2 Hospital performance indicators

Introduction

This chapter describes hospital performance indicators in terms of the average cost per separation, average salaries of staff employed, the number of accredited hospitals, and selected procedures and the length of stay for the most common diagnoses. These indicators were determined under the framework developed by the National Health Ministers' Benchmarking Working Group (see NHMBWG 1999). The indicators have also been reported in earlier editions of *Australian Hospital Statistics* and by the Steering Committee for the Review of Commonwealth/State Service Provision (SCRCSSP 2001). The data relate to the activity and resources of public hospitals, and there are also some data presented for private hospitals.

Those indicators that can be derived from data collected through the National Minimum Data Set for Institutional Health Care, established under the National Health Information Agreement process, have been included in this report. The principal elements for reviewing the performance of health care service delivery are efficiency (for which the principal indicator is cost per unit of output) and effectiveness (for which broad indicators are quality, appropriateness and access and equity). Indicators available for this report that provide a measure of hospital efficiency include cost per casemix-adjusted separation in public acute hospitals; average salaries for medical and non-medical staff in public acute hospitals; and average length of stay for AR-DRGs with the highest number of separations. Only two effectiveness measures are available for reporting: the number of available beds in accredited hospitals, which is a measure of quality; and separation rates for selected procedures in public and private hospitals, which is a measure of the appropriateness of acute hospital service delivery. Access and equity indicators are not included in this report. Hospital waiting times data are presented in separate reports (AIHW 2000f).

Improving data quality is a key strategy in the development of performance reporting in the hospital sector. Those indicators for which regular high quality data are available have benefited from collaborative data development and standardisation processes which health agencies have had in place under the National Health Information Agreement process. However, data for a substantial number of performance indicators required for reporting under the agreed framework remain unavailable. The effort required to implement a new performance indicator is not trivial in a national service delivery system as large and as complex as in the health services field. The National Health Information Agreement provides an established process for endorsing national data standards and for including new data elements in national minimum data sets.

Cost per casemix-adjusted separation

Table 2.1 shows the total cost per casemix-adjusted separation for all States and Territories for 1999–00. At the national level, the cost per casemix-adjusted separation was $2,728. A large portion of these costs is attributed to non-medical salaries and medical labour costs; nationally these costs were $1,454 and $502 respectively, per casemix-adjusted separation.

This performance indicator is a measure of the average cost of providing care for an admitted patient (whether an overnight-stay patient or a same day patient), adjusted for the relative complexity of the patient's clinical condition and for the hospital services provided.

Enhancement of current indicators

Separating acute and non acute costs

The current methodology includes all admitted patient separations and their associated costs. It is appropriate to include the 97% of separations which are acute in this calculation, as meaningful cost weights are available for each of the acute separations. However, the 3% of separations which are not acute are also included. Unfortunately there are no cost weights for these separations, so as an approximation the cost per separation for the acute separations is applied.

To provide an estimate of the average casemix-adjusted cost of acute non-psychiatric patients both New South Wales and Victoria provided the Institute with estimates of the expenditure on acute non-psychiatric patients. This is done by first estimating the costs of all acute patients and then taking out the costs of the psychiatric care days in designated psychiatric units. The effect of restricting the analysis to only acute non-psychiatric patients was to reduce the cost per casemix-adjusted separation by 8% in New South Wales and 9% in Victoria (Table 2.2). Thus, in this case, the refinement of the methodology does not change the relative relationship of NSW and Victoria on this efficiency indicator.

The cost per casemix adjusted separation falls when the non acute and psychiatric separations are excluded, because these excluded separations have a cost per separation which is higher than the average cost of an acute separation. This arises because although these separations are relatively low cost per patient day, they typically have very long lengths of stay. Thus the average cost per separation of these palliative, rehabilitation, non-acute and psychiatric separations is $5,769 for New South Wales and $6,347 for Victoria, over twice the costs of typical acute separations.

The data used in these calculations is in some cases preliminary, so when better data are provided, and when the 1999-00 cost weights are available, the Institute will be updating these numbers on its website.

There are still a number of methodological difficulties to be resolved in this area, such as an examination of the consistency of counting separations that are not acute, the consistency of dealing with separations involving psychiatric unit care, and consistency in determination of statistical separations. The Institute will be publishing information about these methodological issues later in the year.

The Institute hopes that all jurisdictions will soon be in a position to provide data on the costs of treating acute admitted patients that are separated in a year. In addition, if the States and Territories are able to provide cost weights for episodes not acute, e.g. AN-SNAP weights for admitted patient episodes such as palliative care and rehabilitation care, then it will also be possible to publish a cost per palliative care separation, a cost per rehabilitation care separation, a cost per maintenance care separation, etc.

Subcomponents of costs per separation

In 1998–99 the National Hospital Cost Data Collection (NHCDC) included 74% of public hospital separations (Appendix 8). The NHCDC collects information at a more detailed

level than the National Public Hospital Establishments Database. As more and more hospitals come into the NHCDC it will be increasingly possible to use NHCDC data to refine the data that is published in *Australian Hospital Statistics* to improve the accuracy of the subcomponents of the cost per casemix-adjusted separation. For example, the nursing cost per casemix-adjusted separation is currently calculated by applying the overall inpatient fraction to nursing costs. Using NHCDC data it is possible to work out a nursing cost inpatient fraction. The nursing cost per casemix-adjusted separation calculated in this way would be better for benchmarking purposes.

Notes on methodology

A full description of the methodology used to derive the cost per casemix-adjusted separation figures is provided at Appendix 4. Users of the indicator should refer to the information in that appendix when interpreting the data. The calculation of these figures is sensitive to a number of deficiencies in available data. In particular:

- capital costs (including depreciation where available) are not included in numerators (see Table 3.7 for available data on depreciation); and
- recurrent expenditure on admitted patients (the numerator) is estimated in different ways in different hospitals, and so is not always comparable.

In 1999–00 all States used ICD-10-AM and AR-DRG version 4.1 whereas in 1998–99 jurisdictions used a mixture of ICD-9-CM and ICD-10-CM, and AR-DRG version 4.0/4.1. The 1999–00 AR-DRG version 4.1 cost weights were not available for this publication so the 1998–99 AR-DRG combined cost weights version 4.0/4.1 were used (Department of Health and Aged Care 2000).

Hospital peer groups

When making comparisons it is useful if the units being compared have been grouped into categories so that variation in the variable of interest is explained by the attributes defining the group (Hindle 1999). The peer groups in this publication are designed to explain variability in the average cost per casemix-adjusted separation and to group hospitals into broadly similar groups in terms of their range of admitted patient activities. Peer grouping enables comparison at a more appropriate level. Any benchmarking is best done using peer group data rather than data for a jurisdiction as a whole.

The Australian Institute of Health and Welfare worked with the National Health Ministers' Benchmarking Working Group (NHMBWG) and the National Health Performance Committee (NHPC) to develop the national hospital peer group classification. The hospital peer classification is summarised below. Details of the derivation of these peer groups are contained in Appendix 11 of *Australian Hospital Statistics 1998–99* (AIHW 2000a). These peer groups have been allocated names that are broadly descriptive of the types of hospitals included in each category.

Table 2.3 shows the variation within and between the different peer groups. Table 2.4 reports the data at the individual State and Territory level.

The dominant hospital peer group category is the principal referral and specialist women's and children's group. In 1999–00 they accounted for 66% of public acute and psychiatric hospital expenditure and 63% of separations. The proportion of expenditure accounted for by this group varied from a low of 56% in South Australia to 60% in New South Wales and 78% in Tasmania. The cost per casemix-adjusted separation for this group was $2,831

which is 4% higher than the cost per separation for the selected hospitals in Table 2.1 of $2,728.

