

# 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 19% of available beds. The largest hospital had 832 beds and the median hospital size was 26 beds.

Further detail about the characteristics and numbers of public hospitals is included in Appendix 5 and, by public hospital peer group, in Tables 4.2 and 4.3.

## Regional distribution of beds

The Rural, Remote and Metropolitan Area (RRMA) 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. This table does not, however, provide data on the distribution and availability of private hospital beds.

The availability of beds ranged from 2.5 beds per 1,000 population nationally in metropolitan areas, to 3.3 beds per 1,000 population in rural areas and 4.9 beds per 1,000 population in remote areas. However, there is not an exact geographic fit between population distribution and the distribution of hospital services. Hospitals based in central locations may also serve patients who reside in rural and remote areas of a State or Territory or in other jurisdictions.

There were higher numbers of public hospital beds per 1,000 population in rural and remote areas than in metropolitan areas. In contrast, there were fewer private hospital beds in rural and remote areas (AIHW: Strong et al. 1998). The higher rates of beds in non-metropolitan areas also reflect other factors such as the lower numbers of medical practitioners per 1,000 population in rural and remote areas (AIHW 2002b). 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 4.9 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.

## Staffing

Information on the number of staff employed in public hospitals by State and Territory is presented in Table 3.4. Data on full-time equivalent staff are reported here 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, Western Australia and Tasmania were unable to provide information for each nurse category, although data on total nurse numbers are provided.

Nationally, 182,995 full-time equivalent staff were employed in the public hospital sector in 2000–01. Nurses constituted 45% (82,476) 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 17,310 salaried medical officers employed in public hospitals throughout Australia, representing 9% 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 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* 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 explains 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

Commonwealth and State government expenditure on public hospitals, including public psychiatric hospitals, accounted for 37.2% of total health services expenditure by

governments in 1998–99 (\$13,160 million of \$35,420 million), the latest year for which this information is available (AIHW 2002b).

Nationally, recurrent expenditure on public acute and psychiatric hospitals was \$15,545 million in 2000–01. Information on gross recurrent expenditure, categorised into salary and non-salary expenditure, is presented in Table 3.5.

The data for New South Wales presented in this report includes for the first time since 1995–96 expenditure through community health program funding administered by hospitals, so New South Wales data are not comparable with data for previous years. However, New South Wales has provided preliminary revised data for total recurrent expenditure (excluding depreciation) for 1999–00 of \$5,357 million. On the basis of these data (and a preliminary revised national total for 1999–00 of \$14,647 million), there was an increase in expenditure of 6.1% (\$898 million) in current prices. In constant prices (referenced to 1999–00), national expenditure was \$15,038 million in 2000–01, and represents a real increase in expenditure of 2.7% over 1999–00.

The largest contributor to these increases was an increase in recurrent expenditure of \$533 million (current prices) by Victoria, including \$360 million for salaries and wages expenditure (\$141 million for nurses), and \$173 million for other recurrent expenditure.

The largest share of expenditure for 2000–01 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 62% of the \$15.5 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 statewide pathology services.

Depreciation has also been reported in Table 3.5, and the data show that there is variation between States and Territories in reporting, ranging from 6.8% of total expenditure in Queensland to 3.8% in Western Australia. It is anticipated that comparable data on depreciation will become increasingly available. Depreciation data effectively provide a smoothed out annual report on capital expenditure (how capital is expended or used up).

Data reported to the National Public Hospital Establishments Database are not comparable with data reported in the Institute's annual *Health Expenditure Bulletin* (AIHW 2001c). 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.

## 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 revenues* (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*.

There is 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.

Australian public hospitals received \$1.6 billion in revenue in 2000–01. This was equivalent to 10% of total recurrent expenditure (excluding depreciation). Revenue as a proportion of total expenditure was, however, variable across States and Territories. Public hospital revenue in New South Wales represented 14% of expenditure, whereas public hospital revenues in Queensland and South Australia were less than 5% of expenditure.

*Patient revenue*, the largest revenue category, accounted for 50% of all revenue, and was equivalent to 5% of total expenditure.

The total revenue increased between 1999–00 and 2000–01 by 29%, with the largest increase being a doubling of *Other revenue*. The difference between years ranged from a 45% increase in total revenue in New South Wales to a drop of 15% in the Australian Capital Territory.

## Quality of financial data

Capital expenditure is not reported in this publication. Not all jurisdictions were able to report using the *National Health Data Dictionary (NHDD)* (NHDC 2000) 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. As noted above, moves toward accrual accounting will improve the quality of financial data.

