of children aged 24 months to less than 27 months who are fully immunised. Children assessed as fully immunised at 24 months are immunised against diphtheria, tetanus, whooping cough, polio, *Haemophilus influenzae* type b, hepatitis B, and measles, mumps and rubella.

An increase in the proportion of children who are fully immunised indicates a reduction in the risk of children contracting a range of diseases, including measles, whooping cough and *Haemophilus influenzae* type b.

Data on valid vaccinations supplied to children under 7 years of age from the Australian Childhood Immunisation Register (ACIR) are shown in table 11.6. Around 91.2 per cent of Australian children aged 12 months to less than 15 months at 30 June 2007 were assessed as fully immunised (figure 11.25).

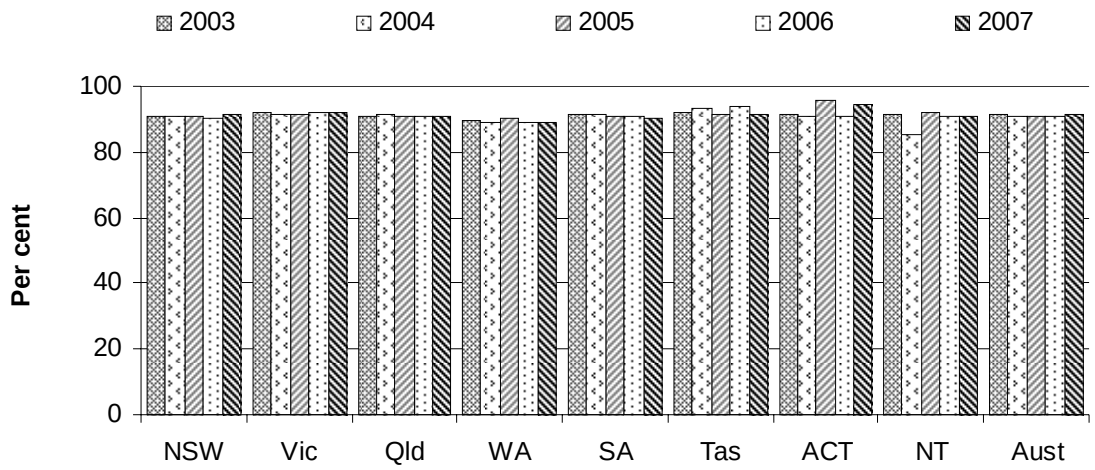
Table 11.6 **Valid vaccinations supplied to children under 7 years of age, by provider type, 1996–2007 (per cent)[a, b]**

| *Provider* | *NSW* | *Vic* | *Qld* | *WA* | *SA* | *Tas* | *ACT*[c] | *NT* | *Aust* |
|---|---|---|---|---|---|---|---|---|---|
| GP | 83.8 | 52.6 | 82.5 | 63.5 | 68.6 | 86.2 | 39.5 | 3.1 | 70.7 |
| Council | 6.0 | 46.0 | 7.3 | 6.9 | 18.1 | 12.9 | – | – | 17.3 |
| State or Territory health department | – | – | – | 5.9 | 0.1 | 0.1 | 22.6 | 0.3 | 1.0 |
| Flying doctor service | – | – | 0.3 | – | 0.1 | – | – | – | 0.1 |
| Public hospital | 2.2 | 0.4 | 3.1 | 5.4 | 3.0 | 0.2 | 0.8 | 7.6 | 2.3 |
| Private hospital | 0.1 | – | – | – | – | – | – | 0.9 | 0.1 |
| Indigenous health service | 0.5 | 0.1 | 0.7 | 0.6 | 0.5 | – | 0.2 | 9.1 | 0.6 |
| Indigenous health worker | – | – | 0.5 | – | 0.1 | – | – | 0.2 | 0.1 |
| Community health centre | 7.4 | 0.8 | 5.6 | 17.7 | 9.6 | 0.6 | 36.8 | 78.8 | 8.0 |
| Community nurse | – | – | – | – | – | – | – | – | – |
| **Total** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** |

**a** 1 January 1996 to 30 June 2007. Data relate to the State or Territory in which the immunisation provider was located. **b** A valid vaccination is a National Health and Medical Research Council's Australian Standard Vaccination Schedule vaccination administered to a child under the age of 7 years. **c** Due to changes in provider classification in the ACT between 1996 to 2007, some vaccinations undertaken by ACT Health's Maternal and Child Health nurses are reported under 'State or Territory health departments' and some are reported under 'Community health centre'. The total proportion of vaccinations provided by ACT Health during this period was 59.4 per cent. – Nil or rounded to zero.

*Source*: DoHA (unpublished); table 11A.33.

Figure 11.25 **Children aged 12 months to less than 15 months who were fully immunised[a, b, c]**

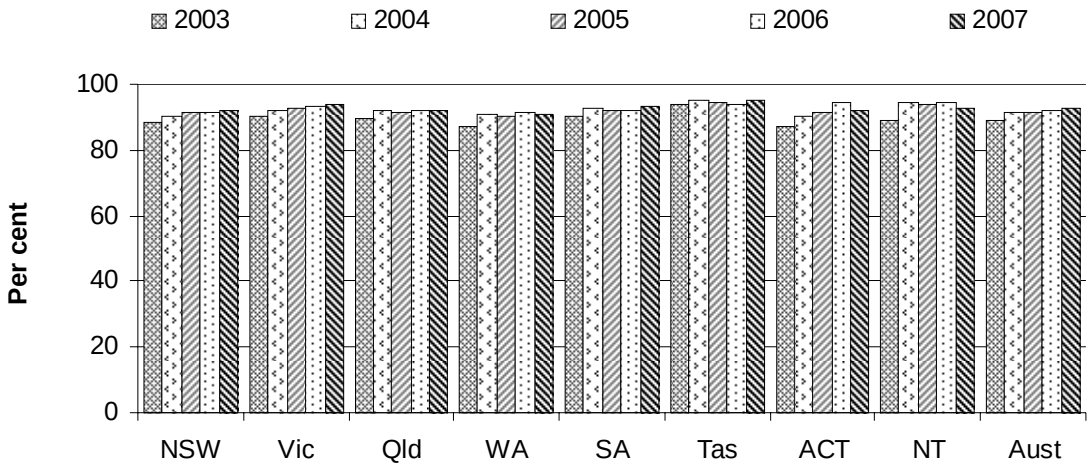



**a** Coverage measured at 30 June for children turning 12 months of age by 31 March, by State or Territory in which the child was located. **b** The ACIR includes all children under 7 years of age who are registered with Medicare. By the age of 12 months, over 98 per cent of Australian children have been registered with Medicare (NCIRS 2000). **c** There may be some under-reporting by providers, so vaccination coverage estimates calculated using ACIR data are considered minimum estimates (NCIRS 2000).

*Source*: DoHA (unpublished); table 11A.34.

Nationally, 92.5 per cent of children aged 24 months to less than 27 months at 30 June 2007 were assessed as being fully immunised (figure 11.26).

Figure 11.26 **Children aged 24 months to less than 27 months who were fully immunised[a, b, c]**




**a** Coverage measured at 30 June for children turning 24 months of age by 31 March, by State or Territory in which the child was located. **b** 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). **c** There may be some under-reporting by providers, so vaccination coverage estimates calculated using ACIR data are considered minimum estimates (NCIRS 2000).

*Source*: DoHA (unpublished); table 11A.35.

*Notifications of selected childhood diseases*

Box 11.21 **Notifications of selected childhood diseases**

Notification rates for selected childhood vaccine preventable diseases (measles, pertussis [whooping cough] and *Haemophilus influenzae* type b) are an outcome indicator of primary and community health, because the activities of GPs and community health services can influence the prevalence of these diseases through immunisation (and consequently the notification rates). These childhood diseases are nationally notifiable diseases — that is, if they are diagnosed, there is a requirement to notify the relevant State or Territory authority. 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 for one in 25 cases.

For each disease, the rate of notifications is defined as the number of notifications for children aged 0–14 years per 100 000 children in that age group.