National hospital peer group classification

Peer group		Definition
A	Principal referral & Women's & children's	A1 Metropolitan hospitals with >20,000 acute casemix-adjusted separations and rural hospitals with >16,000 acute casemix-adjusted separations per annum. A2 Specialised acute women's and children's hospitals with >10,000 acute casemix-adjusted separations per annum. Possible further sub-groups are: A2.1 Obstetric and women's specialist A2.2 Women's and children's A2.3 Paediatric specialist
A9	Un-peered and other	Prison medical services, special circumstance hospitals, hospitals, metropolitan hospitals with <2,000 acute casemix-adjusted separations, hospitals with <200 separations, etc.
B	Major	B1 Metropolitan acute hospitals treating more than 10,000 acute casemix-adjusted separations per annum. B2 Rural acute hospitals treating >8,000 acute casemix-adjusted separations per annum and remote hospitals with >5,000 casemix-weighted separations.
C	Medium	C1 Medium group 1 acute hospitals, treating between 5,000 and 10,000 acute casemix-adjusted separations per annum. C2 Medium group 2 acute hospitals, treating between 2,000 and 5,000 acute casemix-adjusted separations per annum, plus acute hospitals treating <2,000 casemix-adjusted separations per annum but with >2,000 separations per annum.
D	Small hospitals	D1 Small rural acute hospitals (mainly small country town hospitals), acute hospitals treating <2,000 separations per annum, and with less than 40% non-acute and outlier patient days of total patient days. D2 Small non-acute hospitals, treating <2,000 separations per annum, and with more than 40% non-acute and outlier patient days of total patient days. (Community non-acute). D3 Small remote hospitals (<5,000 acute casemix-weighted separations but not 'MPS' and not 'community non-acute'). Most are <2,000 separations.
E	Sub- and non-acute	For this category, a majority of patient days is generally accounted for by rehabilitative, palliative care and non-acute patients: E1 Aged care homes (not in scope of collection) E2 Multi-purpose services E3 Hospices E4 Rehabilitation E5 Mothercraft
E6		Other non-acute (e.g. geriatric treatment centres combining rehabilitation and palliative care with a few acute patients).
F		Psychiatric

Average salaries and wages expenditure

Average salaries paid to public hospital staff by States and Territories are presented in Table 2.5. A number of jurisdictions do not report staffing numbers and salaries for the different nurse categories and, therefore, average nursing salaries have been produced as a

single figure for this report. Some States and Territories have difficulty in differentiating between 'other personal care staff' and 'domestic and other staff'. Thus, some of the variation in average salaries reported within these categories is a result of different reporting practices.

The data show variation in the distribution of labour costs among jurisdictions. States and Territories that reported the highest rates of staff resources did not necessarily report higher costs per casemix-adjusted separation (Table 2.1). The variations in the data are affected by different practices in 'outsourcing' services, and different arrangements for purchasing domestic and catering functions among jurisdictions. Where services are outsourced, the ratio of salary to non-salary costs will be reduced. The degree of outsourcing of high paid versus low paid staff will be a factor that affects the comparison of averages, for example outsourcing the domestic services and retaining domestic service managers to oversee the activities of the contractors.

Salaries per full time equivalent nurse in 1999–00 were $51,092, which was an increase of 2% on the average salary in 1998–99. Salaries per full time equivalent salaried medical officer were $97,300, which was an increase of 8% on the previous year.

Hospital accreditation

Available administrative indicators of hospital quality include a number of accreditation, certification and award schemes. In particular the number of hospitals that have accreditation by the Australian Council on Healthcare Standards (ACHS) has been used in the past by NHMBWG and SCRCSSP as a process indicator of quality. ACHS accreditation is awarded when hospitals demonstrate a continuing adherence to the ACHS quality assurance standards, and is one of the few indicators of hospital quality that is available nationally.

In recent years other organisations have been accrediting hospitals such as the Australian Quality Council (AQC) and the Quality Improvement Council (QIC). A number of hospitals have been certified as ISO 9000 or ISO 9001 compliant. Others have received accreditation under CHASP—the Community Health Accreditation and Standards Program administered by the Australian Community Health Association. Due to time constraints, it has not been possible to gather information for all jurisdictions on accreditation by non-ACHS organisations. This information is included in Table 2.6 for those jurisdictions who had the information to hand. This shows that in some jurisdictions, non-ACHS accreditation is becoming a significant means of accreditation, particularly for smaller hospitals. In NSW 5% out the 85% of beds accredited are accredited by AQC, QMS or according to ISO standards.

For Australia as a whole, 79% of public hospital beds have been accredited by ACHS, and an unknown proportion accredited by other organisations. Future editions of *Australian Hospital Statistics* will contain more complete information on accreditation by non-ACHS organisations.

Comparison of accreditation data in Table 2.6 among the States and Territories is limited because of the voluntary nature of a hospital's participation in the award scheme and because accreditation at any point in time does not assume a fixed or continuing status for a hospital.

Separation rates for selected procedures

Separation rates for 'selected' procedures have been selected because of the frequency with which they are undertaken, because they are often elective and discretionary, and there are sometimes treatment alternatives available (NHMBWG 1998). Use of particular procedures should be interpreted with care as their relative importance can vary from place to place and over time. The procedures in the table were included after consultation with States and Territories. Users of this indicator should note the scope restrictions of the National Hospital Morbidity Database, in particular private hospitals in the Northern Territory and other hospitals as discussed in Chapter 1. This may result in under reporting of procedure rates for some of the procedures and in particular those procedures that are more likely to be performed in private and private free-standing day hospital facilities, which will be under counted for some jurisdictions.

1999–00 data were recorded using ICD-10-AM. (In 1998–99, the ICD-9-CM and ICD-10-AM coded States were reported separately.)

The age- and sex-standardised separation rates that are presented take account of the different age and sex structures of the populations of the States and Territories. In Table 2.7, the standardised rate for each procedure for each State and Territory is accompanied by the standardised rate for all other jurisdictions excluding the reference State or Territory. For example, the rate for appendicectomy in Queensland was 1.61 separations per 1,000 population. The standardised rate for the other States and Territories combined was 1.40 per 1,000 population. Thus, Queensland had a separation rate for appendicectomy that was 16% higher than the rate for all the other jurisdictions combined. This difference was statistically significant (that is, there is a less than 1% chance that the difference between Queensland and the other jurisdictions occurred by chance).

The most common of the procedures were endoscopy, lens insertions and arthroscopic procedures. There was marked variation in rates among the jurisdictions for these (and other) procedures. Some of this reflects differences in the coverage of private and private free-standing day hospital facilities in the database.

Caesarean section was the fourth most common of the selected procedures. The rate was highest in Queensland and lowest in the Australian Capital Territory. The number of caesarean sections is dependent on the birth rate as well as the population thus it is useful to express the rate per birth as well as per population. The number of in-hospital births has been included as a second point of reference. There are completeness problems in terms of non-hospital births and comparability problems with age differences in the per birth rate of caesarean sections. Tasmania has the highest rate on this basis, with 29 caesarean sections per 100 in-hospital births. Further information on caesarean sections compared to other deliveries can be found in the *Australia's Mothers and Babies 1998* (AIHW NPSU: Nassar et al. 2001).

Average lengths of stay for the top 10 AR-DRGs

Within the performance indicator framework for the hospital sector, the average length of stay for overnight separations for the most commonly reported AR-DRGs is an indicator of efficiency in service delivery. Table 2.8 presents data on the average length of stay for overnight separations for the 10 AR-DRGs for which the highest number of overnight separations were reported for 1999–00. These data are not equivalent to the data

presented in the tables in Chapter 10 as same day separations are excluded, as are separations with lengths of stay over 365 days.

The table illustrates variation in the average length of stay for some AR-DRGs across the States and Territories and between the sectors. Of the top 10, AR-DRG F62B *Heart failure and shock without catastrophic complications or comorbidities* had the longest average length of stay of 6.9 days nationally, with considerable variation between sectors and across jurisdictions, ranging from 8.1 days to 6.2 days. Following this, length of stay for AR-DRG O01D *Caesarean delivery without complicating diagnosis* was 5.5 days and for AR-DRG N04Z *Hysterectomy for non-malignancy*, it was 4.8 days nationally. The average length of stay for AR-DRG O60D *Vaginal delivery without complicating diagnosis* was 3.5 days: 3.1 days in the public sector and 4.8 days in the private sector. For 9 of these top 10 DRGs, the average length of stay was longer in the private hospitals than the public hospitals.

