# Appendix 4: Methods for the cost per casemix-adjusted separation and relative stay index analyses

## Cost per casemix-adjusted separation

The cost per casemix-adjusted separation is an indicator of the efficiency of the acute care sector. It is a measure of the average recurrent expenditure for each admitted patient, adjusted using AR-DRG cost weights for the relative complexity of the patient's clinical condition and for the hospital services provided. Details of the methods used in this analysis are presented below, and in *Australian Hospital Statistics 1999–00* (AIHW 2001a).

### Scope

The scope of the analysis is hospitals that mainly provide acute care, as agreed with the States and Territories. These are the hospitals in the public hospital peer groups of *Principal referral and Specialist Women's and Childrens'*, *Large hospitals, Medium hospitals* and *Small acute hospitals* (see Appendix 5). Excluded are small non-acute hospitals, multi-purpose services, hospices, rehabilitation hospitals, mothercraft hospitals, other non-acute hospitals, psychiatric hospitals, and hospitals in the *Unpeered and other* peer group. Also excluded are hospitals that cannot be classified due to atypical events such as being opened or closed mid-year.

### Definition

The formula used to calculate the cost per casemix-adjusted separation is:

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Recurrent expenditure × IFRAC
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 $Total separations \times Average cost weight$ 

where

- Recurrent expenditure is as defined by the recurrent expenditure data elements in the *National Health Data Dictionary* (with depreciation excluded)
- IFRAC (admitted patient cost proportion) is the estimated proportion of total hospital expenditure that related to admitted patients
- Total separations includes all care types, including those other than acute. It excludes Newborns with no qualified days, as defined in the Glossary, and records that do not relate to admitted patients (boarders and post-humous organ procurement).
- Average cost weight is a single number representing the relative costliness of the separations.

Further detail about each of these components is presented below, with discussion of the limitations of the data.

#### **Recurrent expenditure**

For the medical labour cost category, data are available only for public patients, as private patients are charged directly by their doctor for medical services, and these charges are not included in the recurrent expenditure figures. The proportion of patients other than public patients can vary so, to take this into account, medical costs for these patients are estimated, and expenditure is therefore adjusted to resemble what it would be if all patients had been public patients.

The cost of private medical care is estimated by assuming that a patient day of care by a medical practitioner costs the same, whether the patient is public or not. The private patient medical costs are then estimated by dividing the sum of salary/sessional and VMO payments by the number of public patient days and multiplying by the total patient days (including those for private patients). The underlying assumption ignores factors such as whether junior or senior staff provided the care to private patients.

### Admitted patient cost proportion

To determine the costs associated with admitted patients, an admitted patient cost proportion (or inpatient fraction, IFRAC) is used. The IFRAC is the proportion of total hospital expenditure that related to the provision of care for admitted patients, provided to the Institute for most hospitals by the States and Territories. The IFRAC is generally estimated at a hospital level from the results of patient costing data, or from surveys of each department. Because they are estimated in different ways in different hospitals, they are not always comparable. Teaching and research costs should not be included in admitted patient costs, but parts of these costs may be.

For hospitals where the IFRAC was not available or clearly inconsistent with the data, the admitted patient costs were estimated using the Health and Allied Services Advisory Council (HASAC) ratio (see AIHW: Cooper-Stanbury et al. 1994). The HASAC IFRAC is calculated using the following formula:

$$IFRAC_{H} = \frac{Patient days}{Patient days + \left(\frac{NAPOOS}{Ratio}\right)}$$

Where NAPOOS = Non-admitted patient occasions of service;

 $IFRAC_{H}$  = the IFRAC calculated; and

Ratio = the ratio of non-admitted patient cost to admitted patient cost per service.

The ratio equates the cost of 5.753 non-admitted patient services to the cost of one admitted patient day. The HASAC method is used in this report to estimate IFRACs for a small number of small hospitals only.

Ideally, different IFRACs would be used for different cost categories (so estimates could be made of the cost of each component per casemix-adjusted separation). Categories such as food and pharmaceuticals (almost exclusively for admitted patients) would have relatively high IFRACs, for example. In the absence of comprehensive sets of IFRACs, the single hospital-wide IFRACs were applied to all cost categories.