A reduction in the notification rate for the selected diseases indicates the effectiveness of the immunisation program.

In 2007, there were 5 notifications of measles across Australia to 31 August. There were fewer than 15 notifications per year for the period 2002–2005,

preceding a high of 68 notifications in 2006. The national notification rate in 2007 was 0.2 per 100 000 children aged 0–14 years (figure 11.27).

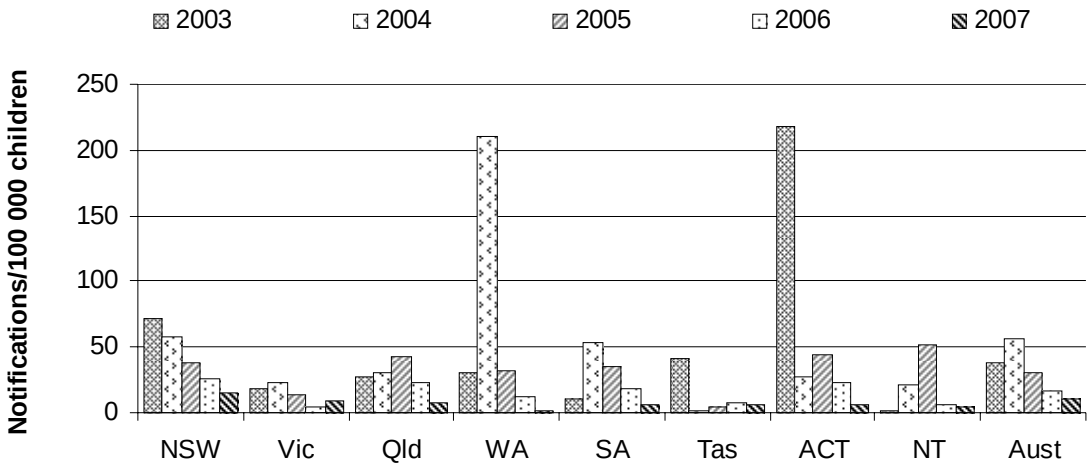
Figure 11.27 **Notifications of measles per 100 000 children aged 0–14 years[a, b]**


**a** Notifications for 2007 are to 31 August. **b** Where a notification rate for a particular year is zero, no notifications were made in that jurisdiction.

*Source*: DoHA (unpublished); table 11A.36.

In 2007 the downward trend in notifications of pertussis (whooping cough) across Australia continued, with 318 notifications to 31 August. This represented a national notification rate of 10.0 per 100 000 children aged 0–14 years (figure 11.28).

Figure 11.28 **Notifications of pertussis (whooping cough) per 100 000 children aged 0–14 years[a]**




**a** Notifications for 2007 are to 31 August.

*Source*: DoHA (unpublished); table 11A.37.

In recent years, notification rates for *Haemophilus influenzae* type b have remained low. In 2007, the notification rate Australia-wide to 31 August was 0.2 per 100 000 children aged 0–14 years (figure 11.29).

Figure 11.29 **Notifications of *Haemophilus influenzae* type b among children aged 0–14 years[a, b]**


**a** Notifications for 2007 are to 31 August. **b** Where a notification rate for a particular year is zero, no notifications were made in that jurisdiction.

*Source*: DoHA (unpublished); table 11A.38.

*Participation rates for women in cervical screening*

'Participation rates for women in cervical screening' is an indicator of primary and community healthcare outcomes (box 11.22). Data for the 24 month period 2005–2006 were not available for the 2008 Report. Data for previous years are reported in table 11A.39.

Box 11.22 **Participation rates for women aged 20–69 years in cervical screening**

'Cervical screening rate for target population' (women aged 20–69 years) is an indicator of a primary and community healthcare outcome. It is estimated that up to 90 per cent of the most common type of cervical cancer (squamous cervical cancer) may be prevented if cell changes are detected and treated early (Mitchell, Hocking, Saville 2003). A range of healthcare providers offer cervical screening tests (Pap smears). The National Cervical Screening Program involves GPs, gynaecologists, family planning clinics and hospital outpatient clinics.

This indicator is defined as the number of women aged 20–69 years who are screened over a two year period, as a proportion of all women aged 20–69 years. Adjustments are made to account for differences in the female age distribution across states and territories, and to remove from the population of women 20–69 years old (the rate denominator) those who have had a hysterectomy.

An increase in the proportion of women aged 20–69 years who have been screened would be expected to result in a reduction in the number of women dying from this disease. Current data were not available for the 2008 Report.

*Influenza vaccination coverage for older people*

'Influenza vaccination coverage for older people' is an indicator of primary and community healthcare outcomes (box 11.23). The Adult Vaccination Survey was not conducted in 2005, and therefore updated data were not available for the 2008 Report. Data for previous years are reported in table 11A.40. The hospitalisation rate of people for influenza and pneumonia is included as a separate indicator (box 11.25).

Box 11.23 **Influenza vaccination coverage for older people**

Each year, influenza and its consequences result in many older people being hospitalised, as well as a considerable number of deaths. Influenza vaccinations for older people have been demonstrated to reduce hospitalisations and deaths (National Health Performance Committee unpublished). GPs provide the majority of influenza vaccinations for older people.

The indicator is defined as the proportion of people aged 65 years or over who have been vaccinated against influenza.

An increase in the proportion of older people vaccinated against influenza reduces the risk of older people contracting influenza and suffering consequent complications. Current data were not available for the 2008 Report.

*Potentially preventable hospitalisations*

The following five outcome indicators relate to potentially preventable hospitalisations for a range of conditions. The first three indicators — hospitalisations for vaccine preventable conditions (box 11.25), selected acute conditions (box 11.26) and selected chronic conditions (box 11.27) — were developed by the National Health Performance Committee, based on empirical research (box 11.24). The other two outcome indicators in this category relate to hospitalisations for diabetes (box 11.28) and the hospitalisation of older people for falls (box 11.29).

Box 11.24 **Potentially preventable hospitalisation indicators**

Potentially preventable hospitalisations refer to hospital admissions that may be avoided by appropriate management in the primary healthcare sector and/or the broader community. They include vaccine preventable, acute and chronic conditions, defined according to the *Victorian Ambulatory Care Sensitive Conditions Study* (DHS 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) that had recently been the subject of systematic review and empirical analysis.

(Continued on next page)

Box 11.24 **(Continued)**

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 that a patient will be treated as an outpatient rather than an admitted patient. Potentially preventable hospitalisations will never be entirely eliminated, but the variation across geographic areas demonstrates considerable potential for strengthening the effectiveness of non-hospital care.

*Source*: NHPC (2004).

Data are reported against these indicators for Indigenous Australians as well as for all Australians. The completeness of Indigenous identification in hospital admitted patient data varies across states and territories. The AIHW (2005) report *Improving the Quality of Indigenous Identification in Hospital Separations Data* found that Indigenous patient data were of acceptable quality for analytical purposes only for Queensland, WA, SA, and public hospitals in the NT. Following new assessments of the quality of Indigenous identification in 2007, the National Health Information Management Principal Committee (NHIMPC) has recently approved NSW Indigenous patient data as acceptable in quality, for analytical purposes, from the 2004-05 reference year. A proposal to accept Victorian data as acceptable was being considered by the NHIMPC in late 2007. Efforts to improve Indigenous identification across states and territories are ongoing.

Reported data are not necessarily representative of other jurisdictions. Indigenous patients are underidentified, to an extent that varies across jurisdictions. Because of improvements in data quality over time, caution also should be used in time series analysis.

*Vaccine preventable hospitalisations*

'Vaccine preventable hospitalisations' is an indicator of primary and community healthcare outcomes (box 11.25).

Box 11.25 **Vaccine preventable hospitalisations**

The effectiveness of primary and community healthcare has a significant influence on the rates of hospitalisation for vaccine preventable conditions. This influence occurs mainly through the provision of vaccinations and the encouragement of high rates of vaccination coverage for target populations.

