

Hospital services in Tasmania

STEPHEN DUCKETT, PAUL GEEVES, LAWRENCE KINNE
AND KEVIN RATCLIFFE.

Stephen Duckett is Dean of Faculty of Health Sciences, La Trobe University, Victoria.

Paul Geeves, Department of Human Services and Health, Tasmania.

Lawrence Kinne, Department of Human Services and Health, Tasmania.

Kevin Ratcliffe, Department of Human Services and Health, Tasmania.

The geographic and demographic context

Tasmania is geographically the smallest (68,049 km²) and southernmost state of Australia. It consists of an island group straddling latitude 42°S approximately 300 km south of Melbourne across Bass Strait. Although constituting only 0.9 per cent of Australia's landmass, the state is the size of Ireland, or Belgium and The Netherlands combined. The population of 470,749 is 2.6 per cent of the Australian population and only slightly smaller than the city of Newcastle, New South Wales. The population is relatively decentralised, being divided between the southern statistical area dominated by Hobart (48 per cent), the northern area clustered around Launceston and the north east (28 per cent) and the north west and west coast region (24 per cent).

Tasmania is the only Australian state with a steadily declining population, due mainly to interstate migration. Between 1994 and 1999 the population fell by 0.3 per cent and this decline is likely to continue with projections for 2051 ranging from 435, 679 to as low as 231,318 - a fifty per cent decrease. Interstate migration was highest in the 15 - 24 year age group, but recently has peaked in the 5 to 14 year and 35 to 54 year age groups (that is, established families). In 1998-99 the net migration outflow was 3,700, equivalent to 0.8 per cent of the state's population. With the median age at 36.0 years and 12.4 per cent of the population over 65, in the next decade Tasmania is projected to overtake South Australia as the state with the highest proportion of old people. The dependency ratio, defined as the number of dependants in the community relative to the number of people in the working age population, is 0.53, the highest in Australia. (Australian Bureau of Statistics 1999, 2000a, 2000b; Department of Treasury and Finance 2000).

Approximately 38 per cent of all Tasmanians receive a pension or benefit compared with the national average of 32 per cent. Tasmanians earn only 90 per cent of the national average weekly earnings. The unemployment rate, whilst remaining the highest of all States and Territories, showed the greatest improvement of a state or territory during 1999. In 1995, Tasmania had the second highest death rate per 100,000 population of all states and territories. Compared with other states and territories, Tasmania has: the highest rate of heart disease; the second highest rate of cancers, strokes and accidents; high rates of diabetes, asthma and mental illness; and increasing rates of severe/profound disability (Department of Treasury and Finance 2000).

Remoteness

In terms of remoteness, islands are a special case. The Accessibility/Remoteness Index of Australia (ARIA) has identified SLAs as being of four classes dependent on population size and remoteness defined as distance from the class A SLAs of more than 250,000 people. Tasmania has no such centres of population and is separated from the nearest, Melbourne, by Bass Strait. However, most Tasmanian SLAs have been designated as highly or moderately accessible to services. Only King and Flinders Islands in Bass Strait are classified as very remote. (DHAC 1999: 51-52).

Age related hospital utilisation

In common with most jurisdictions, the hospital utilisation rate in Tasmania is high in the first year of life and then decreases until 55 years of age, with the exception of women of child-bearing age. After the age of 55 the rate for men is higher than for women. The utilisation rate is generally lower in Tasmania than in Australia as a whole.

Table 1: Rate of Tasmanian and Australian public hospital separations and bed day utilisation per 1000 persons, grouped by age and gender, 1999-2000.

Age group	TAS sepn rate/1000 females	TAS sepn rate/1000 males	AUS sepn rate/1000 females	AUS sepn rate/1000 males	TAS patient bed day rate/ 1000 females	TAS patient bed day rate/ 1000 males	AUS patient bed day rate/ 1000 females	AUS patient bed day rate/ 1000 males
Under 1	482	591	477	633	2966	3282	2632	3132
1-4	121	166	146	203	201	264	277	362
5-14	62	77	74	95	110	141	154	184
15-24	215	110	219	129	568	316	561	424
25-34	359	162	365	156	1045	445	1059	517
35-44	255	180	280	195	746	482	789	597
45-54	282	229	307	279	808	699	872	838
55-64	357	372	436	467	1256	1322	1348	1562
65-74	465	621	633	801	2330	2791	2636	3259
75-84	638	951	815	1139	5444	5725	5382	6326
85 and over	699	927	888	1157	9119	9903	9665	9895
All ages	291	250	331	288	1265	988	1280	1090