Table 2.1: Cost(a) per casemix-adjusted separation, selected public acute hospitals,(b) States and Territories, 1999–00

Variable	NSW	Vic	Qld	WA	SA	Tas(c)	ACT	NT(d)	Total
Total separations ('000)(e)	1,186	977	668	346	337	72	61	58	3,705
Acute separations ('000)(e)	1,160	948	640	341	330	71	60	57	3,607
Proportion of separations not acute %	2.3	2.9	4.2	1.4	2.0	1.7	1.2	1.7	2.6
Average cost weight(f)	1.04	0.98	0.99	0.93	0.99	1.07	0.96	0.77	1.00
Casemix-adjusted separations ('000)(g)	1,230	961	660	323	334	77	58	44	3,687
Total admitted patient days ('000)(e)	4,550	3,670	2,280	1,222	1,163	297	210	195	13,588
Admitted patient days for acute patients ('000)(e)	4,148	3,053	1,987	1,118	1,056	250	196	182	11,991
Proportion of bed days not acute %	8.8	16.8	12.9	8.5	9.2	15.9	6.8	6.3	11.8
Total recurrent expenditure ($m)	4,553	3,361	2,107	1,330	1,043	305	257	197	13,153
Inpatient fraction(h)	0.73	0.71	0.79	0.79	0.80	0.70	0.70	0.77	0.74
Total admitted patient recurrent expenditure ($m)	3,320	2,376	1,663	1,054	835	213	180	152	9,793
Public patient day proportion(i)	0.81	0.87	0.91	0.88	0.85	0.80	0.90	0.94	0.85
Newborn episodes with no qualified days ('000)	56.5	38.5	29.7	14.1	10.1	0.2	2.9	2.5	155
Data for excluded hospitals									
Separations for excluded hospitals ('000)(b)(e)	59	27	40	14	23	2	2	0	166
Per cent of all separations %	4.8	2.6	5.6	3.9	6.4	2.3	2.5	. .	4.3
Expenditure for excluded hospitals ($m)	517	147	241	112	154	13	1.45	. .	1,185
Inpatient fraction for excluded hospitals	0.75	0.50	0.69	0.82	0.92	n.a.	1.00	. .	0.74
Unadjusted cost per separation	6,509	2,741	4,222	6,435	6,095	n.a.	927	. .	5,250
Average cost data for selected hospitals									
Non-medical labour costs per casemix-adjusted separation ($)									
Nursing	735	710	717	808	657	n.a.	750	887	n.a.
Diagnostic/allied health(k)	207	231	151	248	197	n.a.	191	177	n.a.
Administrative	211	205	180	263	210	n.a.	231	261	n.a.
Other staff	185	144	218	240	122	n.a.	124	412	n.a.
Superannuation(j)	128	110	143	163	127	n.a.	197	116	n.a.
Total non-medical labour costs	*1,466*	*1,400*	*1,409*	*1,722*	*1,313*	*1,524*	*1,493*	*1,853*	*1,454*

(continued)

Table 2.1 (continued): Cost(a) per casemix-adjusted separation, selected public acute hospitals,(b) States and Territories, 1999–00

Variable	NSW	Vic	Qld	WA	SA	Tas(c)	ACT	NT(d)	Total
Other recurrent costs per casemix-adjusted separation ($)									
Domestic services	61	70	81	181	71	38	124	192	80
Repairs/maintenance	64	54	46	98	94	77	60	88	64
Medical supplies(k)	204	210	261	223	164	274	290	180	216
Drug supplies	146	126	138	178	131	132	153	173	141
Food supplies	34	30	24	23	16	35	36	34	29
Administration	160	151	147	197	157	318	178	186	162
Other	91	59	39	116	127	12	189	244	80
Total other recurrent costs	*760*	*700*	*736*	*1,016*	*760*	*886*	*1,030*	*1,097*	*772*
Total excluding medical labour costs	**2,226**	**2,100**	**2,145**	**2,738**	**2,073**	**2,410**	**2,523**	**2,950**	**2,226**
Medical labour costs per casemix-adjusted separation ($)									
Public patients									
Salaried/sessional staff	312	310	311	383	285	296	347	426	317
VMO payments	162	62	63	142	144	53	231	38	112
Private patients (estimated)(l)	112	57	37	72	77	89	66	30	73
Total medical labour costs	*586*	*429*	*411*	*597*	*506*	*438*	*644*	*494*	*502*
Total cost per casemix adjusted separation(a)	**2,812**	**2,529**	**2,556**	**3,335**	**2,579**	**2,848**	**3,167**	**3,444**	**2,728**

(a) Excludes depreciation.

(b) Psychiatric hospitals, drug and alcohol services, mothercraft hospitals, Unpeered and other, hospices, rehabilitation facilities, small non-acute and multi-purpose services are excluded from this table. Appendix 5 lists w

(c) Tasmania is the only jurisdiction with a significant payroll tax burden. As a result, payroll tax has been estimated at 6.7% of salary plus superannuation and removed from the above. Consequently the above data do no

(d) These figures should be interpreted in conjunction with the consideration of cost disabilities associated with hospital service delivery in the Northern Territory (see Appendix 4).

(e) Separations from the National Hospital Morbidity Database whose type of episode of care is acute, newborn with qualified days or unspecified.

(f) Average cost weight from the National Hospital Morbidity Database, based on acute and unspecified separations and newborn episodes of care with qualified days, using the 1998–99 AR-DRG v 4.0/4.1 combined cost

(g) Casemix-adjusted separations is the product of Total separations and Average cost weight.

(h) None of the selected hospitals above have had their admitted patient proportion estimated by the HASAC ratio.

(i) Eligible public patient days as a proportion of total patient days, excluding newborns with no qualified days.

(l) Estimated private patient medical costs calculated as the sum of salary/sessional and VMO payments divided by the number of public patient days multiplied by the number of private patient days. This is a notional es

(k) Queensland pathology services are now being purchased from the statewide pathology service rather than being provided by each hospitals' employees.

. . not applicable.

n.a. not available.

Table 2.2: Cost per acute casemix-adjusted separation (excluding psychiatric unit expenditure and activity)

Variable	NSW	Vic
Total separations ('000)	1,186	977
Acute separations ('000)(b)	1,160	948
Acute designated psychiatric unit separations ('000)(c)	22	19
Acute separations and excluding psychiatric unit separations ('000)(c)	1,138	929
Proportion of separations not acute and including psychiatric unit separations	4.1%	4.9%
Total recurrent expenditure ($m)	4,553	3,361
Total admitted patient expenditure ($m)	3,320	2,376
Costs relating to acute (excluding psychiatric unit) separations		
Average cost weight(e)	1.033	0.965
Casemix-adjusted acute separations ('000)	1,176	896
Acute non-psychiatric admitted patient fraction(d)	0.668	0.616
Total acute patient (excluding psychiatric patient) recurrent expenditure ($m)	3,041	2,070
Cost per casemix-adjusted acute separation (excluding psychiatric unit expenditures)	2,587	2,309
Cost per total casemix-adjusted separation (Table 2.1)	2,812	2,529
Percentage this exceeds cost per acute separation (excluding psychiatric unit expenditures)	8.0%	8.7%

(a) Excludes psychiatric, mothercraft, hospices, small non-acute, un-peered and other hospitals, rehabilitation facilities, and multi-purpose services.

(b) From the National Hospital Morbidity Database. Details of acute separations and bed days compared to non-acute separations and bed days are presente

(c) Acute separations are separations where the type of episode of care is acute, newborn with qualified days, or unspecified. Psychiatric unit separations are

(d) The acute non-psychiatric admitted patient fraction is that portion of recurrent costs which are for acute admitted patients and which exclude the costs of ps

(e) Average cost weight from the National Hospital Morbidity Database, based on acute and unspecified separations and newborn episodes of care with qualif

Note: The Cost per non-acute separation and including psychiatric unit separations is $5769 for NSW and $6,347 for Victoria.