This indicator is defined as the number of hospital separations for influenza and pneumonia, and other vaccine preventable conditions, per 1000 people. This indicator is reported for Indigenous people as well as for all people. Adjustments are made to account for differences in the age structures of these populations across states and territories.

A reduction in hospitalisation rates may indicate improvements in the effectiveness of the vaccination program. Effective treatment by primary health providers may also reduce hospitalisations.

Factors outside the control of the primary healthcare sector also influence the rates of hospitalisation for vaccine preventable conditions; for example, the number and virulence of influenza strains from year to year.

Australia-wide, the age standardised hospital separation rate for all vaccine preventable conditions was 0.7 per 1000 people in 2005-06. Nationally, influenza and pneumonia accounted for 78.0 per cent of hospital separations for vaccine preventable conditions in 2005-06 (table 11.7).

Table 11.7 **Separations for vaccine preventable conditions, by state and territory of usual residence, per 1000 people, 2005-06[a]**

| | *NSW* | *Vic* | *Qld* | *WA* | *SA* | *Tas* | *ACT* | *NT* | *Aust* |
|---|---|---|---|---|---|---|---|---|---|
| Influenza and pneumonia | 0.5 | 0.4 | 0.6 | 0.7 | 0.6 | 0.4 | 0.4 | 1.4 | 0.5 |
| Other conditions | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.6 | 0.6 |
| **Total[b]** | **0.7** | **0.6** | **0.7** | **0.8** | **0.7** | **0.5** | **0.4** | **2.0** | **0.7** |

**a** Separation rates are directly age standardised to the Australian population at 30 June 2001. **b** Totals may not equal the sum of individual conditions due to rounding.

*Source*: AIHW (2007b).

The age standardised hospital separation rate of Indigenous people for all vaccine preventable conditions was 3.1 per 1000 Indigenous people in 2005-06 for NSW, Queensland, WA, SA and the NT combined. The quality of Indigenous identification is considered acceptable for the purposes of analysis for these jurisdictions. Over 80 per cent of vaccine preventable separations for Indigenous people were accounted for by influenza and pneumonia in 2005-06 (table 11.8).

Table 11.8 **Separations of Indigenous people for vaccine preventable conditions, per 1000 Indigenous people, 2005-06[a, b]**

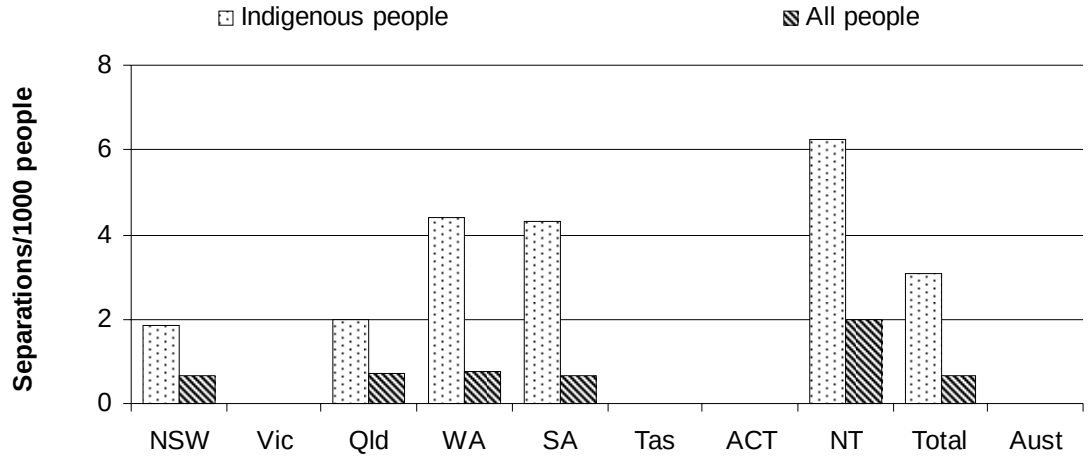
| | *NSW* | *Vic* | *Qld* | *WA* | *SA* | *Tas* | *ACT* | *NT* | *Total*[c] | *Aust* |
|---|---|---|---|---|---|---|---|---|---|---|
| Influenza and pneumonia | 1.7 | np | 1.5 | 3.9 | 3.8 | np | np | 4.6 | 2.5 | np |
| Other conditions | 0.2 | np | 0.5 | 0.5 | 0.5 | np | np | 1.6 | 0.5 | np |
| **Total** | **1.8** | **np** | **2.0** | **4.4** | **4.3** | **np** | **np** | **6.3** | **3.1** | **np** |

**a** Separation rates are directly age standardised to the Australian population at 30 June 2001. **b** Includes data only for NSW, Queensland, WA, SA, and the NT (NT data are for public hospitals only), for which the quality of Indigenous identification is considered acceptable for purposes of analysis. Caution should be used in the interpretation of these data because of jurisdictional differences in data quality. Data for the five states and territory are not necessarily representative of other jurisdictions. **c** Total comprises NSW, Queensland, WA, SA and the NT only. **np** not published.

*Source*: AIHW (unpublished).

The age standardised hospital separation rate of Indigenous people for vaccine preventable conditions was higher than that for all people in 2005-06 in all jurisdictions for which data were published (figure 11.30).

Figure 11.30 **Separations for vaccine preventable conditions, 2005-06[a, b, c, d]**




**a** Separation rates are directly age standardised to the Australian population at 30 June 2001. **b** Includes data only for NSW, Queensland, WA, SA, and the NT (NT data are for public hospitals only), for which the quality of Indigenous identification is considered acceptable for purposes of analysis. Caution should be used in the interpretation of these data because of jurisdictional differences in data quality. Data for the five states and territory are not necessarily representative of other jurisdictions. **c** Total comprises NSW, Queensland, WA, SA and the NT only. **d** Indigenous separation rates are based on state of hospitalisation while all person rates are based on state of usual residence. Care should be taken when comparing the two.

*Source*: AIHW (unpublished).

Age standardised hospital separation rate ratios for infectious pneumonia illustrate differences between the rates of hospital admissions for Indigenous people and those for all Australians, taking into account differences in the age structures of the populations. Rate ratios close to one indicate that Indigenous people have similar

separation rates to all people, while higher rate ratios indicate relative disadvantage. For both males and females there was a marked difference in 2005-06 between the separation rates for Indigenous people and those for the total population for infectious pneumonia diagnoses. For NSW, Queensland, WA, SA and the NT combined, the separation rate for Indigenous males was higher than that for all Australian males, and the separation rate for Indigenous females was higher than the rate for all females (tables 11A.41 and 11A.42).

*Hospitalisations for selected acute conditions*

Box 11.26 **Hospitalisations for selected acute conditions**

The effectiveness of primary and community healthcare services has a significant influence on the rates of hospitalisation for the following selected acute conditions: dehydration and gastroenteritis; pyelonephritis (kidney inflammation caused by bacterial infection); perforated/bleeding ulcer; cellulitis; pelvic inflammatory disease; ear, nose and throat infections; dental conditions; appendicitis; convulsions and epilepsy; and gangrene.

This indicator is defined as the number of hospital separations for the selected acute conditions per 1000 people. The indicator is reported for Indigenous people as well as for all people. Adjustments are made to account for differences in the age structures of these populations across states and territories.

A reduction in hospitalisation rates may indicate improvements in the effectiveness of primary and community healthcare providers' treatment of these conditions.

Factors outside the control of the primary healthcare sector also influence the rates of hospitalisation, for example, the underlying prevalence of the conditions. Public health measures not covered in this chapter may also influence hospitalisation rates.

Of the selected acute conditions, dental conditions and dehydration and gastroenteritis had the highest rates of hospitalisation nationally in 2005-06 (table 11.9).

