



# 7 Health services

Health services are, in essence, the means by which health care in its many forms is provided to patients, clients, other health consumers, or the wider population in general. Either directly, or indirectly through the employment or engagement of health professionals and other workers, the provision of health services (including pharmaceuticals) accounts for the vast majority of expenditure described in the previous chapter. These health services relate to the 'interventions' component of the conceptual framework in Chapter 1.

The approach taken in this chapter is to present the range of health services with a progressively narrower focus on specific services or population groups. That is, the opening section on public health describes services that apply to the whole population or targeted subpopulations—generally to prevent disease and promote health—followed by medical services (such as seeing a doctor) which relate to nearly the entire population and focus on management or treatment of health issues, and so on down to more specific services that apply only to smaller subgroups of the population.

## 7.1 Public health interventions

### What is public health?

A widely-used definition of public health in Australia is 'the organised response by society 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 sub-groups' (NPHP 1998:1).

As best as health sector expenditure can be assessed, around \$1.3 billion was expended by governments on public health activities in Australia in 2003–04, representing less than 2% of total health expenditure.

The boundaries of public health have been difficult to mark out, and the term is often used interchangeably with 'population health', 'preventive health' and occasionally with 'primary health care'. To further confuse the matter, the media often portray public health simply as what is done in public hospitals, which is rather the other end of the health care spectrum to that discussed here.

The boundary between public health and clinical practice is unclear: for example, do preventive services delivered on a one-to-one basis to individuals (such as screening-related tests, immunisation, and counselling and lifestyle advice to support healthy behaviour) meet the 'organised' and 'population' criteria? Another aspect of the boundary issue is whether it should include the activities of—and investments by—the non-health portfolios of governments (such as education and transport), local governments and non-government organisations. These are acknowledged for their influence on the population's health, but health is not their primary aim.

In essence, public health interventions focus on prevention, promotion and protection rather than on treatment; on populations or population groups rather than on individuals; and on the factors and behaviours that cause illness. (See the Glossary for another version of what public health is.)

Public health activities take the form of programs, campaigns or sometimes just an event. They draw on a very large range of methods (see Box 7.1) and apply in multiple settings (such as schools, homes, workplaces, through the media), all relating to a broad spectrum of health issues. They are variously carried out by state and territory governments, the Australian Government, and other agencies such as anti-cancer councils and the Heart Foundation. Examples of a number of public health methods are given below, featuring the three national cancer screening programs.

### Box 7.1: Public health functions and methods

*Public health interventions draw on a range of methods to serve a variety of functions. A current conceptualisation of these functions and methods arises from work to develop a public health classification for Australia, and is depicted below.*

Functions			
Primary	Assess health of populations Protect from threats to health, disability and injury Promote health and prevent disease		
Instrumental	Ensure public health capability Build the evidence base for public health		
Methods			
Advocacy and lobbying	Health impact assessment	Research and evaluation	
Communicable disease control	Immunisation	Road safety	
Community action	Infection control	Screening to detect disease/risk factors	
Community development	Legislation and regulation	Social action	
Counselling	Lifestyle advice	Social marketing	
Diagnosis	Management of biological risk	Training and workforce development	
Directed investment	Monitoring and surveillance	Treatment	
Environmental monitoring	Personal skills development	Urban planning	
Epidemiological methods	Political action	Vector control	
Exercise of capabilities	Public policy development	Waste management	
Food safety	Radiation safety	Other methods of intervention	
Health education	Remediation of environment		

Source: NPHP 2006.

## Cancer-screening services

For breast, cervical and bowel cancers, there is evidence that illness and death can be reduced through population-based screening for early-as-possible detection and effective follow-up treatment. This has led to national screening programs for breast cancer (via mammography) and cervical cancer (via Pap smears). These programs, described below, are called BreastScreen Australia and the National Cervical Screening

Program. They provide screening services that are free to women in the target age group (for breast screening) or are eligible for a Medicare rebate (for cervical screening). Pilot studies of a population-based screening program for bowel cancer were completed in 2004, leading to the National Bowel Screening Program scheduled to begin in mid-2006.

## BreastScreen Australia

The BreastScreen Australia program is jointly funded by the Australian and state and territory governments. It comprises a network of dedicated screening and assessment services throughout metropolitan, rural and remote areas of all Australian states and territories; these services can be fixed or mobile. They provide free two-yearly mammographic screening and follow-up of any suspicious breast areas identified at screening, to the point of either diagnosis of breast cancer or confirmation of its absence. The program is aimed specifically at women aged 50–69 years without symptoms, although women aged 40–49 years and 70 years or over may use the screening service. All may attend without a doctor’s referral. Recruitment and reminder systems are used to promote screening and rescreening among women in the target group once every two years.

The proportion of women in the target age group who were screened under the BreastScreen Australia program in a two-year period rose from 52% in 1996–1997 (the first period for which national data are available) to 57% in 2000–2001, before falling slightly to 56% in 2002–03 (Table 7.1).

**Table 7.1: Women screened by BreastScreen Australia, two-year periods, 1996–1997 to 2003–2004**

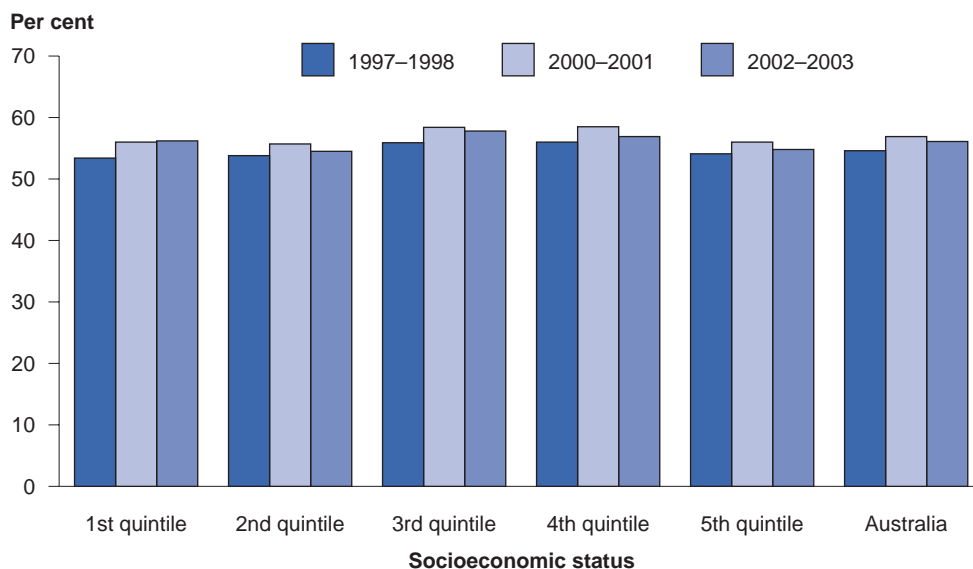
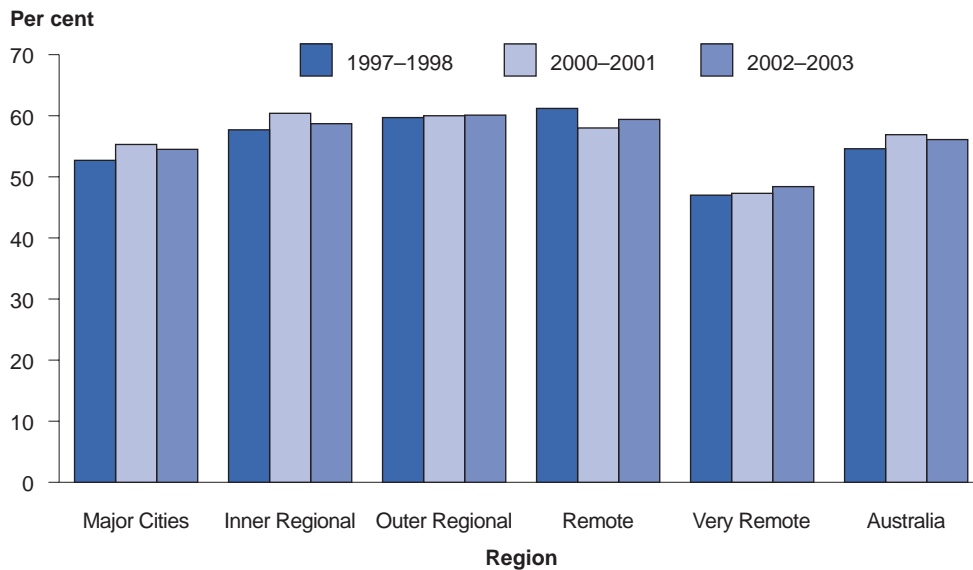
Measure	1996–1997	1998–1999	2000–2001	2002–2003
Target population (ages 50–69)	844,600	975,300	1,063,500	1,118,400
Participation rate for target population (%) <sup>(a)</sup>	52.3	55.6	56.9	56.1