Table 2.3: Average costs(a) and selected parameters by hospital peer group, Australia,(b) 1999–00

	Number of establishments	Average beds	Average separations	Average cost weight	Cost per separation	Cost per patient day	Average length of	Total expenditure	Cost per casemix-adjusted separation ($)		
									Average	Q3	Q1
Principal referral. - Metropolitan (>20,000 separations) & rural (>16,000 separations)	50	506	45,102	1.04	2,817	747	3.8	8,554,423	2,789	2,907	2,590
Women's & children's >10,000 separations	9	258	23,779	0.95	3,037	975	3.1	911,074	3,326	3,707	3,033
Principal referral & Women's & children's	*59*	*468*	*41,849*	*1.03*	*2,836*	*764*	*3.7*	*9,465,497*	*2,831*	3,107	2,593
Large metropolitan, >10,000 separations	20	171	15,037	0.99	2,333	631	3.7	939,060	2,450	7,999	1,189
Large rural (>8,000 separations) & remote (>5,000 separations)	20	146	13,043	0.89	2,262	687	3.3	806,613	2,599	2,867	2,048
Total other large metro and rural	*40*	*159*	*14,040*	*0.94*	*2,300*	*656*	*3.5*	*1,745,673*	*2,516*	*2,915*	*2,249*
Medium 5,000–10,000 separations	32	99	7,945	0.88	2,409	717	3.4	790,088	2,810	2,896	2,101
Medium 2,000–5,000 separations	72	50	3,525	0.81	1,988	551	3.6	638,186	2,540	3,082	2,332
Total medium	*104*	*65*	*4,898*	*0.84*	*2,200*	*632*	*3.5*	*1,428,274*	*2,685*	*2,860*	*2,138*
Small rural acute <2,000 separations	95	24	1,053	0.83	2,094	458	4.6	271,733	2,604	2,963	2,192
Remote acute <5,000 separations	56	24	1,194	0.78	2,466	743	3.3	239,177	3,188	3,152	2,234
Total small rural and remote acute	*151*	*24*	*1,105*	*0.81*	*2,243*	*551*	*4.1*	*510,910*	*2,833*	*4,517*	*2,777*
Small non-acute <2,000 separations	104	24	581	n.a.	2,851	244	11.7	216,155	n.a.	n.a.	n.a.
Multi-purpose service	55	19	513	n.a.	3,007	445	6.8	109,857	n.a.	n.a.	n.a.
Hospice	3	58	996	n.a.	7,671	550	13.9	32,859	n.a.	n.a.	n.a.
Rehabilitation	6	55	637	n.a.	14,819	573	25.9	77,801	n.a.	n.a.	n.a.
Mothercraft	6	24	2,018	n.a.	876	324	2.7	12,067	n.a.	n.a.	n.a.
Other non-acute	15	54	870	n.a.	6,820	364	18.7	138,813	n.a.	n.a.	n.a.
Total non-acute (includes small non-acute)	*189*	*26*	*638*	*n.a.*	*3,683*	*332*	*10.9*	*587,552*	*n.a.*	*n.a.*	*n.a.*
Unpeered and other acute (includes hospitals <200 separations)	116	7	225	*n.a.*	2,492	406	6.3	210,186	*n.a.*	*n.a.*	*n.a.*
Psychiatric(c)	19	139	917	n.a.	21,545	329	65.5	406,264	n.a.	n.a.	n.a.
Total	**678**	**79**	**5,770**	**n.a.**	**2,757**	**658**	**4.2**	**14,354,354**	**n.a.**	**n.a.**	**n.a.**
Teaching hospitals (excluding psychiatric)	*51*	*462*	*43,340*	*1.04*	*2,903*	*780*	*3.7*	*8,704,867*	*2,877*	*4,037*	*2,313*

(a) Expenditure data excludes depreciation.

(b) Excludes a few small hospitals with missing expenditure data: Some data reported at network level. Peer group of hospital listed in Appendix 5.

(c) Psychiatric hospitals consist of a mix of short term acute, long term, psychogeriatric and forensic psychiatric hospitals.

n.a. not available.

Table 2.4: Costs and utilisation by hospital peer group, Australia,(a)(b) public acute & psychiatric hospitals, 1999–00

	NSW	Vic	QLD	WA	SA	Tas	ACT	NT	Total
Principal referral: Metropolitan (>20,000 acute weighted separations) & rural (>16,000 acute weighted separations)									
Number of hospitals	18	11	11	3	3	2	1	1	50
Average beds per hospital	418	771	421	593	461	364	503	268	506
Separations per hospital	36,615	65,590	35,514	58,394	55,466	30,939	48,368	32,046	45,102
Average cost weight(d)	1.08	1.01	1.07	1.00	1.05	1.06	0.89	0.75	1.04
Cost per separation	3,040	2,540	2,851	n.p.	n.p.	2,669	n.p.	n.p.	2,817
Cost per patient day	783	649	791	n.p.	n.p.	650	n.p.	n.p.	747
Cost per casemix-adjusted separation	2,940	2,577	2,703	n.p.	n.p.	2,608	n.p.	n.p.	2,789
Total expenditure ($'000)	2,780,157	2,617,939	1,330,251	n.p.	n.p.	249,034	n.p.	n.p.	8,554,423
Specialist women's & children's >10,000 acute weighted separations									
Number of hospitals	3	1	3	1	1	0	0	0	9
Average beds per hospital	171	535	166	488	288	. .	. .	. .	258
Separations per hospital	17,308	54,649	13,640	36,522	29,998	. .	. .	. .	23,779
Average cost weight(d)	1.02	0.96	0.93	0.91	0.87	. .	. .	. .	0.95
Cost per separation	3,051	n.p.	2,891	n.p.	n.p.	. .	. .	. .	3,037
Cost per patient day	957	n.p.	969	n.p.	n.p.	. .	. .	. .	975
Cost per casemix-adjusted separation	3,170	n.p.	3,176	n.p.	n.p.	. .	. .	. .	3,326
Total expenditure ($'000)	240,998	n.p.	160,136	n.p.	n.p.	. .	. .	. .	911,074
Total principal referral and Specialist women's & children's									
Number of hospitals	21	12	14	4	4	2	1	1	59
Average beds per hospital	383	752	366	567	418	364	503	268	468
Separations per hospital	33,856	64,679	30,827	52,926	49,099	30,939	48,368	32,046	41,849
Average cost weight(d)	1.08	1.00	1.05	0.98	1.02	1.06	0.89	0.75	1.03
Cost per separation	3,041	2,551	2,855	3,325	2,696	2,669	n.p.	n.p.	2,836
Cost per patient day	794	665	806	923	823	650	n.p.	n.p.	764
Cost per casemix-adjusted separation	2,955	2,600	2,743	3,462	2,693	2,608	n.p.	n.p.	2,831
Total expenditure ($'000)	3,021,154	2,830,782	1,490,387	884,739	664,626	249,034	n.p.	n.p.	9,465,496
Large metropolitan, (>10,000 acute weighted separations)									
Number of hospitals	13	0	3	0	3	0	1	0	20
Average beds per hospital	165	. .	177	. .	198	. .	162	. .	171
Separations per hospital	14,079	. .	16,802	. .	18,337	. .	12,288	. .	15,037
Average cost weight(d)	0.99	. .	0.94	. .	0.98	. .	1.10	. .	0.99
Cost per separation	2,359	. .	1,971	. .	2,383	. .	n.p.	. .	2,333
Cost per patient day	615	. .	656	. .	625	. .	n.p.	. .	631
Cost per casemix-adjusted separation	2,471	. .	2,094	. .	2,572	. .	n.p.	. .	2,450
Total expenditure ($'000)	586,229	. .	135,706	. .	168,738	. .	n.p.	. .	939,060
Large rural (>8,000 acute weighted separations) & remote (>5,000 acute weighted separations)									
Number of hospitals	6	6	4	2	0	1	0	1	20
Average beds per hospital	142	143	171	117	. .	131	. .	162	146
Separations per hospital	12,290	13,710	14,652	9,962	. .	8,224	. .	18,098	13,043
Average cost weight(d)	0.99	0.88	0.79	0.86	. .	1.15	. .	0.69	0.89
Cost per separation	2,649	2,128	1,665	2,295	. .	n.p.	. .	n.p.	2,262
Cost per patient day	740	635	567	780	. .	n.p.	. .	n.p.	687
Cost per casemix-adjusted separation	2,763	2,459	2,108	2,710	. .	n.p.	. .	n.p.	2,599
Total expenditure ($'000)	244,490	239,033	155,565	57,738	. .	n.p.	. .	n.p.	806,613
Total large rural, remote and metropolitan									
Number of hospitals	*19*	*6*	*7*	*2*	*3*	*1*	*1*	*1*	*40*
Average beds per hospital	*157*	*143*	*173*	*117*	*198*	*131*	*162*	*162*	*159*
Separations per hospital	*13,514*	*13,710*	*15,573*	*9,962*	*18,337*	*8,224*	*12,288*	*18,098*	*14,040*
Average cost weight(d)	*0.99*	*0.88*	*0.86*	*0.86*	*0.98*	*1.15*	*1.10*	*0.69*	*0.94*
Cost per separation	*2,442*	*2,128*	*1,807*	*2,295*	*2,383*	n.p.	n.p.	n.p.	*2,300*
Cost per patient day	*650*	*635*	*608*	*780*	*625*	n.p.	n.p.	n.p.	*656*
Cost per casemix-adjusted separation	*2,556*	*2,459*	*2,105*	*2,710*	*2,572*	n.p.	n.p.	n.p.	*2,516*
Total expenditure ($'000)	*830,719*	*239,033*	*291,271*	*57,738*	*168,738*	n.p.	n.p.	n.p.	*1,745,672*