Table 11.9 **Separations for potentially preventable acute conditions, by state and territory of usual residence, per 1000 people, 2005-06[a]**

| | *NSW* | *Vic* | *Qld* | *WA* | *SA* | *Tas* | *ACT* | *NT* | *Aust* |
|---|---|---|---|---|---|---|---|---|---|
| Dehydration and gastroenteritis | 2.1 | 2.7 | 2.4 | 2.0 | 2.7 | 2.0 | 1.5 | 1.9 | 2.3 |
| Pyelonephritis[b] | 2.1 | 2.3 | 2.2 | 2.0 | 1.9 | 1.6 | 2.1 | 3.0 | 2.1 |
| Perforated/bleeding ulcer | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 |
| Cellulitis | 1.6 | 1.6 | 1.6 | 1.5 | 1.4 | 1.2 | 1.4 | 4.7 | 1.6 |
| Pelvic inflammatory disease | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.6 | 0.3 |
| Ear, nose and throat infections | 1.7 | 1.4 | 1.8 | 1.6 | 2.5 | 1.2 | 1.1 | 2.2 | 1.7 |
| Dental conditions | 2.2 | 3.0 | 2.7 | 3.5 | 3.1 | 1.8 | 1.7 | 1.8 | 2.7 |
| Appendicitis | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.3 | 0.2 |
| Convulsions and epilepsy | 1.7 | 1.5 | 1.5 | 1.5 | 1.7 | 1.6 | 1.6 | 3.2 | 1.6 |
| Gangrene | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.6 | 0.2 |
| **Total[c]** | **12.1** | **13.4** | **13.0** | **13.0** | **14.3** | **10.0** | **10.2** | **18.6** | **12.9** |

**a** Separation rates are directly age standardised to the Australian population at 30 June 2001. **b** Kidney inflammation caused by bacterial infection. **c** Totals may not equal the sum of individual components as more than one acute condition may be reported for a separation.

*Source*: AIHW (2007b).

The age standardised hospital separation rate of Indigenous people for all potentially preventable acute conditions was 32.1 per 1000 Indigenous people in 2005-06 for NSW, Queensland, WA, SA and the NT combined. Over half of potentially preventable acute separations for Indigenous people were accounted for by convulsions and epilepsy, pyelonephritis, and cellulitis in 2005-06 (table 11.10).

Table 11.10 **Separations of Indigenous people for potentially preventable acute conditions, per 1000 Indigenous people, 2005-06[a, b]**

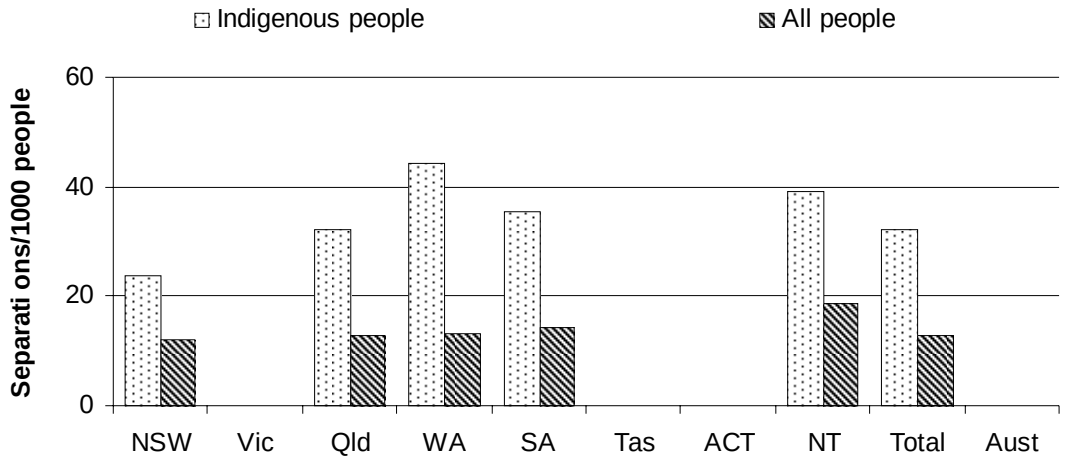
| | *NSW* | *Vic* | *Qld* | *WA* | *SA* | *Tas* | *ACT* | *NT* | *Total*[c] | *Aust* |
|---|---|---|---|---|---|---|---|---|---|---|
| Dehydration and gastroenteritis | 2.7 | np | 4.2 | 5.1 | 5.8 | np | np | 3.9 | 3.9 | np |
| Pyelonephritis[d] | 4.8 | np | 7.1 | 7.8 | 5.2 | np | np | 7.5 | 6.4 | np |
| Perforated/bleeding ulcer | 0.4 | np | 0.4 | 0.2 | 0.2 | np | np | 0.2 | 0.3 | np |
| Cellulitis | 2.9 | np | 5.8 | 7.1 | 3.9 | np | np | 7.5 | 4.8 | np |
| Pelvic inflammatory disease | 0.4 | np | 0.6 | 1.0 | 1.1 | np | np | 1.6 | 40.7 | np |
| Ear, nose and throat infections | 3.0 | np | 3.7 | 4.3 | 4.7 | np | np | 3.4 | 3.6 | np |
| Dental conditions | 2.9 | np | 2.9 | 3.7 | 3.1 | np | np | 2.9 | 3.0 | np |
| Appendicitis | 0.2 | np | 0.2 | 0.2 | 0.2 | np | np | 0.4 | 0.2 | np |
| Convulsions and epilepsy | 6.1 | np | 6.4 | 12.3 | 10.8 | np | np | 10.0 | 8.0 | np |
| Gangrene | 0.4 | np | 0.9 | 2.5 | 0.5 | np | np | 1.8 | 1.1 | np |
| **Total** | **23.8** | **np** | **32.2** | **44.3** | **35.4** | **np** | **np** | **39.2** | **32.1** | **np** |

**a** Separation rates are directly age standardised to the Australian population at 30 June 2001. **b** Includes data only for NSW, Queensland, WA, SA, and the NT (NT data are for public hospitals only), for which the quality of Indigenous identification is considered acceptable for purposes of analysis. Caution should be used in the interpretation of these data because of jurisdictional differences in data quality. Data for the five states and territory are not necessarily representative of other jurisdictions. **c** Total comprises NSW, Queensland, WA, SA and the NT only. **d** Kidney inflammation caused by bacterial infection. **np** Not published.

*Source*: AIHW (unpublished).

The age standardised hospital separation rate of Indigenous people for all potentially preventable acute conditions was higher than that for all people in 2005-06 in all jurisdictions for which data were published (figure 11.31).

Figure 11.31 **Separations for potentially preventable acute conditions, 2005-06[a, b, c, d]**




**a** Separation rates are directly age standardised to the Australian population at 30 June 2001. **b** Includes data only for NSW, Queensland, WA, SA, and the NT (NT data are for public hospitals only), for which the quality of Indigenous identification is considered acceptable for purposes of analysis. Caution should be used in the interpretation of these data because of jurisdictional differences in data quality. Data for the five states and territory are not necessarily representative of other jurisdictions. **c** Total comprises NSW, Queensland, WA, SA and the NT only. **d** Indigenous separation rates are based on state of hospitalisation while all person rates are based on state of usual residence. Care should be taken when comparing the two.

*Source*: AIHW (unpublished).

## *Hospitalisations for selected chronic conditions*

### Box 11.27 **Hospitalisations for selected chronic conditions**

The effectiveness of primary and community healthcare has a significant influence on the rates of hospitalisation for the following selected chronic conditions: asthma; congestive cardiac failure; diabetes complications; chronic obstructive pulmonary disease; angina; iron deficiency anaemia; hypertension; nutritional deficiencies; and rheumatic heart disease. Diabetes is considered in detail in a separate indicator.

This indicator is defined as the number of hospital separations for the selected chronic conditions per 1000 people. This indicator is reported for Indigenous people as well as for all people. Adjustments are made to account for differences in the age structures of these populations across states and territories.

(Continued on next page)

Box 11.27 **(Continued)**

A reduction in hospitalisation rates may indicate improvements in the effectiveness of primary and community healthcare providers' treatment of these conditions.

Factors outside the control of the primary healthcare sector also influence the rates of hospitalisation, for example, the underlying prevalence of the conditions. Public health measures that are not reported in this chapter may also influence the hospitalisation rates.