(a) Participation rates are age-standardised to the relevant 2001 Australian population.

Source: AIHW analysis of state and territory BreastScreen Australia data.

Participation rates for women in the target age group varied significantly between geographic regions in 1997–1998, 2000–2001 and 2002–2003 (Figure 7.1). In 2002–2003 the rates in Major Cities (55%) and in Very Remote areas (48%) were statistically significantly lower than the national rate (56%). The Inner Regional, Outer Regional and Remote areas had statistically significantly higher rates than the national rate (59%, 60% and 59% respectively). The higher participation rates in remote areas may reflect the use of mobile BreastScreen services in these areas.

Between the periods 1997–1998 and 2002–2003 there were statistically significant increases in participation in all socioeconomic categories, but in 2002–2003 there were no clear trends in participation across these categories. Participation rates for women living in postcodes in the first (highest), third and fourth socioeconomic quintiles were higher than the national average (56%, 58% and 57% respectively), while the rates for those in the second and fifth (lowest) quintiles were lower than the national average. This suggests that a link between socioeconomic status and BreastScreen participation is either very weak or does not exist.



**Notes**

1. Rates are the number of women screened as a percentage of the target population and age-standardised to the Australian population at 30 June 2001.
2. Periods cover 1 January 1997 to 31 December 1998, 1 January 2000 to 31 December 2001 and 1 January 2002 to 31 December 2003.
3. The Australian Standard Geographical Classification (ASGC) was used to create the above categories (ABS 2001).
4. The first quintile corresponds to areas with the highest socioeconomic status and the fifth quintile corresponds to the lowest.

Source: AIHW analysis of BreastScreen Australia data.

**Figure 7.1: Participation of women aged 50-69 years in BreastScreen Australia, 1997-1998, 2000-2001 and 2002-2003**

## National Cervical Screening Program

Screening to detect abnormalities of the cervix has been available for Australian women since the 1960s, although in the early years it was largely unstandardised, with no national agreement on the screening target group or the best interval between screens. However, it has since become more organised and in 1995 the program became known as the National Cervical Screening Program. The program has both national and state and territory components; although policy is usually decided at a national level, coordination of screening activity mainly happens at a state and territory level.

Unlike breast screening, cervical screening in Australia does not operate through a separate dedicated screening and assessment service. Instead, screening services are provided as part of mainstream health services, with approximately 80% of Pap smears being performed by general practitioners (GPs). In rural and remote areas, a practice nurse may take the Pap smear on behalf of a medical practitioner. Women may claim Medicare rebates for their Pap smear and any subsequent diagnostic follow-up services. Cervical screening is funded mainly by Medicare (61%) with the remainder funded by Australian Government contributions through special purpose payments to state and territory governments (23%) and these governments' own revenue sources (16%).

Cervical cytology registries operate in all states and territories. The major functions of the registries are to:

- remind women to attend for screening
- ensure the follow-up of women with abnormal Pap smears
- provide cervical screening histories to laboratories and clinicians to aid reporting and management
- monitor the effects of initiatives to improve participation by women in screening.

The Australian recommendation is for all women who have been sexually active at any stage in their lives to have a Pap smear every two years until they reach the age of 70 years. Screening may cease at the age of 70 for women who have had two normal Pap smears within the last five years. Women over 70 years who have never had a Pap smear or who request one are also eligible to be screened. However, for reporting purposes the target group is taken to be all women aged between 20 and 69 years who have not had a hysterectomy.

The proportion of target-age women who were screened under the national program in a two-year period changed little between the periods 1996–1997 and 2002–2003 (Table 7.2).

**Table 7.2: Women screened by National Cervical Screening Program, two-year periods, 1996–1997 to 2002–2003**

Measure	1996–1997	1998–1999	2000–2001	2002–2003
Target population (ages 20–69)	2,563,100	2,716,400	3,262,900	3,318,400
Participation rate for target population (%) <sup>(a)</sup>	60.8	63.4	61.0	60.7

(a) Participation rates are age-standardised to the relevant 2001 Australian population.

Note: The Queensland Health Pap Smear registry began in February 1999, so the cervical screening data presented here for years before 1999 exclude Queensland.

Source: AIHW analysis of state and territory Cervical Cytology Registry data.

## National Bowel Screening Program

The Bowel Cancer Screening Pilot Program ran between November 2002 and June 2004 at three sites: Melbourne, Adelaide and Mackay (Queensland). The pilot program achieved participation rates ranging from almost 40% in Melbourne to 57% in Mackay, resulting in an overall participation rate of 45% (Table 7.3).

**Table 7.3: Bowel Cancer Screening Pilot participation rates (per cent), June 2004**

Measure	Mackay	Adelaide	Melbourne	All sites
Participation rate	57.5	46.3	39.9	45.4
95% CI	56.0–58.9	45.4–47.3	39.1–40.6	44.9–46.0

### Notes

1. The rates are an estimate of the proportion of people invited to screen who returned completed FOBT kits by 78 weeks after their invitation, estimated using the Kaplan-Meier method. 78 weeks is the longest period for which all three sites contributed data. However, those sites that continued beyond 78 weeks showed an increase in participation rate of less than one percentage point.
2. All differences between the rates for the different pilot sites are statistically significant after adjusting for age, sex, test kit type and time between the start of the pilot and the date the invitation to screen was sent.

Source: DoHA 2005a.

The final evaluation report of the pilot showed that a national program would be feasible, acceptable and cost-effective. Consequently, in 2005 the Australian Government initiated a National Bowel Cancer Screening Program to be phased in over a number of years, starting in mid-2006. Initially, screening using faecal occult blood tests (FOBTs) will be offered to Australians turning 55 or 65 years of age between 1 May 2006 and 30 June 2008, and to those who participated in the pilot program. An FOBT is a test for a tiny amount of blood in the faeces which may be due to a cancer or a pre-cancerous polyp in the bowel. Participants with a positive result will be advised to contact their GP for clinical assessment and, if appropriate, referral for further tests (usually a colonoscopy). An evaluation of the national program will be completed in mid-2008 with the aim of extending bowel cancer screening, if successful, to all Australians 55 years of age or over.

Although the participation rates in the Australian pilot program were slightly lower than the rates reported in the major overseas trials, the greater sensitivity of the FOBT used in the Australian pilot should result in the Australian program achieving mortality reductions at least comparable with those of the other trials, that is, reductions in death rates from bowel cancer of between 15% and 33% over a period of 10–14 years.