(continued)

Table 2.4 (continued): Costs and utilisation by hospital peer group, Australia,(a)(b) public acute & psychiatric hospitals, 1999–00

	NSW	Vic(b)	QLD	WA	SA	Tas	ACT	NT	Total
Medium 5,000 to 10,000 acute weighted separations									
Number of hospitals	10	5	6	7	4	0	0	0	32
Average beds per hospital	86	86	108	134	76	. .	. .	. .	99
Separations per hospital	7,162	7,568	8,062	9,268	7,880	. .	. .	. .	7,945
Average cost weight(d)	0.99	0.83	0.86	0.80	0.85	. .	. .	. .	0.88
Cost per separation	2,836	1,924	2,154	2,515	2,194	. .	. .	. .	2,409
Cost per patient day	783	655	694	680	737	. .	. .	. .	717
Cost per casemix-adjusted separation	2,948	2,381	2,514	3,221	2,638	. .	. .	. .	2,810
Total expenditure ($'000)	267,658	97,556	136,983	201,688	86,203	. .	. .	. .	790,088
Medium 2,000 to 5,000 acute weighted separations									
Number of hospitals	30	16	11	4	11	0	0	0	72
Average beds per hospital	49	50	53	50	50	. .	. .	. .	50
Separations per hospital	3,463	3,606	3,736	3,288	3,443	. .	. .	. .	3,525
Average cost weight(d)	0.8	0.8	0.7	0.8	0.9	. .	. .	. .	0.81
Cost per separation	2,292	1,765	1,486	2,211	1,959	. .	. .	. .	1,988
Cost per patient day	585	543	426	710	545	. .	. .	. .	551
Cost per casemix-adjusted separation	2,822	2,292	2,218	2,819	2,280	. .	. .	. .	2,540
Total expenditure ($'000)	310,520	132,643	82,090	34,440	78,494	. .	. .	. .	638,186
Total medium									
Number of hospitals	*40*	*21*	*17*	*11*	*15*	*0*	*0*	*0*	*104*
Average beds per hospital	*58*	*59*	*72*	*104*	*58*	.	. .	. .	*65*
Separations per hospital	*4,388*	*4,549*	*5,263*	*7,094*	*4,711*	.	. .	. .	*4,898*
Average cost weight(d)	*0.90*	*0.81*	*0.79*	*0.80*	*0.87*	.	. .	. .	*0.84*
Cost per separation	*2,514*	*1,828*	*1,847*	*2,464*	*2,071*	.	. .	. .	*2,200*
Cost per patient day	*662*	*584*	*563*	*684*	*628*	.	. .	. .	*632*
Cost per casemix-adjusted separation	*2,879*	*2,330*	*2,406*	*3,153*	*2,449*	.	. .	. .	*2,685*
Total expenditure ($'000)	*578,178*	*230,198*	*219,073*	*236,128*	*164,697*	.	. .	. .	*1,428,274*
Small rural acute <2,000 acute weighted separations & less than 40% not acute or outlier beddays									
Number of hospitals	25	22	14	14	17	3	0	0	95
Average beds per hospital	28	22	17	23	29	17	. .	. .	24
Separations per hospital	1,329	1,052	926	759	1,061	678	. .	. .	1,053
Average cost weight(d)	0.84	0.83	0.79	0.79	0.84	n.p.	. .	. .	0.83
Cost per separation	2,256	2,006	1,594	2,755	1,940	n.p.	. .	. .	2,094
Cost per patient day	470	397	476	699	397	n.p.	. .	. .	458
Cost per casemix-adjusted separation	2,773	2,480	2,049	3,530	2,378	n.p.	. .	. .	2,603
Total expenditure ($'000)	94,439	60,697	29,631	38,520	40,576	n.p.	. .	. .	271,733
Remote acute <5,000 acute weighted separations									
Number of hospitals	5	0	25	21	2	0	0	3	56
Average beds per hospital	27	. .	23	22	14	.	. .	37	24
Separations per hospital	1,408	. .	1,005	1,226	627	.	. .	2,565	1,194
Average cost weight(d)	0.70	. .	0.77	0.81	0.78	.	. .	0.84	0.78
Cost per separation	1,500	. .	1,910	3,179	2,020	.	. .	2,849	2,466
Cost per patient day	429	. .	534	1,060	649	.	. .	831	743
Cost per casemix-adjusted	2,166	. .	2,536	3,965	2,610	.	. .	3,408	3,188
Total expenditure ($'000)	19,441	. .	74,657	111,818	3,477	.	. .	29,785	239,177
Total small rural and remote acute									
Number of hospitals	*30*	*22*	*39*	*35*	*19*	*3*	0	*3*	*151*
Average beds per hospital	*28*	*22*	*21*	*23*	*28*	*17*	. .	*37*	*24*
Separations per hospital	*1,342*	*1,052*	*977*	*1,039*	*1,015*	*678*	. .	*2,565*	*1,105*
Average cost weight(d)	*0.82*	*0.83*	*0.78*	*0.80*	*0.84*	n.p.	. .	*0.84*	*0.81*
Cost per separation	*2,124*	*2,006*	*1,802*	*3,055*	*1,946*	n.p.	. .	*2,849*	*2,243*
Cost per patient day	*464*	*397*	*515*	*933*	*408*	n.p.	. .	*831*	*551*
Cost per casemix-adjusted separation	*2,680*	*2,480*	*2,366*	*3,845*	*2,392*	n.p.	. .	*3,408*	*2,832*
Total expenditure ($'000)	*113,880*	*60,697*	*104,288*	*150,337*	*44,053*	n.p.	. .	*29,785*	*510,910*

(continued)

Table 2.4 (continued): Costs and utilisation by hospital peer group, Australia,(a)(b) public acute & psychiatric hospitals, 1999–00