Table 3.1: Number of public acute and psychiatric hospitals<sup>(a)</sup> and available beds, by hospital size, States and Territories, 2000-01

Hospital size <sup>(b)</sup>	NSW	Vic <sup>(c)</sup>	Qld	WA	SA	Tas	ACT	NT	Total
<b>Hospitals</b>									
10 or less beds	13	41	67	14	7	15	0	0	157
11 to 50 beds	130	45	78	55	55	6	1	2	372
51 to 100 beds	28	24	12	7	8	0	0	1	80
101 to 200 beds	27	13	12	5	4	1	1	1	64
201 to 500 beds	15	21	11	7	5	2	0	1	52
More than 500 beds	6	1	3	2	1	0	1	0	14
<b>Total</b>	<b>219</b>	<b>145</b>	<b>183</b>	<b>90</b>	<b>80</b>	<b>24</b>	<b>3</b>	<b>5</b>	<b>749</b>
<b>Available beds</b>									
10 or less beds	71	251	206	102	45	77	0	..	752
11 to 50 beds	3,418	1,189	1,887	1,256	1,471	118	18	50	9,407
51 to 100 beds	2,026	1,808	926	497	527	..	..	60	5,844
101 to 200 beds	3,861	1,899	1,677	638	607	131	162	153	9,128
201 to 500 beds	4,615	6,434	3,149	1,764	1,797	784	..	297	18,820
More than 500 beds	3,543	650	2,122	1,179	641	..	504	..	8,639
<b>Total</b>	<b>17,534</b>	<b>12,231</b>	<b>9,967</b>	<b>5,436</b>	<b>5,088</b>	<b>1,090</b>	<b>684</b>	<b>560</b>	<b>52,590</b>

(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 5 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. .. not applicable.

Table 3.2: Number of hospitals<sup>(a)</sup> and available beds per 1,000 population, by metropolitan, rural and remote region, public acute and psychiatric hospitals, States and Territories, 2000-01

Region	NSW	Vic <sup>(b)</sup>	Qld	WA	SA	Tas	ACT	NT	Total
<b>Hospitals</b>									
Capital cities	52	48	24	16	15	6	3	1	155
Other metropolitan centres	19	2	5	..	..	..	..	..	26
<i>Total metropolitan</i>	71	50	29	16	15	6	3	1	191
Large rural centres	12	6	8	..	1	2	..	..	29
Small rural centres	23	10	6	3	5	1	..	..	48
Other rural areas	97	77	53	33	47	14	0	0	321
<i>Total rural</i>	132	93	67	36	53	17	0	0	398
Remote centres	..	..	16	9	..	..	..	2	27
Other remote areas	16	2	71	29	12	1	..	2	133
<i>Total remote</i>	16	2	87	38	12	1	..	4	160
<b>Total all regions</b>	<b>219</b>	<b>145</b>	<b>183</b>	<b>90</b>	<b>80</b>	<b>24</b>	<b>3</b>	<b>5</b>	<b>749</b>
<b>Available beds per 1,000 population</b>									
Capital cities	2.4	2.3	2.7	2.5	2.9	2.6	2.2	3.3	2.5
Other metropolitan centres	2.6	3.1	2.0	..	..	..	..	..	2.5
<i>Total metropolitan</i>	2.4	2.3	2.5	2.5	2.9	2.6	2.2	3.3	2.5
Large rural centres	4.1	4.3	3.3	..	3.3	3.5	..	..	3.7
Small rural centres	2.9	4.1	2.2	2.3	4.5	2.4	..	..	3.1
Other rural areas	3.6	2.6	2.5	4.1	4.9	1.1	0.0	0.0	3.1
<i>Total rural</i>	3.5	3.3	2.8	3.4	4.7	2.1	0.0	0.0	3.3
Remote centres	..	..	4.1	4.2	..	..	..	6.0	233.8
Other remote areas	5.9	2.0	7.2	5.5	6.5	1.1	..	0.9	5.3
<i>Total remote</i>	5.9	2.0	5.7	4.8	6.5	1.1	..	3.0	4.9
<b>Total all regions</b>	<b>2.7</b>	<b>2.6</b>	<b>2.8</b>	<b>2.9</b>	<b>3.4</b>	<b>2.3</b>	<b>2.2</b>	<b>2.9</b>	<b>2.7</b>

(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 5 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. .. not applicable.