Source: Australian Bureau of Statistics (1999). Australian Institute of Health and Welfare (1999)

Tasmania's health care needs relative to the rest of Australia

Tasmania is heavily dependent on Commonwealth funding. In 1998-99 54 per cent of total government receipts were federal funds in the form of general purpose payments (63 per cent), specific purpose payments (27 per cent) and health care grants under the Australian Health Care Agreement (10 per cent).

In 1999 the Commonwealth Grants Commission (CGC) assessed the capacity of Tasmania's government to provide hospital services comparable to those offered in other states. The state's disability in offering comparable services is reflected in the relativity factor that is used to calculate the per capita distribution of funds to the states. Tasmania has the second highest relativity in Australia (1.6) after the Northern Territory (4.8). Excluding the Northern Territory, Tasmania's disability i.e. expenditure requirements to meet the costs of providing services, and its capacity to raise the revenue pay for them, are judged by the CGC to be the greatest in the Commonwealth (II pp. 12-13). Tasmania's isolation and the small size of its markets are considered to be the most important economic factors (I: p.31). The CGC found that the socio-demographic disabilities of greatest impact were the effects of an older than average population with greater than average proportions of people on low income, indigenous people and people living in non-metropolitan areas. However, these were offset by a lower proportion of people with low English fluency. In terms of actual per capita expenditure on health, Tasmania was third highest in 1997-98 (\$920) compared to the national average of \$837 (CGC III: p.87, table A-41). According to the Productivity Commission's Report on government services (Steering Committee for the Review of Commonwealth/State Service Provision (SCRCSSP) 2001) in 1998-999 per capita government recurrent expenditure on public hospitals in Tasmania was \$597, the lowest in Australia.

However, the Department of Health and Human Services' view is that expenditure was actually much higher (around \$765 per capita. Tasmania is the only jurisdiction in which this expenditure decreased over the three years 1996-99 (SCRCSSP 2001). This is probably due to incorrect interpretation of Tasmanian Budget data upon the restructuring of the Agency (i.e. not recognising that the Community and Rural Health Program contains considerable hospital expenditure in relation to rural hospitals).

The 1999 CGC review changed the way in which hospital expenditure related to other categories of health expenditure. Only acute and non-acute inpatient services are included in this category, while emergency and outpatient services are now included in the community health category. The states' differential disabilities in meeting hospital costs are calculated using the effects of dispersion, of service delivery scale, of case complexity and of the higher costs of research (CGC II: p.111). The provision of hospital services in Tasmania costs less in terms of input costs, patient transport costs and hospital costs than the Australian average, but the costs are increased by socio-demographic factors, administrative scale and isolation (CGC II: p. 113 table 5-7). The CGC also recognised the higher costs of attracting and retaining medical staff in Tasmania (CGC I: p. 31). The state has the lowest rate of full time equivalent health staff per capita (6.6 per thousand population) than any other state or territory (SCRCSSP 2001). However, Tasmanian figures did not include district hospital staffing (around 500 FTE) which would lift the Tasmanian figure to 7.7 FTE per thousand population.

Health care administration and hospital provision in Tasmania

Hospitals in Tasmania have historically been organisationally autonomous with strong local community support. Members of hospital boards were often also elected members of the powerful Legislative Council (Upper House of Tasmanian Parliament) with its potential veto over government budgets. Regionalisation resulted in the abolition of around 20 autonomous local hospital boards and their replacement with three Regional Health Boards. However, the 1996 Internal Review Team identified the Board administration system as '...a complex management structure which impeded positive systemic management' (DCHS 1996). Considerable duplication and the high costs of regional administration were also recognised. The current structure retains the essential features of the reintegrated statewide service recommended by the Review.

