

3 Public hospital establishments

Introduction

This chapter describes the public hospital sector in terms of the number of hospitals, availability of hospital beds, staff employed and specialised services provided. This chapter also provides information on public hospital expenditure and revenue. The main source of data is the National Public Hospital Establishments Database. Data on specialised services, expenditure, staffing and revenue for some small hospitals in Tasmania were incomplete.

Hospital size

Table 3.1 presents information on the distribution of hospitals by their size, which has been determined by the number of available beds. There were more small sized hospitals, particularly in those jurisdictions that cover large geographic areas. The majority of beds were in larger hospitals and in more densely populated areas. Although 71% of hospitals had fewer than 50 beds, these small hospitals had only 20% of available beds. The largest hospital had 809 beds and the median hospital size was 26 beds.

Further detail about the characteristics and numbers of public hospitals is included in Appendix 4 and, by public hospital peer group, in Tables 4.2 and 4.3.

Regional distribution of beds

The Remoteness Area classification is used in Table 3.2 to present the regional distribution of public hospitals and beds. Information on the number of available beds per 1,000 population is also provided as a comparative measure across states and territories. Information on the Remoteness Area classification is included in Appendix 3.

Nationally, there were 2.7 public hospital beds per 1,000 population. The ratio of public hospital beds in an area to the population resident in the area ranged from 2.1 beds per 1,000 population in the Australian Capital Territory to 3.3 beds per 1,000 population in South Australia.

On a regional basis, the ratio of public hospital beds in an area to the population resident in the area ranged from 2.4 beds per 1,000 population nationally in major cities, to 2.9 beds per 1,000 population in regional areas and 5.1 beds per 1,000 population in remote and very remote areas. In contrast, there were fewer private hospital beds outside of the major cities (AIHW: Strong et al. 1998). There is not an exact geographic fit between population distribution and the distribution of hospital services. Hospitals based in central locations can also serve patients who reside in other areas of a state or territory or in other jurisdictions.

The higher rates of beds in regional and remote areas reflects factors such as the lower numbers of medical practitioners per 1,000 population in areas outside of the major cities (AIHW 2002c). This difference in the supply of beds is reflected by utilisation rates for each hospital sector (see Figures 7.8 and 7.9 and Tables 4.7, 4.9 and 7.12).

Specialised services

Data relating to the availability of specialised services (such as obstetric/ maternity services, intensive care units, cancer treatment centres and organ transplant services) for all states and territories are presented in Table 3.3. By far, the most common specialised services offered by hospitals were domiciliary care services and services provided by obstetric/ maternity and nursing home care units. By contrast, acute spinal cord injury units and pancreas, heart and liver transplant services were provided by only a few hospitals, reflecting the highly specialised nature of those services.

Data on specialised services were not available for a few hospitals so the services may be under-enumerated.

The existence of a specialised unit does not necessarily imply the delivery of large numbers of services in that unit. For example, there are some regional and remote hospitals that report having an obstetric unit and reported less than one delivery a week on average to the National Hospital Morbidity Database. There are also a few hospitals that report not having an obstetric unit, that reported two or more deliveries a day. For information on service-related definitions of specialised services see Appendix 5 on Service Related Groups.

Staffing

Information on the number of full-time equivalent staff employed in public hospitals by state and territory is presented in Table 3.4, as the average available staff for the year. The collection of data by staffing category is not consistent among states and territories – for some jurisdictions, best estimates are reported for some staffing categories. New South Wales was unable to provide information for each nurse category, although data on total nurse numbers are provided.

Nationally, 192,187 full-time equivalent staff were employed in the public hospital sector in 2001–02. Nurses constituted 44% (84,265) of public hospital staff; registered nurses were the largest group in those states and territories that reported a breakdown of the nursing categories.

There were 18,628 salaried medical officers employed in public hospitals throughout Australia, representing 10% of the public hospital labour force. Information on numbers of visiting medical officers (VMOs), who are contracted by hospitals to provide services to public patients and paid on a sessional or fee-for-service basis in public hospitals, is not available due to problems in the collection of systematic data on the hours, sessions and/or services provided by VMOs in many hospitals. (See Table 3.5 for data on payments to VMOs.)