#### **Total separations**

The method includes all admitted patient separations and their associated costs. It is appropriate to include the acute care separations, which comprise 97% of the total for the hospitals included in the analysis (Table A4.1), as cost weights are available for them.

However, the 3% of separations that are not acute care are also included and, as there are no cost weights for these separations, the average cost weight for the acute separations for each hospital is used. This means, however, that the estimates of cost-weighted separations (see below) are affected for each State and Territory, and the extent to which they are affected depends on the proportion of non-acute separations in that State or Territory. The non-acute admitted patients (including rehabilitation care patients) will generally have higher costs per separation than acute care patients because, although their daily costs are lower, these patients typically have longer lengths of stay. (See below for examples relating to selected hospitals in Victoria and Tasmania for 2000–01.)

Comparisons between the States and Territories should therefore take into consideration the uncertainty introduced by these episodes for which the cost weights were unavailable. Table A4.1 shows that there is significant variation in the number and length of stay for these separations between jurisdictions.

There is also some variation between States and Territories in the ways in which periods of hospitalisation are split into episodes of care (see Appendix 3 in relation to *Newborn* care, for example), and in the assignment of care type. In States or Territories where there is a clear delineation in funding arrangements between acute and non-acute services, the split between acute and other types of patients may be different from where there is no such funding delineation.

To refine the method to remove this anomaly would require estimates of expenditure for acute care admitted patients (acute care IFRACs) to be made by each State and Territory. For 2000–01, such estimates were available for 2 jurisdictions, as presented below.

#### Average cost weights

As explained in Chapter 11, hospitals collect data that allow admitted patient episodes to be classified using the Australian National Diagnosis Related Groups (AR-DRG) version 4 casemix classification system. This system groups episodes of similar clinical condition and resource use into 661 categories or AR-DRGs. The National Hospital Cost Data Collection collects data to produce a cost weight for each AR-DRG (see Appendix 8). The set of cost weights is a relative value scale for all AR-DRGs, calculated so that the average cost weight across all episodes used to produce the set of weights is 1.00.

For the cost per casemix-adjusted separation analysis, the average cost weight for the separations of each group of hospitals (within a peer group or State or Territory) is calculated as follows:

Average cost weight = 
$$\frac{\sum_{i=1}^{n} (CW_i \times \text{separations}_i)}{\text{Total no. of acute separations}}$$

where i represents each of the 661 AR-DRGs and CW<sub>i</sub> is the cost weight for the *i*th AR-DRG.

Hospital morbidity data provided to the National Hospital Morbidity Database were used to estimate average cost weights for the groups of hospitals reported in this analysis. The 1999–00 version 4.1 cost weights were applied to 2000–01 data as the National Hospital Cost Data Collection 2000–01 weights were not available at the time of publication.

As noted above, because cost weights are only available for acute care separations, the cost per casemix-adjusted separation analysis applies these cost weights to all separations.

The average cost weight for a hospital or group of hospitals (Table 4.2, for example) is calculated as the number of casemix-adjusted separations divided by the number of

separations. It represents in a single number the overall complexity of cases treated by a hospital. For example, a hospital with an average cost weight of 1.08 has an 8% more costly casemix than the national average (by design equal to 1.00).

The average cost weight for a group of hospitals is multiplied by the total number of separations for that group to produce the number of casemix-adjusted separations (the denominator for the cost per casemix-adjusted separation analysis). The term 'cost per casemix-adjusted separation' derives from this use of the number of separations adjusted by relative costliness.

The validity of comparisons of average cost weights is limited by differences in the extent to which each jurisdiction's psychiatric services are integrated into its public hospital system as service delivery changes under the National Mental Health Strategy. For example, in Victoria, almost all public psychiatric hospitals are now mainstreamed into acute hospital services and psychiatric patient data are therefore included in the acute hospital reports. Cost weights are not as useful as measures of resource requirements for acute psychiatric services because the relevant AR-DRGs are less homogeneous than for other acute services.

The complexity of cases treated as admitted patients can also differ regionally. Some jurisdictions admit patients who might be treated as non-admitted patients in other jurisdictions.