Of the selected chronic conditions (excluding diabetes, which is discussed below) chronic obstructive pulmonary disease, congestive cardiac failure, asthma and angina had the highest rates of hospitalisation nationally in 2005-06. The hospitalisation rate for diabetes complications was more than three times higher than the rate for any of these conditions (table 11.11).

Table 11.11 **Separations for potentially preventable chronic conditions, by state and territory of usual residence, per 1000 people, 2005-06[a, b, c]**

| | *NSW* | *Vic* | *Qld* | *WA* | *SA* | *Tas* | *ACT* | *NT* | *Aust* |
|---|---|---|---|---|---|---|---|---|---|
| Asthma | 2.0 | 1.9 | 1.7 | 1.8 | 2.8 | 1.4 | 1.2 | 1.7 | 1.9 |
| Congestive cardiac failure | 1.8 | 2.1 | 1.9 | 1.9 | 1.9 | 1.7 | 1.7 | 2.7 | 1.9 |
| Diabetes complications | 7.0 | 8.8 | 9.4 | 24.7 | 8.1 | 12.8 | 5.1 | 14.3 | 9.9 |
| Chronic obstructive pulmonary disease | 2.5 | 2.5 | 2.8 | 2.5 | 3.1 | 2.6 | 1.9 | 5.5 | 2.6 |
| Angina | 1.6 | 1.9 | 2.5 | 1.6 | 1.7 | 1.8 | 1.3 | 3.1 | 1.9 |
| Iron deficiency anaemia | 0.9 | 1.5 | 0.9 | 1.3 | 1.0 | 1.1 | 0.8 | 1.2 | 1.1 |
| Hypertension | 0.3 | 1.2 | 1.4 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 |
| Nutritional deficiencies | – | – | – | – | – | – | – | – | – |
| Rheumatic heart disease[b] | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | – | – | 0.1 |
| **Total[c]** | **15.2** | **17.8** | **18.6** | **33.2** | **17.9** | **20.8** | **11.3** | **27.3** | **18.6** |

**a** Separation rates are directly age standardised to the Australian population at 30 June 2001. **b** Rheumatic heart disease includes acute rheumatic fever as well as the chronic disease. **c** Totals may not equal the sum of individual components as more than one chronic condition may be reported for a separation. – Nil or rounded to zero.

*Source*: AIHW (2007b).

The age standardised hospital separation rate of Indigenous people for all potentially preventable chronic conditions was 60.7 per 1000 Indigenous people in 2005-06 for NSW, Queensland, WA, SA and the NT combined. The quality of Indigenous identification is considered acceptable for the purpose of analysis only for these jurisdictions. Excluding diabetes (discussed below), chronic obstructive pulmonary disease, congestive cardiac failure and angina had the highest potentially preventable chronic hospitalisation rates for Indigenous people in 2005-06 (table 11.12).

Table 11.12 **Separations of Indigenous people for potentially preventable chronic conditions, per 1000 Indigenous people, 2005-06[a, b]**

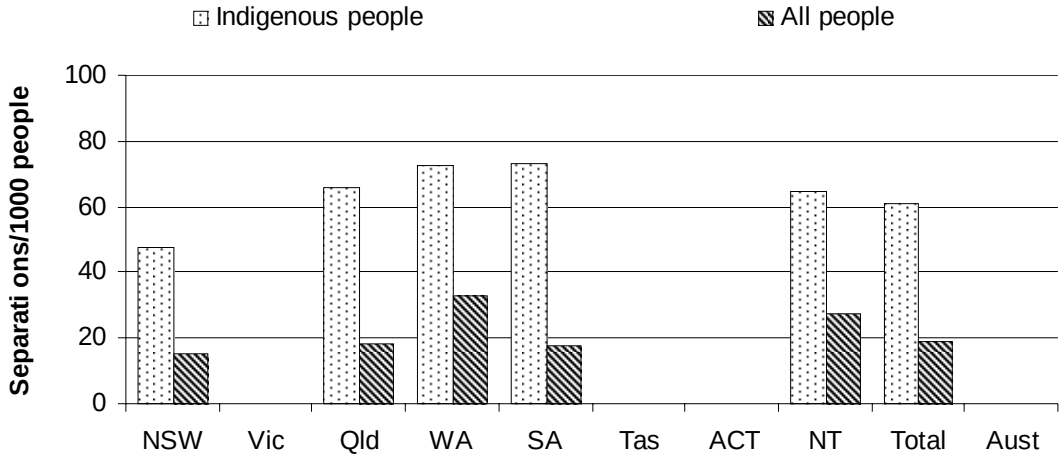
| | *NSW* | *Vic* | *Qld* | *WA* | *SA* | *Tas* | *ACT* | *NT* | *Total*[c] | *Aust* |
|---|---|---|---|---|---|---|---|---|---|---|
| Asthma | 4.1 | np | 4.7 | 6.6 | 6.9 | np | np | 2.8 | 4.7 | np |
| Congestive cardiac failure | 4.9 | np | 9.4 | 9.4 | 7.5 | np | np | 6.7 | 7.3 | np |
| Diabetes complications[d] | 21.4 | np | 34.1 | 42.7 | 42.2 | np | np | 34.2 | 31.6 | np |
| Chronic obstructive pulmonary disease | 13.8 | np | 14.7 | 12.2 | 15.9 | np | np | 16.5 | 14.2 | np |
| Angina | 4.8 | np | 6.7 | 5.4 | 6.4 | np | np | 5.1 | 5.6 | np |
| Iron deficiency anaemia | 1.4 | np | 1.2 | 2.8 | 1.4 | np | np | 2.4 | 1.7 | np |
| Hypertension | 1.1 | np | 1.6 | 1.0 | 0.9 | np | np | 0.8 | 1.2 | np |
| Nutritional deficiencies | 0.0 | np | 0.0 | 0.0 | 0.0 | np | np | 0.1 | 0.0 | np |
| Rheumatic heart disease[e] | 0.1 | np | 1.0 | 0.8 | 0.4 | np | np | 2.2 | 0.8 | np |
| **Total** | **47.3** | **np** | **65.9** | **72.3** | **73.2** | **np** | **np** | **64.7** | **60.7** | **np** |

**a** Separation rates are directly age standardised to the Australian population at 30 June 2001. **b** Includes data only for NSW, Queensland, WA, SA, and the NT (public hospitals only), for which the quality of Indigenous identification is considered acceptable for purposes of analysis. Caution should be used in the interpretation of these data because of jurisdictional differences in data quality. Data for the five states and territory are not necessarily representative of other jurisdictions. **c** Total comprises NSW, Queensland, WA, SA and the NT only. **d** Excludes separations with a principal diagnosis of renal dialysis and an additional diagnosis of diabetes. **e** Rheumatic heart disease includes acute rheumatic fever as well as the chronic disease. **np** Not published.

*Source*: AIHW (unpublished).

The age standardised hospital separation rate of Indigenous people for all potentially preventable chronic conditions was higher than that for all people in 2005-06 in all jurisdictions for which data were published (figure 11.32).

Figure 11.32 **Separations for potentially preventable chronic conditions, 2005-06[a, b, c]**




**a** Separation rates are directly age standardised to the Australian population at 30 June 2001. **b** Includes data only for NSW, Queensland, WA, SA, and the NT (NT data are for public hospitals only), for which the quality of Indigenous identification is considered acceptable for purposes of analysis. Caution should be used in the interpretation of these data because of jurisdictional differences in data quality. Data for the five states and territory are not necessarily representative of other jurisdictions. **c** Indigenous separation rates are based on state of hospitalisation while all person rates are based on state of usual residence. Care should be taken when comparing the two.

*Source*: AIHW (unpublished).

## *Hospitalisations for diabetes*

### Box 11.28 **Hospitalisations for diabetes**

The effectiveness of primary and community healthcare has a significant influence on the rates of hospitalisation for diabetes.