Variation in some staffing categories (in particular, *Other personal care staff* and *Domestic and other staff*) is most likely due to different reporting practices within the states. Queensland, in particular, has noted that there is little difference between these categories, and that an employee may perform different functions within these two categories on different days. South Australia, Tasmania, Victoria and New South Wales did not provide data on *Other personal care staff* and these staff are included in the *Diagnostic and allied health* and *Domestic and other* staffing categories.

There has been an increase in the outsourcing of services with a large labour-related component (e.g. food services and domestic services). Increased outsourcing may explain some of the decline in full-time equivalent staff in some staffing categories and also some of the differences between the states and territories.

Recurrent expenditure

Nationally, recurrent expenditure by public acute and psychiatric hospitals was \$16,848 million in 2001–02. Information on gross recurrent expenditure, categorised into salary and non-salary expenditure, is presented in Table 3.5.

There was an increase in expenditure of 8.4% (\$1,303 million) in current prices between 2000–01 and 2001–02. In constant prices (referenced to 2000–01), national expenditure was \$16,321 million in 2001–02, and represented a real increase in expenditure of 5.0% over 2000–01.

The largest contributor to these increases was an increase in recurrent expenditure of \$477 million (current prices) by Victoria, which included \$310 million increase for salaries and wages expenditure – \$170 million for nurses. This increase also includes an amount of \$41 million expended by the Victorian Department of Human Services on insurance premiums for public hospitals, which was included in Victoria’s expenditure data for the first time this year.

The largest share of expenditure for 2001–02 was for salary payments. Even when payments to VMOs and payments for outsourced services, which include large labour components, are excluded, salary payments accounted for 63% of the \$16.8 billion spent within the public hospital system. Salary payments include salaries and wages, payments to staff on paid leave, workers’ compensation leave and salaries paid to contract staff where the contract was for the supply of labour and where full-time equivalent staffing data are available.

Medical and surgical supplies (which include consumable supplies only and not equipment purchases), administrative expenses and drug supplies were the major non-salary expenses for public hospitals nationally. Queensland has included payments for pathology provided by the state-wide pathology services.

Depreciation has also been reported in Table 3.5, with Victoria reporting depreciation for the first time. The data show that there is variation between states and territories in reporting, ranging from 6.3% of total expenditure in Queensland to 3.4% in Victoria and Western Australia. It is anticipated that comparable data on depreciation will become increasingly available.

Revenue

Public hospital revenue from patients and other sources (excluding general revenue payments received from state or territory governments) is reported in Table 3.6. In this table, states and territories have reported revenue against three categories: *Patient revenue*, *Recoveries* (income from the use of hospital facilities by salaried medical officers or private practitioners exercising their rights of private practice, and other recoveries), and *Other revenue* (such as from charities). In data reported for Queensland, *Patient revenue* includes revenue for items such as pharmacy and ambulance, which could be considered as *Recoveries*.

Australian public hospitals received \$1.53 billion in revenue in 2001–02. This was equivalent to 9.1% of total recurrent expenditure (excluding depreciation). Revenue as a proportion of total expenditure was, however, variable across states and territories. Public hospital revenue in Tasmania represented 13% of expenditure, whereas public hospital revenues in Queensland and South Australia represented less than 5% of expenditure.

There is some variation among the states and territories in the treatment of revenue data. For example, Victoria's *Other revenue* includes Commonwealth grants. In contrast, the Northern Territory does not include Commonwealth grants in its revenue figures, although they were included in 2000–01 (and hence the Northern Territory's reported revenue fell from around \$20 million in 2000–01 to around \$14 million in 2001–02). In 2000–01 some New South Wales state operating subsidy was inadvertently included in *Other revenue* (\$202 million). This has been corrected in the time series data in Table 2.1.

There is also some inconsistency in the treatment of income from asset sales. Western Australia netted out asset sales in their capital expenditure accounts, and South Australia netted out land sales in their capital expenditure accounts and reported sales from other surplus goods in the revenue figures. Both the Australian Capital Territory and the Northern Territory reported revenue from asset disposal as part of *Other revenue*. Victoria and Queensland account for asset sales in their capital expenditure accounts. The income from asset disposal (apart from major assets such as land, buildings and some motor vehicles) is usually not very significant as capital assets are generally retained until they are either worn out or obsolete, making their residual value comparatively small. Sometimes there is even a net cost incurred in disposing of an asset.