### Cost per acute care casemix-adjusted separation

Because cost weights are only available for acute care separations, the cost per casemixadjusted separation analysis applies these cost weights to all separations. Thus, the methodology would be refined if cost weights became available for other care types, or if the analysis were to be restricted to acute care activity and expenditure. Restriction to acute care activity require estimates to be made by the States and Territories of expenditure on acute care admitted patients, and for separations relating to other patients to be excluded from the analysis.

This methodology is still under development, and issues to be resolved include the consistency of counting separations that are not acute. Because the available cost weights may not be as accurate for psychiatric separations, refinement of the method could also encompass exclusion of psychiatric activity and expenditure, however, details of the methods by which psychiatric activity is excluded, for example, are similarly under development. Data on expenditure for acute care non-psychiatric admitted patients were only available for one jurisdiction for 2000–01, so they have not been used for this analysis.

Victoria and Tasmania provided the Institute with estimates of expenditure on acute care admitted patients, so estimates of the cost per casemix-adjusted acute care separation are presented for these jurisdictions (Table A4.2). Separations were excluded if they did not have an acute care type.

For Tasmania, acute care IFRACs were available for the two principal referral hospitals and the one large rural hospital. They were not available for the 3 small rural acute hospitals, so they were not included in the analysis. For Victoria, reported acute care IFRACs were the same as the IFRACs for all care types combined for some hospitals that nevertheless reported non-acute admitted patient care activity. The hospitals that reported the same figures for both IFRACs, but reported more than 1,500 patient days for non-acute separations were therefore excluded from the analysis. This meant that 9 hospitals were excluded from the analysis. 1 specialist women's and children's hospital, 1 large hospital, 2 medium hospitals and 1 small rural acute hospital.

This severely limits the value of the comparison because it means that 30% of the admitted patient expenditure for Victoria was excluded, compared with only 2% for Tasmania.

The estimated cost per acute care casemix-adjusted separation for the selected hospitals in Victoria was \$2,855 and it was \$2,808 for Tasmania. The cost per casemix-adjusted separation for all separations in these hospitals was \$3,053 and \$2,922, respectively, so the effect of restricting the analysis to acute care admitted patients was to decrease the estimated cost by 6.5% and 3.9%, respectively. The estimated cost for non-acute separations for these selected hospitals was \$8,664 for Victoria and \$8,831 for Tasmania.

These analyses would be much improved if all jurisdictions increased their capacity to separate costs for psychiatric services, other acute services, sub-acute services (e.g. rehabilitation) and non-acute services.

### Total cost per casemix-adjusted separation

The cost per casemix-adjusted separation analysis includes only recurrent expenditure, and does not include capital expenditure of any type. There are concerns about the quality and comparability of available capital expenditure data, and they are not provided to the Institute by all States and Territories. The concerns about the comparability of the data include variation among the jurisdictions in the type of expenditure that is defined as recurrent and capital, respectively.

The SCRCSSP reported total costs per casemix-adjusted separation by State and Territory for 1999–00 (SCRCSSP 2002). It was defined as the recurrent cost per casemix-adjusted separation plus the capital costs (depreciation and the user cost of capital of buildings and equipment) per casemix-adjusted separation.

The SCRCSSP notes that 'depreciation is defined as the cost of consuming an asset's services, and is measured by the reduction in value of an asset over the financial year. The user cost of capital is the opportunity cost of the capital and is equivalent to the return forgone from not using the funds to deliver other government services or to retire debt. Interest payments represent a user cost of capital and so should be excluded from recurrent expenditure where user costs of capital are calculated separately and added to recurrent costs. Interest payments were not separately identified in the data for the select group of hospitals included in this indicator. For all public hospitals in 1999–00, however, reported interest expenses were effectively zero for all jurisdictions except Western Australia (where interest expenses were 1.6 per cent of recurrent expenditure) and the Northern Territory (where they were not reported) (AIHW 2001a). Interest expenses were therefore deducted directly from capital costs in Western Australia to avoid double counting.'

Total cost per casemix-adjusted separation by jurisdiction (including capital costs), as published by SCRCSSP for 1999–00, is presented in Figure A4.1. The data for material and labour costs were based on the recurrent cost per casemix-adjusted separation data calculated by the Institute for *Australian Hospital Statistics* 1999–00, except for Western Australia (for which data were provided to the SCRCSSP by the Western Australian Department of Health).