## Immunisation services

The National Health and Medical Research Council—with expert advice from the Australian Technical Advisory Group on Immunisation—recommends a range of vaccinations for all children, older persons and others (including Indigenous Australians) who are medically at higher risk of contracting vaccine-preventable diseases. For the diseases listed on the National Immunisation Program Schedule (NIPS), free vaccines are funded by the Australian Government, and distribution and administration are the responsibility of the states and territories.

## Childhood vaccinations

For many years the NIPS has covered diphtheria, tetanus, pertussis (whooping cough), polio, measles, mumps, rubella and *Haemophilus influenzae* type b (Hib). In 2003 meningococcal type C disease was added and, from 2005, varicella (chickenpox), pneumococcal disease and hepatitis A.

Nationally, the vast majority of childhood vaccinations are delivered in general practice, being the dominant provider in the six states (Table 7.4). However, in the two territories the bulk of vaccinations are administered through community health centres, and in Victoria nearly half are administered through local government councils.

**Table 7.4: Immunisation episodes, 2004–05**

Provider type	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust <sup>(a)</sup>
General practice	1,234,700	595,300	781,000	276,300	203,100	86,600	28,200	2,100	3,207,200
Local government council	70,700	473,200	63,500	23,300	52,900	10,200	—	—	693,800
Community health centre	118,700	11,300	62,900	71,600	41,000	1,000	45,900	50,400	403,000
Hospital	19,300	7,100	25,600	20,600	2,200	200	400	4,900	80,500
Aboriginal health service or worker	7,500	2,100	11,800	3,100	1,500	—	100	7,700	33,900
State/territory health department	—	—	100	32,200	400	—	—	1,000	33,700
Other	500	400	2,500	—	200	—	—	—	3,600
<b>Total</b>	<b>1,451,400</b>	<b>1,089,400</b>	<b>947,400</b>	<b>427,100</b>	<b>301,300</b>	<b>98,000</b>	<b>74,700</b>	<b>66,600</b>	<b>4,456,200</b>

(a) Includes Cocos/Keeling Island, Christmas Island, Norfolk Island and unknown; therefore rows do not add to the 'Australia' column.

Source: Medicare Australia 2005.

## Adult vaccinations

For adults, influenza and, since 2005, pneumococcal vaccines are available free of charge to all Australians aged 65 years or over, to Indigenous Australians aged 50 years or over, and to medically at-risk younger Indigenous Australians.

For those in the main target group who were vaccinated in 2004, over 98% received their influenza vaccination from a doctor or GP. However, for those aged under 65 years who were vaccinated, about two-thirds received their vaccination from a GP, and 27% received it from someone at their place of work.

## Incentives to vaccinate

A number of incentives aim to help Australia reach and maintain national vaccination targets. On the provider side, the General Practice Immunisation Incentives scheme comprises three components:

- a service incentive payment paid to a practitioner who notifies the Australian Childhood Immunisation Register (ACIR) of an immunisation that completes a child's vaccination schedule
- an outcomes payment paid to practices that achieve 90% or greater proportions of full immunisation for the children attending the practice

- infrastructure funding, which provides funds to Divisions of General Practice, State-Based (general practice) Organisations, and funding for a national immunisation coordinator, to improve the proportion of children who are immunised.

Further, the Medicare Benefits Schedule (see Box 7.2) now includes an item for practice nurses to provide an immunisation on behalf of a GP. The item covers the administration of all vaccines on the NIPS.

For parents and carers there is the Maternity Immunisation Allowance, payable in relation to children from 18 months of age when all age-specific immunisations have been recorded on the ACIR (or there is documented conscientious objection or medical contraindication). Up-to-date vaccination (or the same exemptions) is also a prerequisite for receiving reimbursements under the Child Care Benefit arrangements.

## Other public health activities

As noted above, public health interventions operate at a number of levels, in a variety of settings, using a range of methods. The activities outlined below are just a small sample of the public health interventions that occur in Australia.

### Action against smoking

Australia has achieved world-leading low levels of tobacco use (see Chapter 3), largely attributable to multi-faceted tobacco control activities that employ a large number of the public health methods listed in Box 7.1. These have developed over recent decades as a result of interaction between health professional groups, voluntary health agencies, health activists and all levels of government.

The main principles for reducing tobacco use are contained in the World Health Organization's Framework Convention on Tobacco Control (FCTC), which came into force in February 2005. The FCTC was negotiated by 192 WHO member states and unanimously adopted by the 56th World Health Assembly in May 2003. Australia played a leading role in the negotiations and is a strong supporter of the Convention. The FCTC is binding international law for the first 40 Contracting Parties to the Convention, including Australia.

The objective of the FCTC is to protect present and future generations from the health, social, environmental and economic consequences of tobacco consumption and exposure to tobacco smoke. Provisions in the Convention set international standards on tobacco price and tax increases, tobacco advertising and sponsorship, regulation of tobacco products, tobacco product disclosure, packaging and labelling, education, communication, training and public awareness, cessation measures, illicit trade, sales to minors, support for economically viable alternatives, liability issues, and scientific and technical cooperation and exchange of information.

Australia is well advanced in its legislative and regulatory environment consistent with the Convention. For example, Commonwealth legislation prohibits smoking on aircraft, interstate trains and federally-registered motor coaches, and in most airports. Complementary state legislation variously prohibits smoking on public transport and in taxi cabs, in enclosed public places (such as shopping centres and theatres) and in restaurants. A smoke-free work environment policy is also implemented throughout the Australian Public Service and Australian Government-controlled buildings.

Other legislation and regulations affect the prices of tobacco products (mainly through excise), how products can be displayed and advertised, and the nature and size of health warnings on tobacco packaging.

Other components of the tobacco control effort include organised cessation services (notably the Quit programs), pharmaceutical aids to quitting, campaigns to improve retailers' compliance with regulations, school-based education programs, and mass media campaigns to prevent the uptake of smoking and encourage quitting.

### **GPs helping with lifestyle**

The Lifescripts initiative aims to make it easier for GPs to encourage patients to tackle lifestyle risk factors (such as smoking, poor nutrition, alcohol misuse, physical inactivity and unhealthy weight). A Lifescripts Resource Kit was produced in mid-2005 and is being disseminated with associated training to general practices through the Division of General Practice (Divisions) network.

Participation is on an opt-in basis by Divisions and individual general practices. To date, 70% of Divisions across Australia have indicated they will be promoting Lifescripts to their practices. By early 2006 more than 3,500 resource kits had been ordered, and promotion of the initiative is continuing.

### **Preparing for a flu pandemic**

Since avian influenza (bird flu) broke out in late 2003, a significant focus in Australian health policy has been on preparing a response plan to a pandemic outbreak among humans. The interim Australian Management Plan for Pandemic Influenza June 2005 was developed – consistent with WHO guidelines – to build national preparedness and capacity for an immediate and effective response to any pandemic alert.

The plan is for the wide range of people who will be involved in planning and responding to an influenza pandemic: health planners, public and clinical health care providers, state and territory health departments, essential service providers, border workers and those involved in the media and communications. It aims to provide national guidance for stakeholders in developing and implementing responses across the public and private sectors at all levels.

Two major strategies will be used in Australia with the primary aim of minimising the morbidity and mortality associated with a pandemic event:

- **Containment:** preventing transmission and spread by border control measures, isolation of the sick, quarantine of contacts, and judicious use of antiviral medication. Containment effectively 'buys time' to enable a suitable vaccine for the pandemic strain to be manufactured.
- **Maintenance of essential services.** If there is widespread infection within the general population, containment may not be possible. The strategy will shift to an emphasis on maintaining essential services (which include health services, emergency services, power, water and telecommunications, and production of the pandemic vaccine).