Hospital separation rates are reported for patients with diabetes mellitus as the principal diagnosis, and for patients with a lower limb amputation as well as a principal or additional diagnosis of diabetes. These rates are calculated per 100 000 people and adjusted to account for differences in the age structures of State and Territory populations.

A reduction in these rates may indicate an improvement in GPs' and community health providers' management of patients' diabetes.

(Continued on next page)

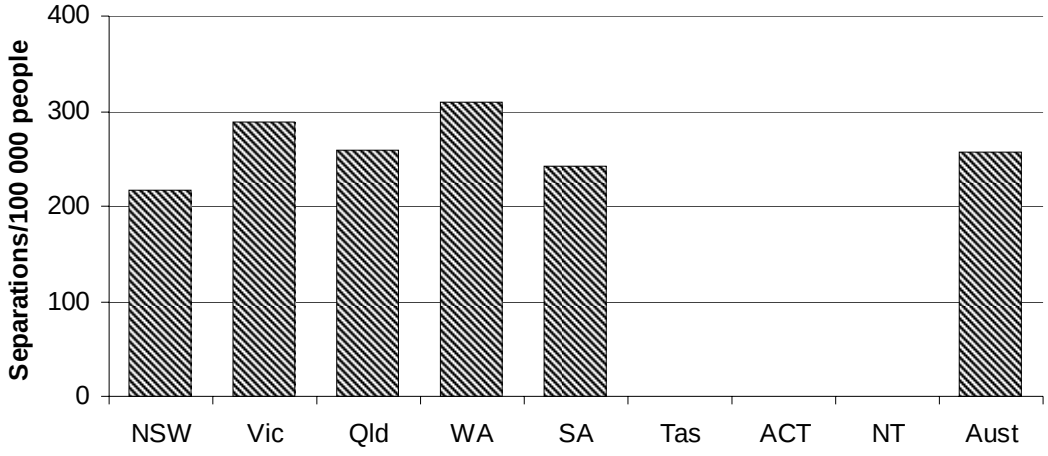
Box 11.28 **(Continued)**

A comparison of Indigenous and all other people is also made by presenting the ratio of age standardised hospital separation rates of Indigenous people to all people. Rate ratios close to one indicate that Indigenous people have similar separation rates to all people, while higher rate ratios indicate relative disadvantage.

Factors outside the control of the primary healthcare sector also influence the rates of hospitalisation, for example, the underlying prevalence of the conditions. Public health measures that are not reported in this chapter may also influence the hospitalisation rates.

Australia-wide, the age standardised hospital separation rate in 2005-06 where the principal diagnosis was Type 2 diabetes mellitus was 257.7 separations per 100 000 people (figure 11.33).

Figure 11.33 **Separations for Type 2 diabetes mellitus as principal diagnosis, all hospitals, 2005-06[a, b, c, d]**

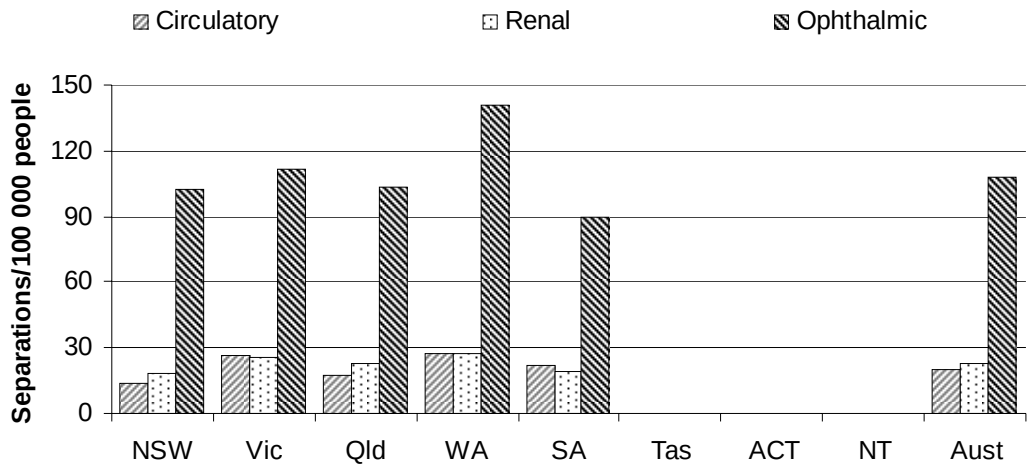



**a** Results for individual complications may be affected by small numbers, and need to be interpreted with care. **b** Differences across jurisdictions in policy and practice relating to the admission of patients, the availability of outpatient services and the incentives to admit patients rather than treat them as outpatients will affect estimates of hospital separations. **c** Morbidity data are coded under coding standards that may differ over time and across jurisdictions. **d** Data for Tasmania, the ACT and the NT are not published separately (due to hospital confidentiality arrangements) but are included in the total for Australia.

*Source*: AIHW (unpublished); table 11A.43.

The three most common complications from Type 2 diabetes that led to hospitalisation in 2005-06 were ophthalmic, renal and circulatory complications. Across all jurisdictions for which data were published, the highest hospital separation rates were for ophthalmic complications (figure 11.34). Each patient may have one or more complication (circulatory, renal and ophthalmic) for each diabetes hospital separation.

Figure 11.34 **Proportion of separations for principal diagnosis of Type 2 diabetes mellitus by selected complications, all hospitals, 2005-06[a, b, c, d]**



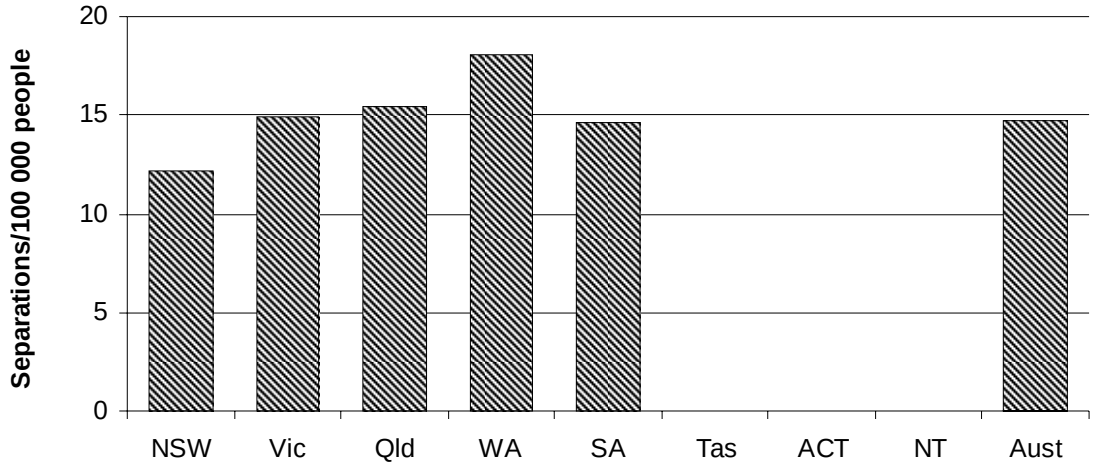

**a** Results for individual complications may be affected by small numbers, and need to be interpreted with care. **b** Differences across jurisdictions in policy and practice relating to the admission of patients, the availability of outpatient services and the incentives to admit patients rather than treat them as outpatients will affect estimates of hospital separations. **c** Morbidity data are coded under coding standards that may differ over time and across jurisdictions. **d** Data for Tasmania, the ACT and the NT are not published separately (due to private hospital confidentiality arrangements) but are included in the total for Australia.

*Source*: AIHW (unpublished); table 11A.43.

Treatment for Type 2 diabetes and related conditions is also provided in ambulatory care settings but 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 the incentives to admit patients rather than treat them as outpatients affect hospital separation rates. This effect is partly reflected in the substantial variation in the proportion of separations that are 'same day' across jurisdictions. Nationally, 48.0 per cent of separations for Type 2 diabetes were same day in 2005-06 (table 11A.44).