Capital cost (excluding land) ranged from \$206 per casemix-adjusted separation in Victoria to \$603 in the Northern Territory (SCRCSSP 2002).

Further details about the SCRCSSP calculation of total cost per casemix-adjusted separation are available in the Report on Government Services 2002 (SCRCSSP 2002).



# **Relative stay index**

Relative stay indexes (RSIs) are calculated as the actual number of patient days for separations in selected AR–DRGs, divided by the number of patient days expected (based on national figures) adjusted for casemix. The adjustment for casemix allows comparisons to be made that take into account variation in types of services provided, but does not take into account other influences on length of stay, such as Indigenous status (AIHW 2001d).

An RSI index greater than 1 indicates that an average patient's length of stay is higher than would be expected given the casemix for the group of separations of interest. An RSI of less than 1 indicates that the length of stay was less than would have been expected.

A simple relative stay index (RSI) developed by the AIHW using data from the National Hospital Morbidity Database has been included by the Steering Committee for the Review of Commonwealth and State Service Provision (SCRCSSP) in their recent reports of government services (SCRCCSP 2001, 2002). These RSI statistics were based on a model that included separations from public acute hospitals only, excluded separations that were not for acute care, separations for dialysis and chemotherapy, and separations with a length of stay of more than 200 days.

In consultation with the Australian Hospital Statistics Advisory Committee, the Institute has refined the method used to calculate RSIs as presented in this report. The method used is:

#### Model on the basis of:

- AR-DRG and
- Age as a cubic regression within each AR-DRG.

#### Included and excluded separations:

- include only acute care type
- exclude AR-DRGs which are overwhelmingly sameday: R63Z Chemotherapy and L61Z Admit for renal dialysis
- exclude AR-DRGs with a length of stay component in the definition
- exclude 'rehabilitation' AR-DRGs
- exclude error AR-DRGs 960Z, 961Z, 962Z and 963Z
- exclude separations for patients who died or were transferred within two days of admission
- exclude episodes with length of stay greater than 120 days.

#### In summary, the AR-DRGs excluded are:

Overwhelmingly same day								
R63Z	Chemotherapy							
L61Z	Admit for Renal Dialysis							
Defined as same day								
G41B	Complex Therapeutic Gastroscopy for Non-Major Digestive Diseases, Same day							
G42B	Other Gastroscopy for Major Digestive Disease, Same day							
G44C	Other Colonoscopy, Same day							
G45B	Other Gastroscopy for Non-Major Digestive Disease, Same day							
R61C	Lymphoma and Non-Acute Leukaemia, Sameday							
S60Z	HIV, Same day							
U40Z	Mental Health Treatment, Same day, W ECT							
U60Z	Mental Health Treatment, Same day, W/O ECT							
V62B	Alcohol Use Disorder and Dependence, Same day							
Other length of stay as a component of the definition								
B70D	Stroke, Died or Transferred < 5 days							
P01Z	Neonate, Died or Transf <5 Days of Admission W Significant O.R. Procedure							
P60A	Neonate Died or Transf <5 Days of Adm, W/O Significant O.R. Proc, Born Here							
P60B	Neonate Died/Transf <5 Days of Adm, W/O Significant O.R. Proc, Not Born Here							
W60Z	Multiple Trauma, Died or Transf to Another Acute Care Facility, LOS<5 Days							
Y60Z	Burns, Transferred to Another Acute Care Facility < 5 Days							
'Rehabilitation' AR-DRGs								
Z60A	Rehabilitation W Catastrophic or Severe CC							
Z60B	Rehabilitation W/O Catastrophic or Severe CC							
Z60C	Rehabilitation, Sameday							
Error AR-DRGs								
960Z	Ungroupable							
961Z	Unacceptable Principal Diagnosis							
962Z	Unacceptable Obstetric Diagnosis Combination							
963Z	Neonatal Diagnosis Not Consistent W Age/Weight							

These inclusions and exclusions are further explained below. More detailed information on the development of the modelling method will be published elsewhere, and is available from the Institute on request.

The method does not standardise for the mix of activity within groups of hospitals, for example, taking into account AR-DRGs for which no separations are reported for some hospitals. This is a topic for further development, and means that comparability of relative stay index statistics may be limited in some circumstances.