The plan is currently under review, with a revised plan expected to be issued in mid-2006.

## Lowering the risks for injecting drug users

Needle and syringe programs aim to reduce the transmission of infections—such as HIV and hepatitis C—that arises from the shared use of injecting equipment. The programs offer a range of services to injecting drug users that include provision of free or affordable sterile injecting equipment and disposal facilities, education and information on reducing drug-related harm, referral to drug treatment, medical care, and legal and other social services.

Needle and syringe programs operate in all states and territories of Australia, although their nature varies in terms of:

- being run by government or non-government organisations
- operating as primary outlets (specifically established as stand-alone needle and syringe programs) or operating as secondary outlets (incorporated into other health services such as community health centres)
- operating as mobile or outreach services, or making needles and syringes available through vending machines. Needles and syringes may also be available through pharmacies, either on a commercial basis or through a government-funded scheme.

Currently, an estimated 32 million needles are distributed each year by needle and syringe programs in Australia.

## Reducing the road toll

The safety of the road transport system directly affects the level of injuries and deaths in Australia: in the 12 months to September 2005 there were 1,619 road deaths nationally, corresponding to about 1.2% of total deaths. Yet most of the actions to improve road safety are traditionally not carried out within the health system.

The National Road Safety Strategy 2001–2010 provides a framework for coordinating the road safety initiatives of federal, state, territory and local governments, and of others capable of improving road safety. The strategy's target is to reduce the annual number of road fatalities per 100,000 population by at least 40% over a decade, from 9.3 in 1999 to no more than 5.6 in 2010 (ATC 2000).

The current biennial action plan for the strategy highlights the *Safe System* concept, which emphasises how different elements of the road transport system combine and also interact with human behaviour to influence the rate and severity of traffic accidents. The key components of this approach are safer roads and roadsides, safer speeds and safer drivers.

Some of the outcomes achieved under the previous action plan include:

- a default speed limit of 50 km/h in built-up areas, which was incorporated into the Australian Road Rules
- combined red light/speed cameras, which were introduced or extended in some states and territories
- alcohol interlock (a device which prevents the vehicle's engine starting if the driver's blood alcohol level is too high) schemes, which were introduced or trialled in several states and territories.

## 7.2 Medical services

Seeing a doctor is a very common health-related action in Australia: the 2004–05 National Health Survey shows that, over any two-week period, 23% of the population visited a doctor (ABS 2006). Further, administrative data from Medicare—Australia’s universal health insurance system (see Box 7.2)—suggest that around 85% of the population see a doctor at least once in a year (Medicare Australia 2005).

### Box 7.2: Medicare and Medicare benefits

*Australia’s universal health insurance scheme came into operation on 1 February 1984. Administered by Medicare Australia (formerly the Health Insurance Commission), the scheme provides for free or subsidised treatment by medical practitioners, participating optometrists, services delivered by a practice nurse on behalf of a GP and, for certain services, eligible dentists and allied health practitioners. All Australian residents are eligible for Medicare, except diplomats from other nations and their dependants. Short-term visitors are not eligible unless they are covered by a reciprocal health care agreement and the services are of immediate medical necessity. The majority of Australian taxpayers contribute to the cost of Medicare through a Medicare levy, which is 1.5% of taxable income.*

*Medicare has established a schedule of fees for medical services provided by private practitioners. The benefits that Medicare contributes for those services are based on those fees. Practitioners are not obliged to adhere to the schedule fees, except in the case of participating optometrists and when bulk-billing incentives are paid. However, if they direct-bill (bulk-bill) Medicare Australia for any service rather than issuing a patient with an account, the amount then payable is the Medicare benefit; additional charges cannot be raised for the service and the patient pays nothing for it.*

*Some types of medical services do not qualify for Medicare benefits. These include services provided to entitled war veterans and their dependants by the Department of Veterans’ Affairs. Interim Medicare benefits may be paid for services for which claims may be lodged under motor vehicle third-party insurance and workers compensation schemes. These benefits are recovered by Medicare Australia when claims are settled. Other services which do not qualify for Medicare benefits include those provided by public authorities and most government-funded community health services, as well as services considered not necessary for patient care (for example, examinations for employment purposes and cosmetic surgery). To attract benefits, services must be ‘clinically relevant’, that is, reasonably required for the treatment of the patient’s condition.*

*For private patients who are admitted in hospitals or day-hospital facilities, the Medicare benefit is 75% of the schedule fee. For non-hospital services, Medicare pays up to 100% of the schedule fee for GP consultations and up to 85% for services provided by medical specialists. The patient is responsible for the gap between the benefit paid and the schedule fee, up to a maximum of \$61.50 (from 1 January 2006), indexed annually. Patients are also responsible for payments of amounts charged above the schedule fee.*

*Further measures take account of situations where, despite normal Medicare benefits, the costs over time for a patient or family may still become a burden. First, for out-of-hospital services the maximum amount of gap payable by a family group or an individual in any one calendar year is \$335.50 (from 1 January 2006), indexed annually. Thereafter, patients are reimbursed 100% of the schedule fee. Second, under the extended safety net, Medicare will meet 80% of the out-of-pocket costs (that is, the difference between the fees charged by the doctor and the Medicare benefits paid) for out-of-hospital medical services, once an annual threshold is reached (\$500 for families in receipt of Family Tax Benefit Part A and for concession card holders, or \$1,000 for all other individuals and families). In addition, for medical expenditure in certain categories (including Medicare payable items), a 20% rebate on net medical expenses over \$1,500 can be claimed through the income tax system.*

*Another component of Medicare – sometimes termed ‘hospital Medicare’ – provides for free hospital care for all eligible Australians, either as an admitted patient, outpatient or emergency department patient at public hospitals. Doctors appointed by the hospitals provide medical care for such ‘public’ patients at no cost to the patient. Patients who choose to be treated in private hospitals, or as private patients in public hospitals, are liable for hospital accommodation and other charges, and for a portion of the medical fees charged by private practitioners.*

## Medicare services

Medicare data provide an overview of the use of private medical services, which include services provided outside hospitals as well as medical services for private patients in public and private hospitals. The scheme covers a range of different services, from a single doctor consultation to multiple pathology tests for a single patient episode, each of which is counted as a separate item. Consequently, it is not possible to directly compare different types of services based on the number of Medicare items. Also for this reason, the terms ‘items’ or ‘items of service’ are generally used when referring to Medicare services. The count of items is subject to changes in bundling and unbundling of services, so the count is not always completely comparable between years. Further, the scope of coverage has changed over time; in particular, new items have been introduced in the past few years to cover things such as:

- practice nurses providing services on behalf of a GP
- selected allied health practitioner services for people with complex conditions that are being managed by a medical practitioner under an Enhanced Primary Care multidisciplinary care plan
- incentives for general practices to bulk-bill (see below) Commonwealth concession card holders and children aged under 16 years.

In the 12-month period 2004–05, an average 11.7 services per Australian were provided under Medicare (or 10.5 services if pathology collection items—which cover the administrative costs of collecting pathology specimens—are excluded). These services included 4.9 *Unreferred medical attendances* (that is, GP services, emergency attendances

after hours, other prolonged attendances, group therapy, and acupuncture), 1.0 *Specialist attendances* and 3.9 *Pathology items* (Table 7.5).

Medicare provided benefits for 236.3 million services, representing an increase of 4.4% over the 226.4 million services in 2003–04 (Table S53). Among other things, this increase was due to the effects of population growth (1.1%) and an overall increase in the number of items per person (3.1%) (DoHA 2006).