Amputation of a lower limb can be an outcome of serious diabetes-related complications. In 2005-06, there were 14.7 hospital separations per 100 000 people (age standardised) for lower limb amputations where Type 2 diabetes mellitus was a principal or additional diagnosis (figure 11.35).

Figure 11.35 **Separations for lower limb amputation with principal or additional diagnosis of Type 2 diabetes, all hospitals, 2005-06[a, b, c]**



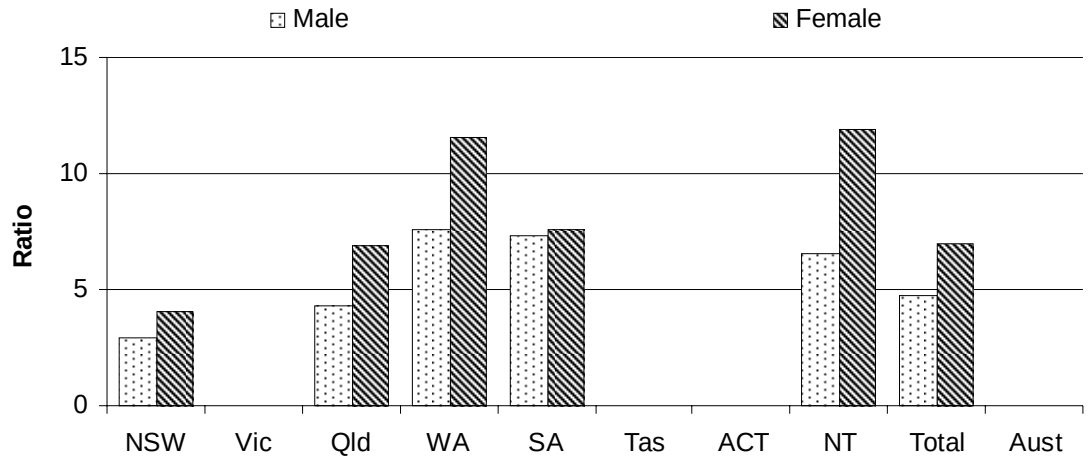

**a** Separation rates are directly age standardised to the Australian population at 30 June 2001. **b** Includes unspecified diabetes. The figures are based on the ICD-10-AM classification. The codes used are ICD-10-AM diagnosis codes E11.x for diabetes, and ICD-10-AM procedure block 1533 and procedure codes 44370-00, 44373-00, 44367-00, 44367-01 and 44367-02 for lower limb amputation. **c** Data for Tasmania, the ACT and the NT are not published separately (due to private hospital confidentiality arrangements) but are included in the total for Australia.

*Source*: AIHW (unpublished); table 11A.45.

Age standardised hospital separation ratios for all diabetes diagnoses[2] illustrate differences between the rate of hospital admissions for Indigenous people and that for all Australians, taking into account differences in the age structures of the two populations. For both males and females there was a marked difference in 2005-06 between the separation rates for Indigenous people and those for the total population for all diabetes diagnoses. The quality of Indigenous identification is considered acceptable for the purpose of analysis only for NSW, Queensland, WA, SA and the NT. For these jurisdictions combined, the separation rate for Indigenous males was 7.3 times higher than those for all Australian males. The separation rate for Indigenous females was 12.2 times the rate for all females (figure 11.36).

2 'All diabetes' refers to separations with either a principal or additional diagnosis of diabetes, except where dialysis is the principal diagnosis.

Figure 11.36 **Ratio of separation rates of Indigenous people to all people for all diabetes diagnoses, 2005-06**[a, b, c, d, e]




**a** The ratios are directly age-standardised to the estimated resident population at 30 June 2001. **b** The Total includes data only for NSW, Queensland, WA, SA and the NT (NT data for public hospitals only), for which the quality of Indigenous identification is considered acceptable for purposes of analysis. Data for the five states and territory are not necessarily representative of the other jurisdictions. **c** 'All diabetes' refers to separations with a principal and/or additional diagnosis of diabetes, except where dialysis is the principal diagnosis. **d** Patients aged 75 years and over are excluded. **e** Indigenous separation rates are based on state of hospitalisation while all person rates are based on state of usual residence. Caution should be used in the interpretation of these data because of jurisdictional differences in data quality.

*Source*: AIHW (unpublished); tables 11A.41and 11A.42.

## *Hospitalisations of older people for falls*

### Box 11.29 **Hospitalisation of older people for falls**

The effectiveness of primary and community healthcare has an influence on the rates of hospitalisation of older people for falls. Primary and community healthcare can help to prevent falls occurring or may assist in reducing the severity of injury from a fall and also the chance of hospitalisation.

The indicator is defined as the number of hospital separations for older people with a reported external cause of falls per 1000 older people, adjusted to take account of differences in State and Territory age distributions. Older people are defined as aged 65 years or over for this indicator.

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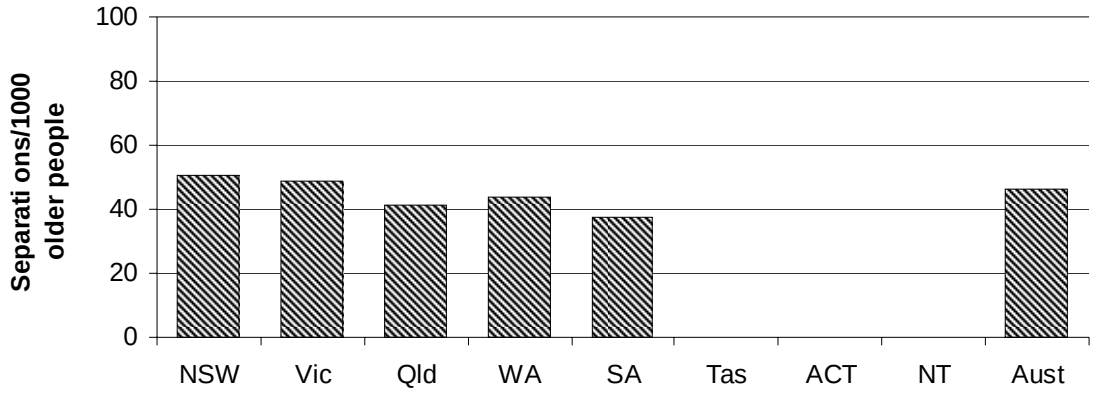
Box 11.29 **(Continued)**

A reduction in the rate of hospitalisation due to falls may indicate improvements in the effectiveness of primary healthcare services provided to older people who are at risk of falls.

Factors outside the control of the primary healthcare system also influence the rates of hospitalisation. These include the support available to older people from family and friends, and the provision of aged care services such as Home and Community Care program services and residential care.

Nationally, the hospital separation rate in 2005-06 for older people with injuries due to falls was 46.2 per 1000 older people (figure 11.37).

Figure 11.37 **Separations for older people with a reported external cause of falls, 2005-06[a, b, c]**




**a** Older people are defined as people aged 65 years or over. In previous reporting against this indicator, older people were defined as people aged 75 years and over and Indigenous people aged 55 years and over. **b** Data for Tasmania, the ACT and the NT are not published separately (due to private hospital confidentiality arrangements) but are included in the total for Australia. **c** Separation rates are crude rates using the 2005 population aged 65 years and over as denominator.

*Source*: AIHW (unpublished); table 11A.46.

## 11.4 Future directions in performance reporting

While the topic of this chapter is all primary and community health services, the indicators remain heavily focused on general practice services. This partly reflects the lack of data available on a nationally consistent basis to support reporting against indicators for other primary and community health services. The Steering Committee has identified possible areas for which indicators may be available for inclusion in the 2009 Report or future reports. These include:

- dental health services
- community-based drug and alcohol treatment services
- additional indicators relating to the use of the MBS chronic disease management items
- management of asthma
- management of diabetes.

In addition, the currently reported indicator 'management of upper respiratory tract infection' has been identified for reporting improvements.

The scope of this chapter may also be further refined to ensure the most appropriate reporting of primary health services against the Review's terms of reference and reporting framework (see chapter 1).