	NSW	Vic(b)	QLD	WA	SA	Tas	ACT	NT	Total
Small non-acute <2,000 acute weighted separations more than 40% not acute or outlier bed days									
Number of hospitals	39	4	34	2	20	5	0	0	104
Average beds per hospital	23	21	24	19	30	16	. .	. .	24
Separations per hospital	520	843	682	490	521	423	. .	. .	581
Cost per separation	3,431	2,944	2,375	4,613	2,785	n.a.	. .	. .	2,851
Cost per patient day	249	441	213	767	263	n.a.	. .	. .	244
Total expenditure ($'000)	85,050	10,793	69,791	5,722	35,541	n.a.	. .	. .	216,155
Multi-purpose service									
Number of hospitals	15	7	9	18	6	0	0	0	55
Average beds per hospital	14	14	21	19	39	. .	. .	. .	19
Separations per hospital	306	830	747	376	828	. .	. .	. .	513
Cost per separation	4,639	2,416	1,758	3,756	n.p.	. .	. .	. .	3,007
Cost per patient day	269	675	275	1,056	n.p.	. .	. .	. .	445
Total expenditure ($'000)	27,588	20,619	16,690	34,321	n.p.	. .	. .	. .	109,856
Hospice									
Number of hospitals	3	0	0	0	0	0	0	0	3
Average beds per hospital	58	. .	. .	. .	. .	. .	. .	. .	58
Separations per hospital	996	. .	. .	. .	. .	. .	. .	. .	996
Cost per separation	7,671	. .	. .	. .	. .	. .	. .	. .	7,671
Cost per patient day	550	. .	. .	. .	. .	. .	. .	. .	550
Total expenditure ($'000)	32,859	. .	. .	. .	. .	. .	. .	. .	32,859
Rehabilitation									
Number of hospitals	5	0	0	0	1	0	0	0	6
Average beds per hospital	40	. .	. .	. .	133	. .	. .	. .	55
Separations per hospital	569	. .	. .	. .	976	. .	. .	. .	637
Cost per separation	14,330	. .	. .	. .	n.p.	. .	. .	. .	14,819
Cost per patient day	644	. .	. .	. .	n.p.	. .	. .	. .	573
Total expenditure ($'000)	61,654	. .	. .	. .	n.p.	. .	. .	. .	77,801
Mothercraft									
Number of hospitals	0	3	1	0	1	0	1	0	6
Average beds per hospital	. .	28	40	. .	9	. .	10	. .	24
Separations per hospital	. .	3,126	1,922	. .	807	. .	793	. .	2,018
Cost per separation	. .	639	n.p.	. .	n.p.	. .	n.p.	. .	876
Cost per patient day	. .	256	n.p.	. .	n.p.	. .	n.p.	. .	324
Total expenditure ($'000)	. .	7,008	n.p.	. .	n.p.	. .	n.p.	. .	12,067
Other non-acute									
Number of hospitals	13	2	0	0	0	0	0	0	15
Average beds per hospital	51	71	. .	. .	. .	. .	. .	. .	54
Separations per hospital	854	970	. .	. .	. .	. .	. .	. .	870
Cost per separation	6,257	10,046	. .	. .	. .	. .	. .	. .	6,820
Cost per patient day	348	437	. .	. .	. .	. .	. .	. .	364
Total expenditure ($'000)	116,679	22,134	. .	. .	. .	. .	. .	. .	138,813
Total non-acute									
Number of hospitals	75	16	44	20	28	5	1	0	189
Average beds per hospital	29	26	24	19	34	14	10	. .	26
Separations per hospital	557	1,281	723	388	600	389	793	. .	638
Cost per separation	5,358	2,412	2,180	3,864	3,555	n.a.	n.p.	. .	3,683
Cost per patient day	338	444	225	999	334	n.a.	n.p.	. .	338
Total expenditure ($'000)	323,830	60,554	89,424	40,042	62,997	n.a.	n.p.	. .	587,551
Unpeered and other acute(c) (includes hospitals with fewer than 200 separations)									
Number of hospitals	17	9	59	14	10	6	0	0	116
Average beds per hospital	14	9	3	15	11	5	. .	. .	7
Separations per hospital	278	612	110	278	476	123	. .	. .	225
Cost per separation	4,509	1,953	1,039	5,083	1,191	n.a	. .	. .	2,492
Cost per patient day	293	604	255	1,244	323	n.a	. .	. .	406
Total expenditure ($'000)	32,343	73,418	62,068	24,145	9,002	n.a	. .	. .	210,186

(continued)

Table 2.4 (continued): Costs and utilisation by hospital peer group, Australia,(a)(b) public acute & psychiatric hospitals, 1999–00

	NSW	Vic(b)	QLD	WA	SA	Tas	ACT	NT	Total
Psychiatric(e)									
Number of hospitals	9	1	7	1	1	0	0	0	19
Average beds per hospital	119	90	103	283	479	. .	. .	. .	139
Separations per hospital	1,025	520	200	2,692	3,592	. .	. .	. .	917
Cost per separation	15,899	n.p.	65,058	n.p.	n.p.	. .	. .	. .	21,545
Cost per patient day	316	n.p.	215	n.p.	n.p.	. .	. .	. .	329
Total expenditure ($'000)	170,674	n.p.	91,459	n.p.	n.p.	. .	. .	. .	406,264
Total									
Number of hospitals	211	87	187	87	80	17	3	5	677
Average beds per hospital	84	140	55	61	66	60	225	108	79
Separations per hospital	5,873	11,536	3,785	4,142	4,737	4,411	20,219	11,568	5,770
Cost per separation	2,992	2,440	2,586	3,178	2,712	2,835	2,986	2,618	2,757
Cost per patient day	646	639	602	848	661	628	861	778	658
Total expenditure ($'000)	5,070,777	3,507,211	2,347,970	1,441,974	1,196,872	334,142	258,624	196,784	14,354,354
Teaching (excluding psychiatric)									
Number of hospitals	*17*	*9*	*10*	*4*	*4*	*3*	*2*	*2*	*51*
Average beds per hospital	*412*	*907*	*358*	*567*	*418*	*286*	*333*	*215*	*462*
Separations per hospital	*36,730*	*78,740*	*28,825*	*52,926*	*49,099*	*23,367*	*30,328*	*25,072*	*43,340*
Average cost weight(d)	*1.09*	*1.01*	*1.12*	*0.98*	*1.02*	*1.07*	*0.93*	*0.69*	*1.04*
Cost per separation	*3,094*	*2,569*	*3,187*	*3,325*	*2,696*	*2,885*	n.p.	n.p.	*2,903*
Cost per patient day	*812*	*674*	*860*	*923*	*823*	*698*	n.p.	n.p.	*780*
Cost per casemix-adjusted separation	*2,988*	*2,601*	*2,890*	*3,462*	*2,693*	*2,778*	n.p.	n.p.	*2,877*
Total expenditure ($'000)	*2,736,033*	*2,578,789*	*1,121,847*	*884,739*	*664,626*	*294,655*	n.p.	n.p.	*8,704,867*

(a) Expenditure data excludes depreciation.

(b) Some data reported at network level. Networks can contain smaller, specialised and non-acute hospitals.

(c) Excludes a few small hospitals with missing expenditure data.

(d) Average cost weight from the National Hospital Morbidity Database, based on acute and unspecified separations and newborn episodes of care with qualified days, using

(e) Psychiatric hospitals consist of a

n.p. Not published.

. . Not applicable.

Table 2.5: Average salary of full time equivalent staff,[(a)] public acute and psychiatric hospitals, States and Territories, 1999–00 ($)

Staffing category	NSW	Vic[(b)]	Qld	WA	SA	Tas[(c)]	ACT	NT	Australia[(c)]
Salaried medical officers	95,543	109,515	89,580	103,122	79,717	95,769	106,101	109,515	97,269
Nurses	50,802	56,232	48,834	49,477	46,125	n.a.	48,487	52,177	n.a.
Other personal care staff	n.a.	30,975	36,211	32,703	n.a.	n.a.	35,624	40,522	n.a.
Diagnostic & health professionals	50,133	48,764	51,007	47,692	47,757	n.a.	47,415	66,887	n.a.
Administrative & clerical staff	46,617	43,896	38,154	38,562	36,636	n.a.	43,079	48,978	n.a.
Domestic & other staff	33,001	37,966	33,171	33,335	31,075	n.a.	31,016	39,293	n.a.
Total staff	**51,130**	**55,646**	**48,267**	**49,097**	**46,044**	**47,167**	**51,433**	**55,788**	**50,981**

(a) Where average full time equivalent (FTE) staff numbers were not available, staff numbers at 30 June 2000 were used.
(b) For Victoria, salaries and FTEs may be slightly understated
(c) Breakdown of salary and FTEs for staff who are not medical officers is not available.
n.a. not available.