### Modelling using AR-DRGs and age

As noted above, AR-DRGs are designed to categorise separations into groups that are similar clinically, and have similar resource usage. The resource usage is reflected in length of stay so, theoretically, average lengths of stay for groups of separations with the same distribution of AR-DRGs should be approximately the same.

In practice, the average length of stay within AR-DRGs tends to vary with age, with generally relatively shorter lengths of stay for young patients, and longer lengths of stay for older patients (and very young patients). Thus, including age in the modelling helps to account for differences in the age distributions of patients.

In testing the model, it was determined that including age as a variable to help explain length of stay was useful, however, the way in which it was included (as 5-year age groups, or as a cubic regression with a continuous variable, for example) did not markedly affect the modelling. The cubic regression on age as a continuous variable explained a typical amount of the length of stay, so it was therefore chosen to be part of the model.

### Acute care separations

The modelling was restricted to acute care separations as the AR-DRGs are designed to apply to acute care only. Greater variation in length of stay would be expected if separations other than acute care separations had been included.

### AR-DRGs that are overwhelmingly same day

R63Z Chemotherapy and L61Z Admit for renal dialysis are DRGs that, although not defined as same day AR-DRGs are overwhelmingly same day. In 2000–00, 99.9% of the 571,903 separations for L61Z Admit for renal dialysis and 99.8% of 224,025 separations for R63Z Chemotherapy were same day. If these separations had been included in the model, the effect would have been to add a large number of separations for which the actual and expected length of stay was the same, and the sensitivity of the analysis would have been reduced. Hence, these AR-DRGs were excluded from the analysis.

### AR-DRGs with length of stay as part of their definition

As listed above, there are 9 AR-DRGs that are defined as being same day, and a further 6 AR-DRGs that have other length of stay restrictions as components of their definitions. Hence, the variation in length of stay that is possible with these AR-DRGs is restricted is a result of the way in which they are defined, and will not reflect other influences on length of stay that the RSI statistics can be used to illustrate.

### 'Rehabilitation' AR-DRGs

For a small number of separations reported with acute care, a 'rehabilitation' AR-DRG is assigned, for example because they have a principal diagnosis of Z50 (Care involving use of rehabilitation procedure). If these separations had had a care type of rehabilitation, as could have been expected, they would have been excluded from the model on that basis. Thus, for the model, it has been assumed that these separations are equivalent to separations with rehabilitation as the care type, and they have been excluded.

### **Error AR-DRGs**

The error AR-DRGs are by definition applied to separations which are in some way out of the ordinary, so there is less expectation that they would have uniformity in length of stay. However, AR-DRGs 901Z, 902Z and 903Z (which are defined as procedures unrelated to the principal diagnosis) can be considered to be 'edit' AR-DRGs rather than error DRGs, and may include some valid (though unusual) cases. AR-DRGs 960Z, 961Z, 962Z and 963Z are defined as error AR-DRGs on the basis of diagnosis information, and are more likely to be a mixture of types of separations, with varying lengths of stay. Hence, the former group was included in the RSI model but the latter group was excluded.

### Death or transfer within 2 days of admission

Separations for patients who died or transferred out of the hospital within 2 days of admission are excluded because the length of stay that would have been usual for the AR-DRGs are likely to have been shortened by the transfer or death. Often, for example, patients who are transferred are maintained or stabilised in the transferring hospital, rather than being treated by them.

There is also scope for the length of stay to be affected by the availability of transfer sources and destinations. Hence, exclusion of transfers may allow the RSIs to be more comparable between jurisdictions with differing availability of transfer points.

### Separations with length of stay of over 120 days

Small numbers of separations with very long lengths of stay can distort length of stay statistics, so they are sometimes excluded from comparative statistics (Table 4.8, for example). For the RSI statistics, separations with a length of stay of 120 days or more were excluded. With 1999–00 data, this trimming excluded about 0.02% of separations but these accounted for about 2.7% of the patient days, with an average length of stay of about 370 days.