### Indigenous health

Barriers to accessing primary health services contribute to the poorer health status of Indigenous people compared to other Australians (see the 'Health preface'). In recognition of this issue, the Steering Committee has identified primary and community health services for Indigenous people as a priority area for future reporting. The 'early detection and early treatment' indicator of accessibility of primary and community health services to Indigenous people has been included in the 2008 Report. The Steering Committee will continue to examine options for the inclusion of further such indicators. The Aboriginal and Torres Strait Islander Health Performance Framework developed under the auspices of the Australian Health Ministers' Advisory Council will inform the selection of future indicators of primary and community health services to Indigenous people.

The completeness of Indigenous identification in hospital admitted patient statistics remains variable across states and territories. There has been some improvement, for example, NSW data are now considered to be of acceptable quality, whereas on previous assessment this was not the case. Victorian data are being considered for

publication. The quality of data for Tasmania and the ACT is considered to be too poor for publication. Continued efforts to improve Indigenous identification are necessary in order to better measure the performance of primary and community health services in relation to the health of Indigenous Australians. The AIHW is currently undertaking a project to develop best practice guidelines for identification.

## 11.5 Definitions of key terms and indicators

| | |
|---|---|
| **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. |
| **Cervical screening rates for target population** | Proportion of women aged 20–69 years who are screened for cervical cancer over a two year period. |
| **Closed treatment episode** | A closed treatment episode is a period of contact between a client and an alcohol and other drug treatment agency. It has defined dates of commencement and cessation, during which the principal drug of concern, treatment delivery setting and main treatment type did not change. Reasons for cessation of a treatment episode include treatment completion, and client non-participation in treatment for three months or more. Clients may be involved in more than one closed treatment episode in the data collection period. |
| **Community health services** | Health services for individuals and groups delivered in a community setting, rather than via 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. There are 119 Divisions of General Practice, 8 State Based Organisations and a peak national body, the Australian General Practice Network (AGPN). The Divisions of General Practice Program evolved from the former Divisions and Projects Grants Program established in 1992. The Divisions of General Practice Program aims to contribute to improved health outcomes for communities by working with GPs and other health services providers to improve the quality and accessibility of health care at the local level. |
| **Full time workload equivalents (FWE)** | 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 FWE except that full time equivalents are capped at 1 for each practitioner. |
| **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 and rubella vaccine. |
| **General practice** | The organisational structure with one or more GPs and other staff such as practice nurses. A general practice provides and supervises healthcare for a 'population' of patients and may include services for specific populations, such as women's health or Indigenous health. |

| | |
|---|---|
| **General practitioner (GP)** | Vocationally recognised GPs — medical practitioners who are vocationally recognised under s.3F of the *Health Insurance Act 1973* (Cwlth), hold Fellowship of the RACGP, ACRRM, or equivalent (From 1996, vocational registration was available only to GPs who attained Fellowship of the RACGP; since April 2007, it has also been available to Fellows of the ACRRM), or hold a recognised training placement.<br><br>Other medical practitioners — medical practitioners who are not vocationally recognised GPs. |
| **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-referred attendances that are bulk billed** | Number of non-referred attendances that are bulk billed and provided by medical practitioners, divided by the total number of non-referred non-specialist attendances. |
| **Nationally notifiable disease** | A communicable disease that is on the Communicable Diseases Network Australia's endorsed list of diseases to be notified nationally (DoHA 2004). On diagnosis of these diseases, there is a requirement to notify the relevant State or Territory health authority. |
| **Notifications of selected childhood diseases** | Number of cases of measles, pertussis and *Haemophilus influenzae* type b notified to State and Territory health authorities. |
| **Other medical practitioner (OMP)** | A medical practitioner other than a vocationally recognised GP who has at least half of the schedule fee value of his/her Medicare billing from non-referred attendances. These practitioners are able to access only the lower A2 Medicare rebate for general practice services they provide, unless the services are provided through certain Departmental incentive programs. |
| **Pap smear** | A procedure for the detection of cancer and pre-cancerous conditions of the female cervix. |
| **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. |

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|---|---|
| **Primary healthcare** | The primary and community healthcare sector includes services that:<br>• provide the first point of contact with the health system<br>• have a particular focus on illness prevention or early intervention<br>• are intended to maintain people's independence and maximise their quality of life through care and support at home or in local community settings. |
| **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). |
| **Proportion of GPs who are female** | Number of all FWE GPs who are female, divided by the total number of FWE GPs. |
| **Proportion of GPs with vocational recognition** | Number of FWE GPs who are vocationally recognised, divided by the total number of FWE GPs. |
| **Proportion of general practices registered for accreditation** | Number of practices that have registered for accreditation through either of the two accreditation bodies, AGPAL and GPA ACCREDITATION *plus*, 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 that maintain and/or use predominantly secure electronic patient records, that are registered under the PIP, 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 healthcare services. |
| **Reasons for encounter** | The expressed demand of the patient for care, as perceived and recorded by the GP. |
| **Recognised immunisation provider** | A provider recognised by Medicare Australia 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 or 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. |
| **Vocationally recognised general practitioner** | A medical practitioner who is vocationally recognised under s.3F of the *Health Insurance Act 1973* (Cwlth), holds Fellowship of the RACGP, ACRRM, or equivalent, or holds a recognised training placement, and who has at least half of the schedule fee value of his/her Medicare billing from non-referred attendances. |

## 11.6 Attachment tables

Attachment tables are identified in references throughout this chapter by a '11A' suffix (for example, table 11A.3 is table 3 in the attachment). Attachment tables are provided on the CD-ROM enclosed with the Report and on the Review website (www.pc.gov.au/gsp). On the CD-ROM, the files containing the attachment tables are in Microsoft Excel format as \Publications\Reports\2008\Attach_11A.xls and in Adobe PDF format as \Publications\Reports\2008\Attach_11A.pdf. Users without access to the CD-ROM or the website can contact the Secretariat to obtain the attachment tables (see contact details on the inside front cover of the Report).

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| **Table 11A.1** | Types of encounter, 2006-07 |
| **Table 11A.2** | Australian Government real expenditure per person on GPs (2006-07 dollars) |
| **Table 11A.3** | Medical practitioners billing Medicare and full time workload equivalent (FWE) GPs |
| **Table 11A.4** | Indigenous primary healthcare services for which service activity reporting (SAR) data are reported (number) |
| **Table 11A.5** | Services and episodes of healthcare by services for which service activity reporting (SAR) data are reported, by remoteness category (number) |
| **Table 11A.6** | Proportion of services for which service activity reporting (SAR) data are reported that undertook selected health related activities, 2005-06 (per cent) |
| **Table 11A.7** | Full time equivalent health staff employed by services for which service activity reporting (SAR) data are reported, as at 30 June 2006 (number) |
| **Table 11A.8** | Alcohol and other drug treatment services, by sector, 2005-06 (number) |
| **Table 11A.9** | PBS services, 2006-07 |
| **Table 11A.10** | Approved providers of PBS medicines, by urban and rural location, 2006-07 |
| **Table 11A.11** | PBS expenditure per person, by urban and rural location (2006-07 dollars) |
| **Table 11A.12** | Availability of GPs by region |
| **Table 11A.13** | Female GPs |
| **Table 11A.14** | Availability of public dentists (per 100 000 people) |
| **Table 11A.15** | Availability of public dental therapists, 2003 (per 100 000 people) |
| **Table 11A.16** | Voluntary annual health assessments for older people by Indigenous status, 2006-07 |
| **Table 11A.17** | Older Indigenous people who received an annual health assessment (per 1000 people) |
| **Table 11A.18** | Indigenous people who received a voluntary health check or assessment, by age (per 1000 people) |
| **Table 11A.19** | Early detection activities provided by services for which service activity reporting (SAR) data are reported |
| **Table 11A.20** | Non-referred attendances that were bulk billed, by region (per cent) |
| **Table 11A.21** | Non-referred attendances that were bulk billed (per cent) |

## 11.7 References


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