**Table 7.5: Medicare items processed, 2002–03 to 2004–05**

Broad type of service	Items per person (number)			Average annual change (%)	Items in 2004–05	
	2002–03	2003–04	2004–05		Number ('000)	Proportion of total (%)
Unreferred medical attendances <sup>(a)</sup>	4.91	4.82	4.86	–0.5	98,200	41.5
Practice nurse	..	0.06	0.13	..	2,700	1.1
Allied health	..	..	0.01	..	300	0.1
Specialist attendances	1.02	1.02	1.03	0.6	20,800	8.8
Obstetrics	0.07	0.07	0.07	–1.5	1,400	0.6
Anaesthetics	0.10	0.10	0.10	1.2	2,000	0.8
Pathology	3.57	3.69	3.85	3.8	77,700	32.9
Diagnostic imaging	0.67	0.67	0.70	2.2	14,100	6.0
Operations	0.32	0.33	0.34	3.1	6,900	2.9
Assistance at operations	0.02	0.02	0.02	3.0	300	0.1
Optometry	0.23	0.24	0.25	4.5	5,100	2.2
Radiotherapy and therapeutic nuclear medicine	0.03	0.04	0.04	6.0	800	0.3
Miscellaneous	0.22	0.22	0.23	3.1	4,700	2.0
<b>Total</b>	<b>11.21</b>	<b>11.33</b>	<b>11.69</b>	<b>2.1</b>	<b>236,300</b>	<b>100.0</b>
Pathology collection items <sup>(b)</sup>	1.09	1.12	1.16	2.9	23,400	9.9
<b>Total excluding pathology collection items</b>	<b>10.11</b>	<b>10.21</b>	<b>10.54</b>	<b>2.1</b>	<b>212,900</b>	<b>90.1</b>

(a) Includes general practitioner attendances, emergency attendances, attendances after hours, other prolonged attendances, group therapy and acupuncture.

(b) Covering the administrative costs associated with the collection of specimens.

.. Not applicable.

Sources: DoHA 2006; Medicare Australia 2005.

## Benefits paid

In 2004–05, a total of \$9,923 million was paid in Medicare benefits, of which \$3,321 million (34%) was for 101 million (42.6%) *Unreferred medical attendances* (including *Practice nurse* items). A further \$1,483 million (16%) was paid for 14 million (6%) *Diagnostic imaging* services; \$1,522 million (15%) for 78 million (33%) *Pathology* items; and \$1,212 million (12%) for 21 million *Specialist attendances* (Table 7.5, Table S53).

To avoid double-counting, the bulk-billing incentive items are not counted in broad type of service statistics or in bulk-billing statistics. However, the benefits paid for

*Diagnostic imaging* and *Pathology* bulk-billing incentive items are included in their respective broad type of service categories (Table S53), while the bulk-billing incentives for other services (including attendances) are included in *Miscellaneous*. This adds \$96.5 million in 2003–04 and \$317.3 million in 2004–05 to the total for *Miscellaneous* that might otherwise be allocated to the service types for which the bulk-billing incentive was paid.

While some of the growth in Medicare use over the past three years can be attributed to the new items, most types of service have increased or remained relatively stable, with slight decreases in *Obstetrics* (–1.5%) and in *Unreferred medical attendances* (–0.5%) being the only declines. *Radiotherapy* and *Therapeutic nuclear medicine* had the largest percentage increase (6%) but *Pathology* showed the largest numeric increase per person (0.28 services per person).

The number of services used per person varies considerably. For example, in 2003–04, 3.5% of the population received 51 or more services each, and these accounted for 26.0% of total benefits paid. Almost one-third of the population received 1–5 services per person, accounting for 15.6% of the total benefits (Table S56).

There was a moderate change in the average number of unreferred and specialist consultations per person over the period 1984–85 to 2004–05. The rates peaked in 1995–96, declined steadily to 2003–04 and then increased again in 2004–05 (to rates of 5.0 and 6.6 per person for males and females respectively).

## **Bulk-billing**

Bulk-billing rates act as a barometer of the affordability of medical care: when a service is bulk-billed, the provider directly bills Medicare Australia the amount payable under the Medicare Benefits Schedule, so there is no out-of-pocket expense for the patient. Cost is then not an obstacle to receiving care.

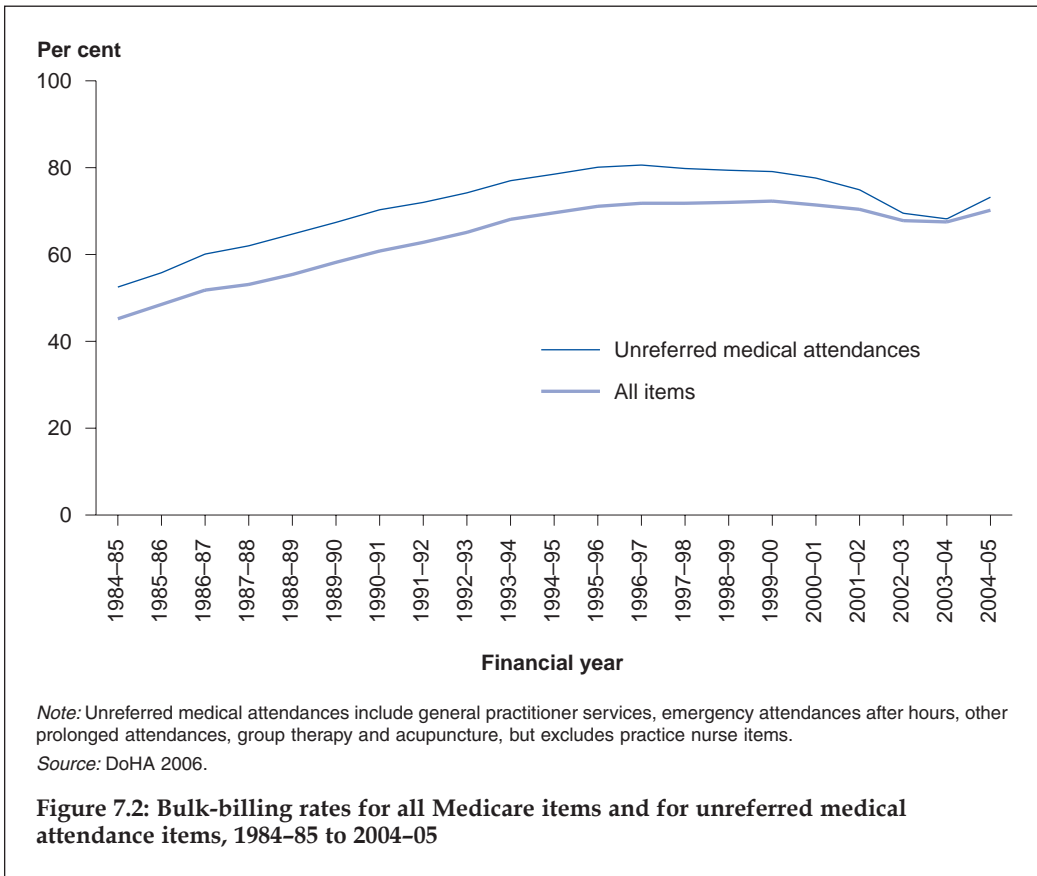
The trend in bulk-billing has followed a similar pattern to overall service use throughout this period, although the peak is observed slightly later: rates across all items increased from 45.2% in 1984–85 to a high of 72.3% in 1999–2000, decreased to 67.5% in 2003–04, and rose to 70.2% in 2004–05 (Figure 7.2). Bulk-billing rates for unreferred medical attendances increased from 52.5% in 1984–85 to a high of 80.6% in 1996–97, fell to 68.2% in 2003–04, and rose to 73.2% in 2004–05.