Table 3.3: Number of public acute hospitals<sup>(a)</sup> with specialised services, States and Territories, 2000-01

Specialised services	NSW <sup>(b)</sup>	Vic <sup>(c)</sup>	Qld	WA	SA <sup>(c)</sup>	Tas <sup>(b)</sup>	ACT	NT	Total <sup>(d)</sup>
Acute renal dialysis unit	14	14	11	4	4	2	1	1	51
Acute spinal cord injury unit	2	1	1	1	1	0	0	0	6
AIDS unit	8	4	4	1	1	0	1	1	20
Alcohol and drug unit	36	18	9	3	2	0	0	1	69
Burns unit (level III)	4	2	2	2	2	1	0	0	13
Cardiac surgery unit	11	9	4	4	2	1	1	0	32
Clinical genetics unit	10	6	2	3	2	1	1	0	25
Coronary care unit	49	30	23	5	11	3	2	2	125
Diabetes unit	22	15	8	5	9	3	1	1	64
Domiciliary care service	127	92	32	55	54	0	0	3	363
Geriatric assessment unit	45	35	12	15	16	3	1	0	127
Hospice care unit	31	28	10	21	21	1	0	0	112
Infectious diseases unit	9	13	7	3	6	1	1	1	41
Intensive care unit (level III)	39	21	12	5	5	3	1	2	88
In-vitro fertilisation unit	3	4	0	1	2	0	0	0	10
Maintenance renal dialysis centre	33	53	14	11	8	2	1	3	125
Major plastic/reconstructive surgery unit	10	11	4	2	5	2	1	0	35
Neonatal intensive care unit (level III)	12	6	3	2	2	1	1	1	28
Neurosurgical unit	11	10	6	3	4	1	1	0	36
Nursing home care unit	62	79	9	27	45	9	0	0	231
Obstetric/maternity service	87	69	62	36	31	5	3	5	298
Oncology unit	34	32	8	6	7	3	1	0	91
Psychiatric unit/ward	35	35	16	10	8	3	2	2	111
Refractory epilepsy unit	5	6	0	1	2	1	0	0	15
Rehabilitation unit	48	26	13	12	17	3	1	2	122
Sleep centre	10	8	5	2	4	0	0	0	29
Specialist paediatric service	46	27	34	11	8	3	2	3	134
Transplantation unit—bone marrow	9	6	6	2	3	1	1	0	28
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	2	0	0	0	0	0	0	3
Transplantation unit—renal	9	7	1	2	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, 2000-01**

Staffing category	NSW <sup>(b)</sup>	Vic <sup>(c)</sup>	Qld <sup>(d)</sup>	WA <sup>(e)</sup>	SA <sup>(b)</sup>	Tas <sup>(f)</sup>	ACT	NT	Total
<b>Full-time equivalent staff numbers</b>									
Salaried medical officers	6,104	3,912	3,114	1,625	1,685	346	285	239	17,310
Registered nurses	n.a.	16,468	11,792	6,758	5,855	1,625	1,139	806	n.a.
Enrolled nurses	n.a.	2,890	2,250	786	1,512	189	180	154	n.a.
<b>Total nurses</b>	<b>30,072</b>	<b>19,358</b>	<b>14,042</b>	<b>7,544</b>	<b>7,367</b>	<b>1,814</b>	<b>1,319</b>	<b>960</b>	<b>82,476</b>
Other personal care staff	n.a.	711	454	159	n.a.	n.a.	122	88	1,534
Diagnostic & allied health professionals	8,996	7,116	2,944	2,147	1,819	362	269	150	23,603
Administrative & clerical staff	9,736	6,946	4,381	2,911	2,611	549	445	314	27,693
Domestic & other staff	11,682	4,892	6,463	3,151	2,064	1,050	163	504	29,979
<b>Total staff</b>	<b>66,600</b>	<b>42,935</b>	<b>31,398</b>	<b>17,537</b>	<b>15,546</b>	<b>4,121</b>	<b>2,603</b>	<b>2,255</b>	<b>182,995</b>

(a) Where average full-time equivalent (FTE) staff numbers were not available, staff numbers at 30 June 2000 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.

(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 3 small Tasmanian hospitals not supplied. Tasmanian Other personal care staff are included in *Domestic & other staff*. n.a. not available.