Table 2.6: Number of public acute and psychiatric hospitals and available beds[a] accreditation status[b] States and Territories, 1999–00

Hospital accreditation	NSW[c]	Vic[d]	Qld[e]	WA	SA	Tas	ACT[f]	NT	Total
Public hospitals									
ACHS accredited hospitals	128	108	73	38	52	4	2	1	406
Other accredited hospitals	20	5	8	n.a.	n.a.	n.a.	1	0	n.a.
Total accredited hospitals	148	113	81	n.a.	n.a.	n.a.	3	1	n.a.
Total public hospitals	216	143	187	90	76	24	3	5	744
ACHS accredited beds	14,176	11,421	7,286	3,283	3,807	871	665	268	41,777
Other accredited beds	902	84	149	n.a.	n.a.	n.a.	10	0	n.a.
Total accredited beds	15,078	11,505	7,435	n.a.	n.a.	n.a.	675	268	n.a.
Total available beds for admitted patients	17,754	12,162	10,320	5,299	5,045	1,152	675	569	52,976

(a) Where average available beds for the year were not available, bed numbers at 30 June 2000 were used.

(b) Accreditation status during 1999–00.

(c) Of the 'Other accredited hospitals', 17 were accredited by AQC, 2 were accredited according to ISO standards and one was accredited by QMS.

(d) Of the Other accredited hospitals' 2 were accredited by QICSA and 3 were accredited according to ISO9002 standards.

(e) All of the 'other accredited' hospitals were accredited by QIC using the IHCA standards.

(f) One establishment was accredited by CHASP.

n.a. not available.

Table 2.7: Separation statistics for selected procedures[a] by State or Territory of usual residence, all hospitals,[b] States and Territories, 1999–00

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total[c]
Appendicectomy									
Separations[d]	8,133	6,460	5,595	3,109	1,926	655	380	187	26,445
Separations within State of residence (%)	97	99	99	99	99	98	94	94	
Separation rate[e]	1.33	1.42	1.61	1.69	1.36	1.46	1.21	0.89	1.44
Separation rate[e] for other States	1.49	1.44	1.40	1.41	1.44	1.44	1.44	1.44	
Difference, State/Territory & national rate (%)	-11.3	-1.7	15.5	19.9	-6.1	1.3	-15.8	-38.1	
Significance of difference	**	–	**	**	**	–	**	**	
Coronary artery bypass graft									
Separations[d]	6,898	4,319	3,071	1,147	1,182	396	188	70	17,271
Separations within State of residence (%)	93	99	99	99	99	95	90	0	
Separation rate[e]	0.97	0.83	0.85	0.63	0.66	0.74	0.74	0.58	0.84
Separation rate[e] for other States	0.78	0.85	0.84	0.86	0.86	0.84	0.84	0.84	
Difference, State/Territory & national rate (%)	24.8	-2.4	0.7	-27.5	-23.3	-12.7	-11.9	-31.2	
Significance of difference	**	–	–	**	**	**	–	**	
Angioplasty									
Separations[d]	6,962	5,973	2,987	1,901	1,803	546	300	103	20,575
Separations within State of residence (%)	93	99	99	99	99	98	86	0	
Separation rate[e]	0.97	1.14	0.81	1.02	1.02	1.00	1.13	0.79	1.00
Separation rate[e] for other States	1.01	0.95	1.04	0.99	0.99	1.00	0.99	1.00	
Difference, State/Territory & national rate (%)	-3.2	20.8	-22.4	2.9	2.8	0.4	13.2	-20.6	
Significance of difference	*	**	**	–	–	–	–	*	
Caesarean section									
Separations[d]	17,847	13,757	11,681	5,844	4,462	1,165	748	528	56,032
Separations within State of residence (%)	97	100	99	100	99	99	98	97	
In-hospital births	85,996	59,755	47,664	24,260	18,313	3,963	3,978	2,695	246,624
Separations per 100 in-hospital birth	21	23	25	24	24	29	19	20	
Separation rate[e]	2.96	3.03	3.54	3.27	3.37	2.95	2.40	2.41	3.13
Separation rate[e] for other States	3.21	3.16	3.03	3.11	3.11	3.13	3.14	3.14	
Difference, State/Territory & national rate (%)	-7.9	-4.0	16.6	5.0	8.3	-5.7	-23.6	-23.0	
Significance of difference	**	**	**	**	**	*	**	**	
Cholecystectomy									
Separations[d]	15,014	11,015	8,493	4,134	3,961	1,023	593	202	44,435
Separations within State of residence (%)	97	99	99	100	100	98	95	90	
Separation rate[e]	2.19	2.18	2.32	2.16	2.41	2.06	1.90	1.32	2.21
Separation rate[e] for other States	2.23	2.22	2.19	2.22	2.20	2.22	2.22	2.22	
Difference, State/Territory & national rate (%)	-1.6	-1.8	6.0	-2.4	9.9	-6.9	-14.4	-40.5	
Significance of difference	–	–	**	–	**	*	**	**	

(continued)

Table 2.7 (continued): Separation statistics for selected procedures,[a] by State or Territory of usual residence, all hospitals,[b] States and Territories, 199

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total[c]
Diagnostic gastrointestinal endoscopy									
Separations[d]	171,818	134,150	102,527	47,881	37,149	9,284	3,464	1,822	508,095
Separations within State of residence (%)	98	99	99	100	100	99	95	91	
Separation rate[e]	24.52	26.16	27.71	25.05	21.64	17.63	11.80	12.32	24.87
Separation rate[e] for other States	25.05	24.44	24.25	24.85	25.17	25.06	25.07	24.96	
Difference, State/Territory & national rate (%)	-2.1	7.0	14.2	0.8	-14.0	-29.6	-52.9	-50.7	
Significance of difference	**	**	**	–	**	**	**	**	
Hip replacement									
Separations[d]	7,496	5,970	3,244	2,288	2,224	674	332	29	22,257
Separations within State of residence (%)	94	99	98	100	100	99	94	76	
Separation rate[e]	1.01	1.09	0.87	1.22	1.15	1.19	1.31	0.36	1.04
Separation rate[e] for other States	1.06	1.02	1.08	1.02	1.03	1.04	1.04	1.04	
Difference, State/Territory & national rate (%)	-4.9	6.4	-19.8	19.6	11.6	14.7	26.3	-66.0	
Significance of difference	**	**	**	**	**	**	**	**	
Hysterectomy									
Separations[d]	10,537	8,003	6,379	3,771	3,245	1,035	536	151	33,657
Separations within State of residence (%)	96	99	99	100	100	99	95	85	
Separation rate[e]	1.51	1.55	1.69	1.89	1.96	2.06	1.61	0.81	1.63
Separation rate[e] for other States	1.70	1.66	1.62	1.61	1.61	1.62	1.64	1.64	
Difference, State/Territory & national rate (%)	-11.1	-6.8	4.3	17.4	22.2	26.5	-1.7	-50.7	
Significance of difference	**	**	**	**	**	**	–	**	
Lens insertion									
Separations[d]	45,689	29,237	24,499	11,593	9,258	2,363	958	403	124,000
Separations within State of residence (%)	97	99	98	100	100	99	94	91	
Separation rate[e]	6.05	5.27	6.58	6.32	4.64	4.04	3.96	4.97	5.76
Separation rate[e] for other States	5.60	5.93	5.58	5.71	5.87	5.81	5.78	5.76	
Difference, State/Territory & national rate (%)	8.0	-11.1	17.8	10.7	-20.9	-30.4	-31.5	-13.7	
Significance of difference	**	**	**	**	**	**	**	**	
Tonsillectomy									
Separations[d]	10,334	8,346	6,122	3,773	2,830	598	426	128	32,557
Separations within State of residence (%)	96	99	99	100	100	99	96	86	
Separation rate[e]	1.73	1.92	1.81	2.10	2.13	1.36	1.40	0.60	1.83
Separation rate[e] for other States	1.88	1.80	1.84	1.80	1.81	1.85	1.84	1.85	
Difference, State/Territory & national rate (%)	-7.9	6.7	-1.5	16.6	17.5	-26.2	-23.8	-67.6	
Significance of difference	**	**	–	**	**	**	**	**	