## **Geographic variation in the use of Medicare services**

Variations in the use of Medicare services occur among the states and territories. In 2004–05, the highest number of services per person (on an age-standardised basis) was recorded in New South Wales with 12.2 services, followed by Queensland (11.5) and Victoria (11.4). The Northern Territory recorded the lowest per-person use of medical services with 7.6 (Table S55). However, this is partly offset by services being provided to Aboriginal and Torres Strait Islander peoples through programs other than Medicare, and these services are not included in the data reported here.

## **DVA-funded medical services**

The Department of Veterans' Affairs (DVA) funds medical services, provided by local medical officers (GPs who are registered with DVA) and specialists, for eligible



veterans, war widows/widowers and their dependants. A gold health card is issued to veterans who are entitled to the full range of health care services funded by DVA. A white health card is issued to veterans who are eligible only in relation to conditions arising from active service.

The number of medical services provided decreased by 2.9% from 12.6 million in 2003-04 to 12.3 million in 2004-05. The proportion of the treatment population (316,000 at 30 June 2005) who used medical services in 2004-05 was 97.6%, an increase from 95.9% in 2003-04.

## General practice activity

Although the Medicare and DVA data provide a comprehensive view of the volume of general practice services, they shed little light on the reasons patients consult a doctor, or on what doctors do for their patients.

A better understanding of the nature of general practice activity can be gained through BEACH – Bettering the Evaluation and Care of Health (see Box 7.3). This is a continuous study of general practice activity in Australia that collects information on patients and problems managed in general practice and on how GPs manage the problems.

### Box 7.3: The BEACH survey of general practice activity

The BEACH (Bettering the Evaluation and Care of Health) study is conducted by the Australian General Practice Statistics and Classification Centre (an Australian Institute of Health and Welfare (AIHW) collaborating unit within the Family Medicine Research Centre, University of Sydney). BEACH began in April 1998 and each year about 1,000 GPs from a random sample participate, providing details of about 100,000 GP–patient encounters, which represent more than one hundred million such encounters across the country each year. No information identifying patients is collected.

GPs who claimed at least 375 general practice Medicare items of service in the previous three months form the source population. This equates with 1,500 Medicare claims a year and ensures inclusion of the majority of part-time GPs while excluding those who are not in private practice but may claim for a few consultations a year. Each participating GP uses structured paper encounter forms to give details on 100 consecutive patient encounters, and also provides information about themselves and their practice. Questions about selected patient health risk factors and health states are asked of subsamples of patients.

### Why do people see a GP?

The 2004–05 BEACH survey recorded 94,386 encounters, of which 97.4% were direct encounters (that is, the patient was seen face-to-face).

For every 100 encounters there was an average 150 patient reasons for encounter (RFEs) recorded; the RFE is the reason for seeing the doctor as stated or implied by the patient. The most common RFEs were those of a general and unspecified nature (24.4 per 100 encounters). Approximately half related to the respiratory, musculoskeletal, skin, circulatory and digestive systems. The 20 most commonly recorded reasons accounted for 48.1% of all RFEs (Table 7.6). The need for a check-up was the most common (13.4 per 100 encounters), followed by requests for medication or repeat prescriptions (12.2) and for receipt of test results (6.8).

Table 7.6: GP consultations: 20 most frequent patient reasons for encounter, 2004–05

Patient reason for encounter	Per cent of total RFEs	Rate per 100 encounters	Patient reason for encounter	Per cent of total RFEs	Rate per 100 encounters
Check-up	9.0	13.4	Fever	1.2	1.8
Prescription	8.1	12.2	Upper respiratory tract infection	1.2	1.8
Test results	4.5	6.8	Headache	1.1	1.7
Cough	3.9	5.9	Hypertension/high blood pressure	1.1	1.7
Immunisation/vaccination—all	2.9	4.3	Weakness/tiredness	1.1	1.7
Throat complaint	2.4	3.5	Ear pain	1.1	1.6
Back complaint	2.3	3.4	Skin complaint	1.0	1.5
Rash	1.9	2.9	Administrative procedure	1.0	1.4
Abdominal pain	1.3	1.9	Diarrhoea	0.9	1.4
Depression	1.3	1.9	Nasal congestion/sneezing	0.9	1.4

Source: AIHW: Britt et al. 2005.

Since 1998–99 there has been an increase in the rate of RFEs associated with a need for services such as prescriptions and referrals. Visits to obtain the results of tests and investigations have also become more frequent.

## Problems managed by GPs

Problems were managed at an average rate of 146 per 100 encounters. Those relating to the respiratory system, musculoskeletal system and skin accounted for almost 40% of all problems managed. The 20 problems most frequently managed accounted for 39.8% of all problems managed. The most common individual problems managed were hypertension (8.9 per 100 encounters), upper respiratory tract infection (5.6 per 100), immunisation/vaccination (4.6 per 100) and depression (3.7 per 100) (Table 7.7).

In light of the ageing of the population and therefore of the average age of the patients encountered, it is surprising there has been no increase in the number of problems managed per encounter: this has remained steady since 1998–99 at around 145 per 100 encounters. However, it is not surprising that there has been an increase in the management rate of chronic problems. One-third of the problems managed in general practice are now chronic in nature. At least one chronic problem was managed at 39% of encounters and they were managed at an average rate of 51 per 100 encounters.

The chronic problems managed most frequently in general practice are hypertension (high blood pressure), depressive disorder, lipid (notably blood cholesterol) disorders, diabetes, osteoarthritis, asthma and oesophageal disease. Together these six chronic problems account for 18% of all problems managed. One in every five problems managed by GPs in Australia remains undiagnosed at the end of the consultation, with the GP describing the problem in terms of a symptom or complaint.

**Table 7.7: GP consultations: 20 most frequently managed problems, 2004–05**

<b>Problem managed</b>	<b>Per cent of total problems</b>	<b>Rate per 100 encounters</b>	<b>Problem managed</b>	<b>Per cent of total problems</b>	<b>Rate per 100 encounters</b>
Hypertension	6.1	8.9	Prescription	1.4	2.1
Upper respiratory tract infection	3.8	5.6	General check-up	1.4	2.1
Immunisation/vaccination	3.2	4.6	Contact dermatitis	1.3	1.9
Depression	2.6	3.7	Female genital check-up/ Pap smear	1.2	1.8
Lipid disorders	2.3	3.3	Anxiety	1.2	1.7
Diabetes	2.2	3.2	Urinary tract infection	1.2	1.7
Back complaint	2.0	2.8	Sprain/strain	1.2	1.7
Osteoarthritis	1.9	2.8	Sleep disturbance	1.2	1.7
Acute bronchitis/bronchiolitis	1.7	2.4	Test results	1.0	1.4
Asthma	1.6	2.3			
Oesophageal disease	1.4	2.1			

Source: AIHW: Britt et al. 2005.

Acute conditions remain common reasons for seeing the GP. In 2004–05, upper respiratory tract infection remained the second most common problem managed in general practice, but its management rate has significantly decreased since 1998–99,

there now being an estimated 1.5 million fewer encounters managed by GPs than in 1998–99. Other acute conditions being managed less often include acute bronchitis, sinusitis and tonsillitis.

## How do GPs manage the problems?

GPs have available to them a range of management techniques, including advice and counselling, referral to another provider, medications, and investigations. In 2004–05 GPs undertook management activities at a rate of 214 per 100 encounters, or 147 per 100 problems (Table 7.8). The most common treatment was medication alone (37% of problems, at a rate of 101.5 per 100 encounters or 69.8 per 100 problems), followed by clinical treatment alone (for example counselling) (11%) and then medication plus clinical treatment (8%). There was no specific treatment recorded for 13% of problems managed.