Notes on financial data

Expenditure reported in Table 3.5 is largely expenditure by hospitals and not necessarily all expenditure on hospital services by the state or territory government. Revenue reported in Table 3.6 is largely revenue received by individual hospitals, and does not necessarily include all revenue received by the state or territory government for provision of hospital services.

For example, for some states and territories, expenditure on services purchased by the state or territory government from private hospitals is not included in Table 3.5. New South Wales, for example, has reported that, in 2001–02, the state government spent \$74.8 million on services purchased from two private hospitals, and this amount is not included in Table 3.5. Expenditure by state and territory governments on their residents treated as public patients in other jurisdictions is also not identified in Table 3.5 for the purchasing jurisdiction. It would be largely reflected as expenditure in other jurisdictions' columns in Table 3.5, but would not be included in Table 3.6, which excludes general revenue payments from the state and territory governments. In relation to these 'cross-border flows', New South Wales, for example, reported \$88.4 million as expenditure on New South Wales residents treated as public patients in other jurisdictions, and \$1.7 million as revenue for treatment of residents of other jurisdictions as public patients in its hospital system (a net \$86.7 million outflow).

Financial data reported from the National Public Hospital Establishments Database are not comparable with data reported in the Institute's annual publication *Health Expenditure Australia* (AIHW 2002d). For the latter, trust fund expenditure is included (whereas it is not generally included in the data here), and hospital expenditure may be defined to cover activity not covered by this data collection.

Capital formation expenditure is not reported in this publication. Not all jurisdictions were able to report using the *National Health Data Dictionary* (NHDD) (NHDC 2001) categories. There remains more developmental work to be carried out in the area of capital and expenditure reporting in the capacity of the states to report as specified in the NHDD.

It should also be noted that, because some states and territories have not fully implemented accrual accounting procedures and systems, expenditure and revenue presented in the current report are mixtures of expenditure/payments and revenue/receipts, respectively. Depreciation represents a significant portion of expenditure and has been excluded from expenditure totals to ensure comparability across jurisdictions.

Table 3.1: Number of public acute and psychiatric hospitals ^(a) and available beds, by hospital size, states and territories, 2001–02

Hospital size ^(b)	NSW	Vic ^(c)	Qld	WA	SA	Tas	ACT	NT	Total
Hospitals									
10 or less beds	11	38	66	22	7	17	1	0	162
More than 10 to 50 beds	130	50	78	47	55	6	0	2	368
More than 50 to 100 beds	31	21	12	8	9	0	0	1	82
More than 100 to 200 beds	25	14	13	6	3	1	1	1	64
More than 200 to 500 beds	15	21	8	4	5	2	1	1	57
More than 500 beds	6	0	4	2	1	0	0	0	13
Total	218	144	181	89	80	26	3	5	746
Available beds									
10 or less beds	68	213	219	167	45	83	10	n.a.	805
More than 10 to 50 beds	3,391	1,263	1,909	1,074	1,443	131	n.a.	50	9,261
More than 50 to 100 beds	2,245	1,534	939	534	611	n.a.	n.a.	60	5,923
More than 100 to 200 beds	3,665	2,065	1,869	914	513	131	162	153	9,472
More than 200 to 500 beds	4,607	6,566	2,269	1,314	1,811	764	498	297	18,126
More than 500 beds	3,426	n.a.	2,675	1,139	634	n.a.	n.a.	n.a.	7,874
Total	17,402	11,641	9,880	5,142	5,057	1,109	670	560	51,461

(a) The number of hospitals reported can be affected by administrative and/or reporting arrangements and is not necessarily a measure of the number of physical hospital buildings or campuses. See Appendix 4 for more detail.

(b) Size is based on the number of available beds.

(c) The count of hospitals in Victoria is a count of the campuses which report data separately to the National Hospital Morbidity Database. n.a. not applicable.