Variable	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Total separations ('000)	1.169	1.003	661	340	333	68	61	59	3 693
Total patient days ('000)	4,455	3,690	2,210	1.216	1.168	290	211	194	13 434
Acute separations"									
Separations ('000)	1,144	973	634	334	325	67	60	58	3,595
Proportion of all separations	98%	97%	96%	98%	98%	98%	99%	99%	97%
Patient days ('000)	4,099	3,054	1,967	1,057	1,055	258	199	184	11,872
Proportion of all patient days	92%	83%	89%	87%	90%	89%	94%	95%	88%
Acute care psychiatric separations <sup>(c)</sup>									
Separations ('000)	21	19	21	9	6	2	1	1	80
Proportion of all separations	2%	2%	3%	3%	2%	3%	2%	1%	2%
Average cost weight <sup>(d)</sup>	1.38	1.85	1.47	1.06	1.56	1.49	1.62	1.53	1.50
Patient days ('000)	213	270	198	75	67	26	16	6	871
Proportion of all patient days	4.8%	7.3%	9.0%	6.1%	5.7%	9.0%	7.6%	3.3%	6.5%
Acute care non-psychiatric separations									
Separations ('000)	1.123	954	613	324	320	65	59	57	3 515
Proportion of all separations	96%	95%	93%	95%	96%	95%	96%	97%	0,010
Patient days ('000)	3 886	2 784	1 769	982	988	232	183	177	11 002
Proportion of all patient days	87%	75%	80%	81%	85%	80%	87%	91%	82%
Conceptions of the state state									
Separations other than acute	45.4	10.5	10.0		4.0			<u>.</u>	
Renabilitation separations (000)	10.1	18.5	19.9	3.7	1.8	0.6	0.5	0.4	60.5
Proportion of all separations	1.3%	1.8%	3.0%	1.1%	0.6%	0.9%	0.8%	0.6%	1.6%
Patient days (1000)	210	ు∠⊃ • • • • ∕	124	97	29	16	10	4	815
Proportion of all patient days	4.770	8.8%	5.6%	7.9%	2.5%	5.7%	4.5%	2.1%	6.1%
Prainanve care separations (000)	0.4	0.0 0.00/	3.1 0.5%	0.7	1.Z	0.1	0.1	0.0	11.7
Proportion of all separations	0.3%	U.3%	0.5%	0.2%	0.4%	0.2%	0.1%	0.0%	0.3%
Patient days (000)	32.7	42.4	27.9	5.1	13.9	1.3	0.6	0.3	124.3
Proportion or all patient days	0.7%	1.1%	1.5%	0.4%	1.2%	U.4%	U.3%a	0.2%	0.9%
Genatric evaluation and management	0.0	7.0							
separations ('000)	0.0	7.0	0.3		0.0	0.0	0.0	• •	8.0
Proportion of all separations	0.0%	Q.7%	0.0%	• •	0.0%	0.1%	0.0%	• •	0.2%
Patient days (000)	0.007	215	0.00	• •	0.451	0.377	0.041		232.579
Proportion of all patient days	0.2%	5.8%	0.3%		0.0%	0.1%	0.0%		1.7%
Psychogenatric separations	0.3	• •	0.2	0.6	0.1	0.0	0.0		1.1
Proportion of all separations	0.0%	• •	0.0%	0.2%	0.0%	0.0%	0.0%	• •	0.0%
Patient days (1000)	9	• •	0.00	27	12	0	0	• ·	55
Proportion of all patient days	0.2%		0.3%	2.2%	1.0%	0.1%	0.0%	• •	0.4%
Maintenance separations (1000)	3.8	· •	3.1	1,1	0.6	0.4	0.1	0.5	9.6
Proportion of all separations	0.3%	• •	0.5%	0.3%	0.2%	0.6%	0.1%	0.8%	0.3%
Patient days (000)	86		/5	31	40	14	2	6	254
Proportion of all patient days	1.9%		3.4%	2.5%	3.4%	4.8%	0.9%	3.0%	1.9%
Other separations (1000)	1.8	1.4	0.2		3.5		0.0	0.0	7.0
Proportion of all separations	0.2%	0.1%	0.0%		1.1%		0.1%	0.0%	0.2%
Patient days ('000)	7.0	53.8	1.4		18.5		0.1	0.0	80.8
Proportion of all patient days	0.2%	1.5%	0.1%	• •	1.6%		0.1%	0.0%	0.6%
Total separations other than acute									
Separations ('000)	25.0	29.9	26.9	6.1	7.3	1.2	0.7	0.9	97.8
Proportion of all separations	2.1%	3.0%	4.1%	1.8%	2.2%	1.8%	1.1%	1.5%	2.6%
Patient days	355.7	635.6	242.6	159.5	113.6	32.3	12.3	10.3	1,561.9
Proportion of all patient days	8.0%	17.2%	11.0%	13.1%	9.7%	11.1%	5.8%	5.3%	11.6%
Psychiatric separations (c)									
Separations ('000)	22	19	21	10	6	2	1	1	82
Proportion of all separations	2%	2%	3%	3%	2%	3%	2%	1%	2%
Patient days ('000)	219	270	207	110	82	25	17	7	935
Proportion of all patient days	5%	7%	9%	9%	7%	9%	8%	3%	7%