The total medication rate (prescribed, supplied and advised for over-the-counter purchase) decreased by about 7% over the period 1998–99 to 2004–05. The decline has been greatest in the rate of prescriptions, which fell by almost 11% to 83 per 100 encounters in 2004–05. Applied to general practice across Australia, this represents an average annual decrease of 2.6 million prescriptions, that is 15.6 million fewer prescriptions given by GPs in 2004–05 than in 1998–99. Note that this is a decrease in the number of occasions a prescription is written and does not consider the number of repeats involved or whether the prescription was filled.

**Table 7.8: GP consultations: management activities, 2004–05**

Management type	Rate per 100 encounters	Rate per 100 problems
Medications	101.5	69.8
Prescribed	83.4	57.3
Advised over-the-counter	8.1	5.5
GP supplied	10.1	6.9
Other treatments	54.7	37.6
Clinical	39.2	27.0
Procedural	15.5	10.6
Referrals	11.5	7.9
Specialist	7.7	5.3
Allied health	2.7	1.9
Pathology	36.7	25.2
Imaging	8.3	5.7
<b>Total management activities</b>	<b>213.9</b>	<b>147.0</b>

Source: AIHW: Britt et al. 2005.

Other treatments provided by the GP were classified as clinical or procedural. At least one such treatment was provided for 32.4% of problems. Clinical treatments were more frequent (39.2 per 100 encounters or 27.0 per 100 problems) than procedures (15.5 and 10.6 respectively). General advice and education (7.0 per 100 encounters) was the most common clinical treatment followed by counselling about nutrition and weight. The most frequent procedure was excision or removal of tissue (3.3 per 100 encounters).

At least one referral was given at 10.9% of encounters for 7.9% of problems. Referrals to medical specialists arose at a rate of 7.7 per 100 encounters, the most frequent being to ophthalmologists. Referrals to allied health professionals were made at a rate of 2.7 per 100 encounters, more than one-third being to physiotherapists. Admissions to hospital and referrals to emergency departments were rare. Pathology was ordered for 12.2% of all problems (at a rate of 36.7 tests per 100 encounters), and imaging was ordered for about one in 20 problems, at a rate of 8.3 per 100 encounters.

Provision of advice and counselling is on the increase in general practice, with an estimated 5.4 million more occasions in 2004–05 than in 1998–99. Advice and counselling about nutrition/weight accounts for about 1.5 million of these additional events. An increase in provision of psychological counselling was also found, but the change was smaller.

BEACH suggests that GPs undertook almost 15 million procedures across the country during 2004–05 and that this represents an increase of about 460,000 procedures per year since 1998 (that is, an extra 2.8 million procedures in 2004–05 compared with 1998–99).

Pathology test ordering by GPs continues to increase, not only in total numbers but also in terms of how often at least one pathology test is ordered. The proportion of encounters generating pathology test orders increased between 1998–99 and 2004–05, from 13% to 16% of encounters. This suggests there were 1.5 million more encounters at which the GP ordered pathology tests in 2004–05 than in 1998–99. Further, the total number of pathology tests ordered increased by almost 25% after 2000–01, from 29.7 per 100 encounters that year to 36.7 in 2004–05. Previous research has demonstrated that in the late 1990s an increase in pathology test ordering was not due to increased likelihood of testing, but to increased numbers of tests ordered at any one time. It appears this is no longer the case, with the data suggesting a combination of these effects. The extrapolated effect of the increase is that Australian GPs ordered 5.2 million more pathology tests in 2004–05 than they did in 2000–01. This increase was particularly apparent in ordering rates for chemical pathology and haematology.

There has also been an increase in the likelihood of GPs ordering imaging tests, but the change was far less than that for pathology. There was no significant change in overall referral rates, or in rates of referral to medical specialists, allied health professionals or hospital services.

## Medical indemnity claims

At times incidents arise in health care services where a person decides to pursue a claim against a health professional or organisation on the basis that the person has suffered some kind of harm.

There has been increasing policy concern about the costs associated with health care litigation and the financial viability of medical indemnity insurers in Australia. This has drawn responses on a number of fronts, including:

- a range of Australian Government initiatives to help either with the affordability of medical indemnity insurance, or to cover some of the cost of extraordinary claims

- reforms of the medical insurance market, including bringing medical indemnity insurers under the same regulatory arrangements as general insurers
- continued reforms by the states and territories of tort law and the legal system, in the context of general public liability reforms.

A further response, following a recommendation by health ministers at the Medical Indemnity Summit in 2002, was the establishment of the Medical Indemnity National Collection (MINC), which collates information on the number, nature, incidence and costs of public sector medical indemnity claims.

Although the management of public sector medical indemnity insurance varies across jurisdictions, all health professionals employed by public health agencies (including public hospitals) are indemnified for their public work. Recently, these arrangements have been expanded to cover private medical practitioners in specified circumstances, such as non-salaried doctors treating public patients in public hospitals, or rural GPs working in country health services. In the future, medical indemnity data from both the public sector and private insurers will be compiled into a single collection and national report.

A medical indemnity claim in the context of the MINC is a claim for compensation for harm or other loss as a result of a health care incident in the public sector. A claim is included in the MINC when either legal proceedings have been instigated or the claim is likely to require litigation and has a reserve (that is, the best current dollar estimation of the total cost of the claim) placed against it.

The MINC is a new collection and improvements are continuing in areas of data quality and completeness. The results presented here reflect the availability of data to date, and hence should be interpreted with this in mind.

## **What claims are being made?**

In the period 1 July 2003 – 30 June 2004, almost 5,000 claims were made in the public sector. The clinical service context most frequently recorded in medical indemnity claims data was obstetrics (825 claims, 17% of all claims), accident and emergency (710 claims, 14%), general surgery (561, 11%) and gynaecology (414, 8%) (Table 7.9). The clinical service context is the area of clinical practice or hospital department in which the patient was receiving a health service when the incident occurred.

The primary incident/allegation type describes what is alleged to have ‘gone wrong’; that is, the area of the possible error, negligence or problem that was of primary importance in giving rise to a claim. Procedural-related issues (such as invasive clinical intervention, where there is an incision and/or a body cavity is entered) were the most commonly recorded primary incident or allegation type for all claims (1,627 claims, 33% of all claims). The next most common incident/allegation types were diagnosis (1,028 claims, 21%), treatment (676, 14%) and other general duty of care (512, 10%).

Adults aged 18 years or over accounted for almost three-quarters of claim subjects. Babies under one year and children aged 1–18 years represented a similar proportion of claim subjects: 9% (431 claims) and 8% (413 claims) respectively. Around 58% of all adult claim subjects were female, but males were slightly more common (53%) among baby claim subjects (AIHW 2005a).

**Table 7.9: Public sector medical indemnity claims, 1 July 2003 to 30 June 2004**

Clinical service context	Primary incident/allegation type					Not known	Total
	Diagnosis	Procedure <sup>(a)</sup>	Treatment <sup>(b)</sup>	Other general duty of care	Other <sup>(c)</sup>		
Obstetrics	93	390	167	40	85	50	825
Accident & emergency	414	41	142	42	47	24	710
General surgery	68	292	47	22	118	14	561
Gynaecology	32	263	20	19	68	12	414
Orthopaedics	68	185	45	17	59	12	386
Psychiatry	37	2	27	126	32	10	234
General medicine	45	11	36	61	43	8	204
Paediatrics	43	33	22	9	23	5	135
All other clinical service contexts	214	393	163	163	293	68	1,294
Not known	14	17	7	13	25	117	193
<b>Total</b>	<b>1,028</b>	<b>1,627</b>	<b>676</b>	<b>512</b>	<b>793</b>	<b>320</b>	<b>4,956</b>

(a) 'Procedure' includes failure to perform a procedure, wrong procedure performed, wrong body site, post-operative complications, failure of procedure, and other procedure-related issues.