Table 3.2: Number of hospitals^(a) and ratio of available beds in area to 1,000 population resident in area, by Remoteness Area, public acute and psychiatric hospitals, states and territories, 2001–02

Region	NSW	Vic ^(b)	Qld	WA	SA	Tas	ACT	NT	Total
Hospitals									
Major cities of Australia	65	48	22	15	14	0	3	0	167
Inner regional	75	58	26	9	16	8	0	0	192
Outer regional	63	36	55	28	28	14	0	1	225
<i>Total regional</i>	138	94	81	37	44	22	0	1	417
Remote	12	2	34	24	16	2	0	2	92
Very remote	3	0	44	13	6	2	0	2	70
<i>Total remote</i>	15	2	78	37	22	4	0	4	162
Total all regions	218	144	181	89	80	26	3	5	746
Ratio of available beds in area to 1,000 population resident in area									
Major cities of Australia	2.4	2.3	2.5	2.5	2.9	n.a.	2.1	n.a.	2.4
Inner regional	3.0	2.8	2.2	1.4	2.6	2.7	0.0	n.a.	2.6
Outer regional	3.6	3.1	3.3	4.2	5.5	1.6	n.a.	2.8	3.5
<i>Total regional</i>	3.1	2.9	2.7	2.7	4.0	2.3	0.0	2.8	2.9
Remote	5.9	2.3	5.0	5.5	7.6	3.0	n.a.	5.1	5.5
Very remote	6.8	n.a.	7.7	3.5	6.4	3.4	n.a.	1.0	4.4
<i>Total remote</i>	6.0	2.3	6.0	4.8	7.3	3.1	n.a.	2.9	5.1
Total all regions	2.6	2.4	2.7	2.7	3.3	2.4	2.1	2.8	2.7

(a) The number of hospitals reported can be affected by administrative and/or reporting arrangements and is not necessarily a measure of the number of physical hospital buildings or campuses. See Appendix 4 for more detail.

(b) The count of hospitals in Victoria is a count of the campuses which report data separately to the National Hospital Morbidity Database. n.a. not applicable.

Table 3.3: Number of public acute hospitals^(a) with specialised services, states and territories, 2001–02

Specialised services	NSW ^(b)	Vic ^(c)	Qld	WA	SA ^(c)	Tas ^(b)	ACT	NT	Total
Acute renal dialysis unit	14	11	10	4	4	2	1	1	47
Acute spinal cord injury unit	2	1	1	2	1	0	0	0	7
AIDS unit	9	3	4	1	1	0	1	1	20
Alcohol and drug unit	32	16	8	1	4	0	0	1	62
Burns unit (level III)	4	2	2	2	2	1	0	0	13
Cardiac surgery unit	11	8	4	4	2	1	1	0	31
Clinical genetics unit	11	5	2	2	2	1	1	0	24
Coronary care unit	48	29	21	4	10	3	2	2	119
Diabetes unit	22	15	10	4	9	3	1	1	65
Domiciliary care service	141	91	30	56	56	0	0	2	376
Geriatric assessment unit	59	32	13	13	16	3	1	0	137
Hospice care unit	28	26	6	28	22	1	0	0	111
Infectious diseases unit	9	11	7	4	5	1	1	1	39
In-vitro fertilisation unit	36	17	12	4	5	3	1	2	80
Intensive care unit (level III)	3	4	0	1	2	0	0	0	10
Maintenance renal dialysis centre	37	51	16	12	10	2	1	3	132
Major plastic/reconstructive surgery unit	11	10	4	3	5	2	1	0	36
Neonatal intensive care unit (level III)	10	4	3	1	2	1	1	1	23
Neurosurgical unit	11	8	6	3	4	1	1	0	34
Nursing home care unit	49	76	5	38	46	10	0	0	224
Obstetric/maternity service	84	67	63	33	31	5	3	5	291
Oncology unit	32	30	8	5	7	3	2	0	87
Psychiatric unit/ward	34	31	16	10	8	3	2	2	106
Refractory epilepsy unit	5	4	0	3	2	1	0	0	15
Rehabilitation unit	48	28	13	12	20	3	1	2	127
Sleep centre	12	7	6	2	4	0	0	0	31
Specialist paediatric service	39	23	32	12	8	3	2	3	122
Transplantation unit—bone marrow	9	7	6	3	3	1	1	0	30
Transplantation unit—heart (including heart/lung)	1	2	1	1	0	0	0	0	5
Transplantation unit—liver	2	2	2	1	1	0	0	0	8
Transplantation unit—pancreas	1	1	0	1	0	0	0	0	3
Transplantation unit—renal	9	6	1	3	1	0	0	0	20

(a) Excludes psychiatric hospitals.