Table 3.5: Recurrent expenditure (\$'000), public acute and psychiatric hospitals, States and Territories, 2000-01

Recurrent expenditure category	NSW <sup>(a)</sup>	Vic	Qld <sup>(b)</sup>	WA	SA <sup>(c)</sup>	Tas <sup>(d)</sup>	ACT	NT <sup>(e)</sup>	Total
Salaried medical officers	599,102	490,953	298,549	169,051	137,617	36,233	30,372	29,573	1,791,450
Registered nurses	n.a.	1,010,478	642,416	359,599	291,520	84,543	59,101	48,725	n.a.
Enrolled nurses	n.a.	123,686	88,633	29,052	59,518	7,495	6,625	6,825	n.a.
Total nurses	1,520,087	1,134,164	731,049	388,651	351,038	92,738	65,726	55,550	4,338,403
Other personal care staff	n.a.	19,265	16,179	4,980	n.a.	n.a.	4,273	3,309	48,006
Diagnostic & allied health professionals	446,422	459,503	156,464	104,460	87,094	19,607	14,915	10,222	1,298,687
Administrative & clerical staff	419,668	314,509	169,824	114,039	95,109	20,584	20,400	13,627	1,167,750
Domestic & other staff	408,705	185,236	222,364	112,519	62,569	0	5,537	22,309	1,019,239
Not allocatable to a salary expenditure category	..	11,758	..	..	..	46,758	..	..	58,516
<b>Total salary &amp; wages expenditure</b>	<b>3,393,974</b>	<b>2,615,388</b>	<b>1,594,429</b>	<b>893,700</b>	<b>733,427</b>	<b>215,320</b>	<b>141,223</b>	<b>134,590</b>	<b>9,722,951</b>
Payments to visiting medical officers	289,139	100,271	59,203	60,634	64,810	4,354	18,650	1,897	598,958
Superannuation payments	296,594	194,487	143,635	81,695	66,459	12,852	15,843	3,373	814,338
Drug supplies	271,002	185,382	143,791	80,877	62,134	18,099	8,752	10,255	780,292
Medical & surgical supplies	436,812	301,793	219,329	92,741	73,605	32,003	24,246	11,973	1,192,401
Food supplies	71,343	51,098	23,187	12,054	9,525	3,885	3,283	1,979	176,354
Domestic services	131,889	95,896	77,112	86,163	35,525	14,753	11,286	9,869	462,493
Repairs & maintenance	133,957	85,200	50,609	48,122	42,434	11,101	5,272	5,352	382,047
Patient transport	37,125	17,841	15,085	12,510	8,958	2,011	589	4,608	98,727
Administrative expenses	345,063	255,124	118,889	85,151	89,002	10,030	15,162	9,551	927,972
Interest payments	588	289	12	17,287	1,736	n.a.	111	n.a.	20,023
Depreciation	263,691	n.a.	178,803	58,247	216	0	12,293	n.a.	n.a.
Other recurrent expenditure	111,939	131,569	15,188	7,959	51,522	12,460	18,601	5,390	354,628
Not allocatable to a non-salary expenditure category	..	5,901	..	..	..	8,260	..	..	14,161
<b>Total non-salary expenditure excluding depreciation</b>	<b>2,125,451</b>	<b>1,424,851</b>	<b>866,040</b>	<b>585,193</b>	<b>505,610</b>	<b>129,808</b>	<b>121,794</b>	<b>64,247</b>	<b>5,822,994</b>
<b>Total expenditure excluding depreciation</b>	<b>5,519,425</b>	<b>4,040,239</b>	<b>2,460,469</b>	<b>1,478,893</b>	<b>1,239,037</b>	<b>345,128</b>	<b>263,017</b>	<b>198,837</b>	<b>15,545,045</b>

(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 each hospital's 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) Data for 6 small Tasmanian hospitals incomplete. Other personal care staff are reported as part of Domestic & other staff.

(e) Superannuation payments for 4 of the 5 Northern Territory hospitals are included under Superannuation payments. For the other hospital, they are included with the salary and wages expenditure categories. Interest payments are not reported.

n.a. not available.

.. not applicable.

Table 3.6: Revenue (\$'000), public acute and psychiatric hospitals, States and Territories, 2000-01

Revenue source	NSW	Vic	Qld <sup>(a)</sup>	WA	SA	Tas <sup>(c)</sup>	ACT	NT	Total
Patient revenue	372,362	214,744	53,911	55,520	42,441	24,276	16,185	9,860	789,299
Recoveries	126,779	54,587	17,553	20,073	47	9,334	4,328	3,477	236,178
Other revenue <sup>(b)</sup>	293,468	177,649	39,393	16,247	7,597	8,972	2,917	7,166	553,408
<b>Total revenue</b>	<b>792,609</b>	<b>446,980</b>	<b>110,857</b>	<b>91,840</b>	<b>50,085</b>	<b>42,582</b>	<b>23,430</b>	<b>20,503</b>	<b>1,578,886</b>

(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) Data for 6 hospitals not supplied.