(b) 'Treatment' includes delayed treatment, treatment not provided, complications of treatment, failure of treatment, and other treatment-related issues.

(c) 'Other' includes medication-related, anaesthetic, blood/blood-product-related, consent, infection control, device failure and other.

*Notes*

1. The clinical service context categories listed separately are the eight most frequently recorded categories; all other categories are combined in 'All other clinical service contexts'.
2. Data for approximately 80% of all claims in scope are included.
3. As well as the primary incident/allegation type represented in this table, up to three additional categories may be recorded in the MINC, to describe other aspects of 'what went wrong'.

Source: AIHW 2005a.

### Finalised claims

A total of 860 claims current during 2003–04 were finalised by 30 June 2004. More than one-third of finalised claims had a total claim size of less than \$10,000 (37% or 318 claims). Another 148 claims (17%) had no payment made.

Around 40% of claims were settled out of court, the majority by 'other processes'. Very few claims (42, or 6%) were settled by a court decision and just under half (43%) were discontinued. Of claims with a total claim size exceeding \$100,000, 82% (50 claims) were settled out of court, compared with 16% (10 claims) decided in court. Of those discontinued, no payment was received for 33% of claims and 56% resulted in a total claim size of less than \$10,000. Around 42% of claims settled by a court decision did not receive any payment.

## 7.3 Dental services

Unlike medical services, there are no national administrative data on the use of dental services. However, information about dental services is obtained from the National Dental Telephone Interview Survey—most recently conducted in 2002—which asked

Australians aged 18 years or over about their patterns of dental care during the preceding 12 months. The 2002 survey was the fifth in a series conducted since 1994 by the AIHW's Dental Statistics and Research Unit.

## Who sees a dentist?

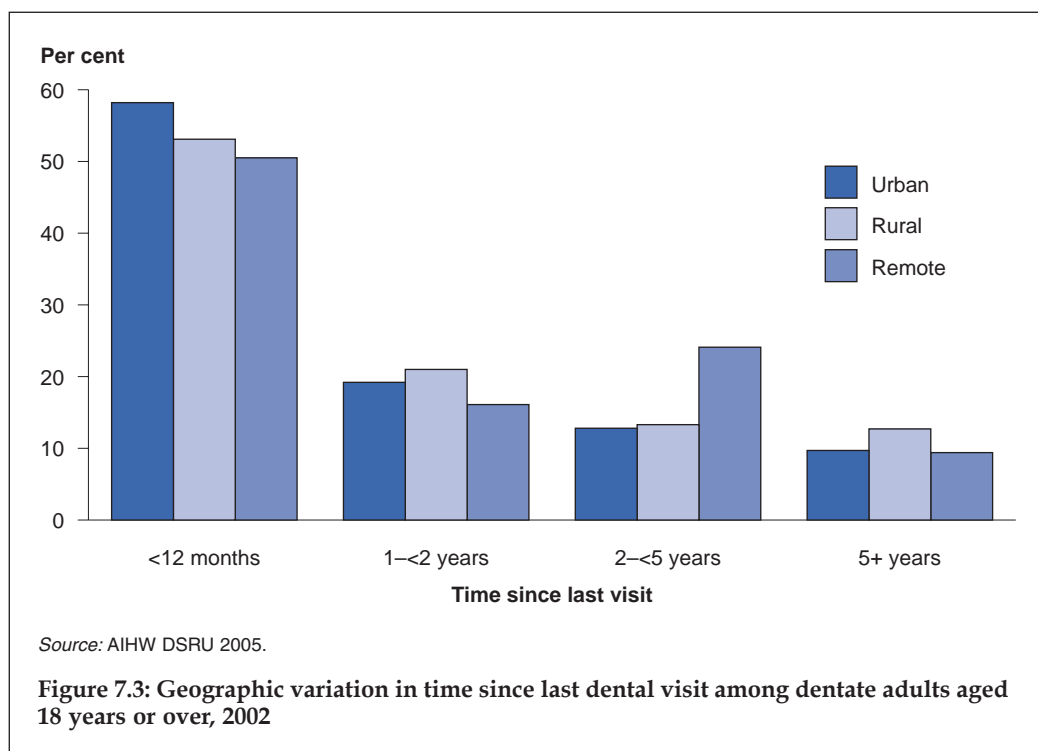
In 2002, 62.5% of Australians who were dentate (that is, who had some or all of their natural teeth) said that they visited a dentist at least once within the preceding 12 months, compared with 15.2% of people who were edentulous (that is, who had no natural teeth). Edentulous people represent 8.3% of the adult population, although the figure ranges from less than 1% among those aged 18–44 years to 43.8% among people aged 75 years or more.

Historically, complete tooth loss was highly prevalent among older Australians, with the consequence that relatively few of them used dental services. However, the prevalence of complete tooth loss halved in the period 1979–2002 and the decline is projected to continue (Sanders et al. 2004). As more older adults retain some of their natural teeth the demand for dental services will therefore increase.

Because complete tooth loss is so strongly associated both with age and patterns of dental visits, the remaining analyses were limited to dentate people.

## Geographic variation in dental visits

Urban dwellers were more likely than rural and remote dwellers to have visited a dentist in the preceding year (Figure 7.3). Among adults who made one or more dental



visits within the preceding year, most (80.2%) attended a private dental practice, with the remainder using public dental services funded by state or territory governments. The likelihood of visiting a private dental practice was greater in urban (86.7%) and rural (82.2%) than in remote areas (73.0%).

There was additional geographic variation in the types of dental services provided: rural dwellers were somewhat more likely than urban and remote dwellers to report that they had a tooth extracted in the last year. People living in remote areas were less likely to have had a filling than people in urban or rural areas. When people were asked if they usually visited the dentist for a check-up or because of dental problems, 59% of those in rural and remote areas said it was for dental problems, compared with 45% in urban areas.

## 7.4 Use of medications

According to the 2004–05 National Health Survey, the use of medications is a common health-related action taken by Australians. Whether it be conventional prescription medication (233 million prescriptions filled in 2004), over-the-counter medications such as analgesics (pain-killers) and cough medicines (\$1.7 billion spent in 2003–04), or vitamins, minerals, and natural and other complementary medications (\$0.8 billion spent in 2004), this is an important component of the health system, accounting for over 14% of recurrent health expenditure in 2003–04.

Prescription medications are provided largely through community pharmacies and hospitals, whereas non-prescription medicines and complementary and alternative medicines are available from pharmacies and other retail outlets. At 30 June 2005, there were 4,922 approved community pharmacies and friendly societies in Australia (DoHA 2005b).

### Prescribed medicines

Information on the supply of prescription medicines in the community is compiled by Medicare Australia (formerly the Health Insurance Commission). This information is derived from prescriptions submitted for subsidy payment under the Pharmaceutical Benefits Scheme or the Repatriation Pharmaceutical Benefits Scheme (PBS and RPBS, see Box 7.4). Estimates of the use of non-subsidised prescription medicines are calculated from the Pharmacy Guild of Australia's ongoing survey of community-based pharmacies. Data are not available on the use of prescribed medicines in public hospitals and most private hospitals.

In 2004–05, there were 170 million community PBS prescriptions – 28 million for general patients and 142 million for concessional patients (Medicare Australia 2005). This was an increase of 2.7% over the 166 million in 2003–04 and 7.4% over the 148 million in 2000–01. Additionally, there were 16 million RPBS prescriptions in 2004–05 and 0.4 million PBS doctors bag prescriptions (that is, emergency drugs that the doctor can provide to patients free of charge).

In 2003–04 there were about 42 million prescriptions which did not attract a subsidy (27 million below the co-payment threshold and about 15 million private prescriptions, that is, prescriptions for drugs not covered by the PBS or RPBS).