Table A4.1: Summary of separations in public acute hospitals selected for the cost per casemix-adjusted separation analysis<sup>(a)</sup> States and Territories, 2000–01

(a) Psychiatric hospitals, drug and alcohol services, mothercraft hospitals, unpeered and other hospitals, hospices, rehabilitation facilities, small non-acute and multi-purpose services are excluded from this table, as are some small hospitals with incomplete expenditure information. See Appendix 5 for further information.

(b) Includes same day separations, acute and unspecified care type separations and episodes of newborn care with qualified days.

(c) Separations with total days of psychiatric care equal to the total length of stay.

(d) Average cost weight from the National Hospital Morbidity Database, based on acute and unspecified separations and episodes of newborn care with qualified days, using the 1999–00 AR-DRG v 4.1 cost weights (DHAC 2001). Updated versions of this table based on 2000–01 AR-DRG v 4.2 cost weights will be posted on www.aihw.gov.au when available.

Variable	Vic	Tas
Total separations ('000)	677	67
Total patient days ('000)	2,518	283
Acute separations ('000) <sup>(b)</sup>	658	65
Acute patient days ('000) <sup>(b)</sup>	2,027	251
Proportion of separations acute	97.2%	98.2%
Proportion of patient days acute	80.5%	88.8%
Total recurrent expenditure (Sm)		
Subset hospitals	2,541	295
Hospitals in Table 4.1	3,863	303
Propertien	66%	97%
Total admitted patient expenditure (\$m)		
Subset hospitals	1,851	211
Hospitals in Table 4.1	2,633	216
Proportion	70.3%	97.6%
Total separations ('000)		
Subset hospitals	677	67
Hospitals in Table 4.1	1,003	68
Proportion	67.5%	97.4%
Costs relating to acute care separations		
Average cost weight <sup>er</sup>	0.919	1.121
Casemix-adjusted acute separations ('000)	605	73
Acute IFRAC W	0.663	0.679
Total acute patient recurrent expenditure (Sm)	1,685	200
Cost per casemix-adjusted acute separation <sup>(f)</sup>	2,855	2,808
Cost per total casemix-adjusted separation (from Table 4.1)	2,801	2,935
Cost per total casemix-adjusted separation on subset of hospitals	3,053	2,922
Percentage this exceeds cost per acute separation for subset hospitals	6.5%	3.9%
Cost of not acute separations in subset (\$m)	166	11
Per separation (\$)	8664	8831
Per patient day (\$)	454	336

Table A4.2: Cost per acute care casemix-adjusted separation, subset of selected public acute hospitals.<sup>(a)</sup> Victoria and Tasmania, 2000-01

(a) Excludes psychiatric, mothercraft, hospices, small non-acute, un-peered and other hospitals, rehabilitation facilities, and multi-purpose services. This subset excludes Victorian hospitals where the IFRAC was equal to the acute IFRAC and more than 1,500 not acute patient days was recorded. Only includes the three largest hospitals in Tasmania

(b) From the National Hospital Morbidity Database. Details of acute separations and patient days and non-acute separations and patient are presented in Table A4.1.

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

(d) The acute IFRAC is that portion of recurrent costs which are for acute admitted patients.

(e) Average cost weight from the National Hospital Morbidity Database, based on acute and unspecified separations and episodes of newborn care with qualified days, using the 1999-00 AR-DRG version 4.1 cost weights (DHAC 2001).

(f) Includes adjustment for private patient medical costs: \$67 for Victoria \$72 for Tasmania.