(continued)

Table 2.7 (continued): Separation statistics for selected procedures,[a] by State or Territory of usual residence, all hospitals,[b] States and Territories, 199

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total[c]
Myringotomy									
Separations[d]	10,016	9,967	5,698	4,260	3,900	643	409	138	35,031
Separations within State of residence (%)	96	99	99	100	100	99	96	91	
Separation rate[e]	1.65	2.29	1.69	2.41	2.94	1.44	1.40	0.61	1.96
Separation rate[e] for other States	2.12	1.86	2.02	1.91	1.88	1.97	1.97	1.98	
Difference, State/Territory & national rate (%)	-22.4	23.5	-16.6	25.9	56.0	-27.2	-28.8	-69.1	
Significance of difference	**	**	**	**	**	**	**	**	
Knee replacement									
Separations[d]	7,815	3,796	3,155	2,030	1,802	456	307	40	19,401
Separations within State of residence (%)	94	98	99	99	99	97	93	68	
Separation rate[e]	1.08	0.72	0.88	1.13	0.98	0.82	1.26	0.43	0.94
Separation rate[e] for other States	0.86	1.02	0.95	0.92	0.94	0.94	0.94	0.94	
Difference, State/Territory & national rate (%)	25.5	-29.3	-8.1	22.7	4.8	-13.5	34.5	-54.4	
Significance of difference	**	**	**	**	–	**	**	**	
Prostatectomy									
Separations[d]	8,126	7,013	3,649	1,858	2,014	597	263	50	23,570
Separations within State of residence (%)	95	98	99	100	99	99	93	74	
Separation rate[e]	1.12	1.31	1.00	1.03	1.08	1.06	1.08	0.61	1.13
Separation rate[e] for other States	1.14	1.07	1.16	1.14	1.14	1.14	1.13	1.14	
Difference, State/Territory & national rate (%)	-1.5	22.3	-13.7	-10.2	-4.9	-6.3	-5.1	-46.1	
Significance of difference	–	**	**	**	*	–	–	**	
Arthroscopic procedures (includes arthroscopies)									
Separations[d]	32,373	27,449	15,913	13,550	13,072	2,361	1,662	658	107,038
Separations within State of residence (%)	95	97	99	100	100	97	91	57	
Separation rate[e]	4.89	5.63	4.42	7.10	8.42	4.95	5.28	3.49	5.47
Separation rate[e] for other States	5.77	5.42	5.71	5.30	5.22	5.49	5.48	5.49	
Difference, State/Territory & national rate (%)	-15.3	3.8	-22.7	33.9	61.2	-9.8	-3.6	-36.5	
Significance of difference	**	**	**	**	**	**	_	**	

(a) The procedures are defined using ICD-10-AM codes in Appendix 3. Procedures include National Health Minister's Benchmarking Working Group sentinel procedures and additional procedures requested by States and Territories.
(b) Some private hospitals are not included. See Chapter 1 for details.
(c) Includes *Other Territories* .
(d) Excludes multiple procedures during the same separation within the same sentinel group.
(e) Rate per 1,000 population was directly age- and sex-standardised to the Australian population at 30 June 1991.
– not significant, * significant at 5%, ** significant at 1%.

Table 2.8: Average length of stay (days) for the 10 AR-DRGs (version 4) with the highest number of separations,[(a)] excluding same day separations, by hos

AR-DRG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
O60D Vaginal Delivery W/O Complicating Diagnosis	Public	3.13	3.13	2.79	3.30	3.10	3.32	2.90	3.74	3.08
	Private	4.77	4.93	4.76	4.76	4.90	3.94	5.42	n.a.	4.80
	Total	*3.47*	*3.56*	*3.25*	*3.79*	*3.52*	*3.55*	*3.53*	*3.74*	*3.49*
G67B Oesophagitis, Gastroent & Misc Digestive Systm	Public	2.79	2.55	2.40	2.60	2.54	3.44	3.41	2.94	2.63
	Private	4.49	3.84	3.54	3.43	3.56	3.09	4.00	n.a.	3.74
	Total	*2.98*	*2.84*	*2.74*	*2.83*	*2.77*	*3.30*	*3.57*	*2.94*	*2.87*
O01D Caesarean Delivery W/O Complicating Diagnosis	Public	5.14	4.96	4.27	5.01	5.13	4.53	4.96	6.07	4.90
	Private	6.46	6.60	6.09	6.96	6.63	5.82	7.13	n.a.	6.48
	Total	*5.57*	*5.54*	*5.00*	*5.93*	*5.63*	*5.10*	*5.80*	*6.07*	*5.48*
H04B Cholecystectomy W/O Closed CDE W/O Catastrophic	Public	2.58	2.40	1.94	2.63	2.09	2.27	2.25	3.20	2.37
	Private	2.54	2.80	2.50	2.46	2.84	2.53	2.71	n.a.	2.61
	Total	*2.57*	*2.54*	*2.19*	*2.54*	*2.37*	*2.40*	*2.46*	*3.20*	*2.47*
F74Z Chest Pain	Public	2.40	2.00	2.16	2.11	2.19	2.83	2.03	2.44	2.22
	Private	3.10	2.73	2.84	2.41	2.07	2.31	3.40	n.a.	2.67
	Total	*2.45*	*2.15*	*2.30*	*2.20*	*2.16*	*2.65*	*2.11*	*2.44*	*2.30*
D11Z Tonsillectomy, Adenoidectomy	Public	1.28	1.19	1.16	1.23	1.29	1.28	1.14	1.25	1.22
	Private	1.12	1.20	1.09	1.16	1.18	1.29	1.21	n.a.	1.14
	Total	*1.20*	*1.19*	*1.12*	*1.20*	*1.24*	*1.28*	*1.17*	*1.25*	*1.19*
G09Z Inguinal and Femoral Hernia Procedures Age>0	Public	2.10	1.83	1.52	1.95	2.06	1.84	1.28	1.66	1.89
	Private	2.09	2.03	1.71	2.09	2.27	2.01	2.04	n.a.	2.02
	Total	*2.09*	*1.94*	*1.63*	*2.04*	*2.17*	*1.95*	*1.72*	*1.66*	*1.96*
N04Z Hysterectomy for Non-Malignancy	Public	4.65	4.25	3.92	4.62	4.43	3.81	5.02	4.27	4.37
	Private	5.16	5.81	4.76	5.63	5.53	5.24	6.11	n.a.	5.33
	Total	*4.88*	*4.84*	*4.34*	*5.10*	*4.92*	*4.53*	*5.65*	*4.27*	*4.80*
E69C Bronchitis and Asthma Age<50 W/O CC	Public	2.13	1.93	2.10	2.21	2.18	2.35	2.15	2.32	2.10
	Private	2.83	2.63	2.65	2.43	3.42	2.43	2.52	n.a.	2.68
	Total	*2.15*	*1.98*	*2.18*	*2.24*	*2.27*	*2.36*	*2.19*	*2.32*	*2.15*
F62B Heart Failure and Shock W/O Catastrophic CC	Public	6.73	6.11	5.85	6.42	6.11	8.11	6.46	6.21	6.38
	Private	9.63	8.42	8.23	7.99	7.35	8.09	9.07	n.a.	8.43
	Total	*7.10*	*6.78*	*6.62*	*6.80*	*6.43*	*8.10*	*7.06*	*6.21*	*6.85*

(a) Separations for which the type of episode of care was reported as acute, or was not reported and the length of stay was less than 366 days.

n.a. not available.

Abbreviations: CC—complications and comorbidities, CDE—common bile duct exploration, W/O—without, W—with.