(b) These data were not available for a small number of hospitals, so the number of services is therefore slightly under-enumerated

(c) May be a slight underestimate as some small multi-campus rural services reported at network rather than campus level. Consequently if two campuses within the group had a specialised type of service, they were counted as one.

Table 3.4: Average full-time equivalent staff, ^(a) public acute and psychiatric hospitals, states and territories, 2001–02

Staffing category	NSW ^(b)	Vic ^(c)	Qld ^(d)	WA ^(e)	SA ^(b)	Tas ^(f)	ACT	NT	Total
Full-time equivalent staff numbers									
Salaried medical officers	6,481	4,521	3,320	1,702	1,714	347	290	253	18,628
Registered nurses	..	17,868	11,980	6,821	5,962	1,575	1,271	819	..
Enrolled nurses	..	3,195	2,200	769	1,663	159	195	125	..
<i>Total nurses</i>	29,663	21,063	14,180	7,590	7,625	1,734	1,466	944	84,265
Other personal care staff	..	..	557	31	..	..	137	98	823
Diagnostic & allied health professionals	9,516	8,040	3,145	2,151	2,161	363	316	155	25,847
Administrative & clerical staff	10,252	7,666	4,752	3,079	3,231	528	499	355	30,362
Domestic & other staff	11,501	6,259	6,488	3,474	2,897	946	165	532	32,262
Total staff	67,413	47,549	32,442	18,027	17,628	3,918	2,873	2,337	192,187

(a) Where average full-time equivalent (FTE) staff numbers were not available, staff numbers at 30 June 2002 were used. Staff contracted to provide products (rather than labour) are not included

(b) Other personal care staff are included in *Diagnostic & allied health professionals* and *Domestic & other staff*.

(c) For Victoria, FTEs may be slightly understated. Other personal care staff are included in *Domestic & other staff*.

(d) Queensland pathology services are provided by staff employed by the state pathology service not reported here

(e) Other personal care staff for Western Australia excludes staff on retention who do not work regular hours. Many hospitals were unable to provide a split between nurse categories and these have been coded as *Registered nurses*.

(f) Data for 6 small Tasmanian hospitals not supplied. Other personal care staff are included in *Domestic & other staff*.
.. not available.

Table 3.5: Recurrent expenditure (\$'000), public acute and psychiatric hospitals, states and territories, 2001–02

Recurrent expenditure category	NSW ^(a)	Vic	Qld ^(b)	WA	SA ^(c)	Tas ^(d)	ACT	NT ^(e)	Total
Salary and wages expenditure									
Salaried medical officers	641,804	607,240	326,815	199,628	148,335	32,607	34,648	33,720	2,024,797
Registered nurses	..	1,156,104	657,980	409,995	323,869	88,217	68,590	54,697	..
Enrolled nurses	..	147,944	88,890	27,331	69,570	7,305	8,336	6,553	..
<i>Total nurses</i>	1,612,145	1,304,048	746,870	437,326	393,439	95,522	76,926	61,250	4,727,526
Other personal care staff	..	..	19,241	833	..	..	5,445	3,810	29,329
Diagnostic & allied health professionals	485,470	409,203	166,279	106,949	90,323	20,542	15,340	11,449	1,305,555
Administrative & clerical staff	457,901	343,082	184,714	129,303	101,647	20,507	21,621	15,317	1,274,092
Domestic & other staff	398,734	245,044	228,189	130,472	66,248	46,399	5,860	22,903	1,143,849
Salary expenditure category, not further categorised	n.a.	16,635	n.a.	n.a.	n.a.	1,306	n.a.	n.a.	17,941
Total salary & wages expenditure	3,596,054	2,925,252	1,672,108	1,004,511	799,992	216,883	159,840	148,449	10,523,089
Non-salary expenditure									
Payments to visiting medical officers	308,849	106,090	57,324	59,289	64,828	11,979	21,639	3,340	633,338
Superannuation payments	306,492	208,276	157,152	83,931	68,769	21,966	19,606	8,787	874,979
Drug supplies	291,933	206,048	140,529	86,259	66,900	16,463	9,988	11,705	829,825
Medical & surgical supplies	494,934	345,493	249,665	106,168	78,793	49,534	24,231	14,653	1,363,471
Food supplies	79,770	54,083	22,577	11,743	10,567	4,565	3,375	2,099	188,779
Domestic services	138,581	116,077	84,818	79,124	38,831	11,885	13,277	10,474	493,067
Repairs & maintenance	147,521	95,205	56,098	48,106	40,785	9,528	5,760	3,636	406,639
Patient transport	42,576	21,035	15,958	13,492	9,949	2,317	684	6,120	112,131
Administrative expenses	378,444	312,091	133,851	84,755	39,063	14,256	23,304	7,099	992,863
Interest payments	532	374	10	15,086	1,792	..	125	..	17,919
Depreciation	290,360	160,211	176,602	56,549	240	..	12,753	..	..
Other recurrent expenditure	71,169	120,035	17,459	13,185	133,275	14,217	23,284	11,688	404,312
Non-salary expenditure, not further categorised	n.a.	7,268	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	7,268
Total non-salary expenditure excluding depreciation	2,260,801	1,592,075	935,441	601,138	553,552	156,710	145,273	79,601	6,324,591
Total non-salary expenditure including depreciation	2,551,161	1,752,286	1,112,043	657,687	..	..	158,026	..	..
Total expenditure excluding depreciation	5,856,855	4,517,327	2,607,549	1,605,649	1,353,544	373,593	305,113	228,050	16,847,680
Public acute hospitals	5,674,552	4,493,423	2,527,659	1,554,989	1,278,414	373,593	305,113	228,050	16,424,408
Psychiatric hospitals	182,303	23,904	79,890	50,660	75,130	11,385	n.a.	n.a.	423,272
Total expenditure including depreciation	6,147,215	4,677,538	2,784,151	1,662,198	..	..	317,866	..	n.a.
Public acute hospitals	5,954,281	4,652,940	2,694,737	1,610,432	..	..	317,866	..	n.a.
Psychiatric hospitals	192,934	24,598	89,414	51,766	..	..	n.a.	n.a.	n.a.

(a) New South Wales hospital expenditure recorded against special purposes and trust funds is excluded. Other personal care staff are included in Diagnostic & allied health professionals and Domestic & other staff.

(b) Pathology services are purchased from a statewide pathology service rather than being provided by hospital employees.

(c) South Australian Other personal care staff are included in Diagnostic & allied health professionals and Domestic & other staff. Interest payments are included in Administrative expenses. Termination payments are included in Other recurrent expenditure. Depreciation only reported for small subset of hospitals.

(d) Tasmanian data for 2 small hospitals not supplied and data for one small hospital incomplete. Other personal care staff are reported as part of Domestic & other staff.

(e) Interest payments are not reported.

n.a. not applicable.

.. not available.

Table 3.6: Revenue (\$'000), public acute and psychiatric hospitals, states and territories, 2001-02

Revenue source	NSW	Vic	Qld ^(a)	WA	SA	Tas ^(c)	ACT	NT	Total
Patient revenue	430,212	244,705	55,227	53,229	48,302	32,708	17,886	5,515	887,784
Recoveries	131,244	65,234	17,276	24,217	14	8,527	5,636	6,669	258,817
Other revenue ^(b)	90,739	200,588	47,062	22,604	11,048	7,262	3,253	2,363	384,919
Total revenue	652,195	510,527	119,565	100,050	59,364	48,497	26,775	14,547	1,531,520
Public acute hospitals	640,659	509,862	116,532	99,073	57,367	47,445	26,775	14,547	1,512,260
Psychiatric hospitals	11,536	665	3,033	977	1,997	1,052	n.a.	n.a.	19,260

(a) *Patient revenue* includes revenue for items such as pharmacy and ambulance, which may be considered to be Recoveries.

(b) Includes investment income, income from charities, bequests and accommodation provided to visitors.

(c) Tasmania did not supply data for 7 small hospitals.

n.a. not applicable.