Administrative structures governing Tasmanian hospitals

Until 1991 all hospitals and nursing homes were subject to the *Hospitals Act 1918*. The *Health (Regional Boards) Act 1991* was enacted to enable the regionalisation of the hospitals and health system. Deregionalisation was legislated through the *Health Act 1997* which today covers the public hospitals, and these are now directly run by the Department of Health and Human Services. Private hospitals, nursing homes, hostels, disabled and aged accommodation are still covered by the 1918 Act which is currently under review to make it compliant with competition policy requirements. The 1918 Act fails to deal with modern technology and health service delivery and has many inconsistencies. For example, one of the deficiencies of the current Act is that it does not cover stand alone establishments offering day procedures not requiring overnight accommodation. Since the establishment of the first such centre in Tasmania in 1993 payment of health insurance fund benefits to these establishments has been authorised by agreement between the Commonwealth and State Departments of Health. At present, private hospitals offering day procedures must comply with the requirements of the *Hospitals Act 1918* but stand alone establishments do not.

Structure of the Department of Health and Human Services

Tasmanian government agencies are organised on an output group basis. Currently there are six output groups: Health Advancement; Community and Rural Health; Child, Youth and Family Support; Hospitals and Ambulance Service; Housing Services; and Strategic Policy. These translate into six divisions within the organisational structure. Of these, Community and Rural Health, and Hospitals and Ambulance Services are involved in the provision of hospital services. The current minister, The Hon Judy Jackson, has been responsible for the portfolio since the election of the ALP Bacon government in 1998.

State program budget structure

Implied financial mismanagement of the Department of Health and Community Services in the Rundle government led to a stringent overview of the previous two budgets by the incoming Bacon government (1999, 2000). Much of the blame was laid at the feet of regionalisation and the accompanying latitude for maladministration. The Regional Health Boards operated as three separate organisations each with their own financial and information reporting and operating systems (DCHS 1996). These administrative problems led to a subsequent 'de-regionalisation'.

The current Government has increased the funding of health services in recent years. The Department's overall budget has grown from \$746.9 million in 1998/99 to \$876.5 million in 2001/02, an increase of 17.4 per cent over 3 years.

The Department of Health and Human Services accounts for 29.7 per cent of Consolidated Revenue expenditure in Tasmania in 2000-2001. In 1992 it was 25 per cent and it has consistently been above this figure despite 1996 predictions that it would fall to 27 per cent (DCHS 1996).

Table 2: Department of Health and Human Services budget 2000/01

DHHS Output group	Budget 2000/01	Percentage total
Health advancement	36.74	4
Community and Rural Health	152.68	19
Child, Youth and Family Support	27.12	3
Hospitals and Ambulance Service	356.22	43
Housing Services	73.07	9
Administered payments	129.20	16
Capital Investment Program	48.37	6
Total	823.39	100

Source: Department of Treasury and Finance (2000). (Budget Paper No. 2, Chap. 4).

Table 2 shows the distribution of health funds within the agency budget for 2000/2001. Hospital and ambulance services account for a very large minority of funds and Table 3 shows that ambulance services comprise a tiny proportion of the output group budget. However, hospital funding for rural hospitals is also contained within the Community and Rural Health Program. The 1996 Internal Review Team found that a shift of resources to acute care had been a continuing trend since 1992 despite budget figures which argued against this. The autonomy of the Regional Boards allowed both internal cost shifting between output groups and internal deficit funding by borrowing against trust and other funds (DCHS 1996). Consequently, longitudinal comparison is difficult.

Table 3: DHHS Hospital and ambulance services budget 2000/01 in \$m

	Total	Percentage total
Admitted patients	263.9	74
Non-admitted outpatients	45.82	13
Non-admitted accident & emergency	14.90	4
Emergency transport	14.01	4
Non-emergency patient transport	2.96	0.8
Clinical research	5.67	1.6
Clinical teaching	8.26	2
Policy advice	0.69	0.2
Total	356.22	

Source: Department of Treasury and Finance (2000). (Chapter 4, table 4.13)

Some hospital services are also provided under output group 2, Community and Rural Services. Rural hospitals, mental health and palliative care beds are accounted for under the respective subgroups given in Table 4.

Table 4: DHHS Community and Rural Health budget 2000/20001 in \$m

	Total	Percentage total
Aged rural and community	76.21	50
Mental health	38.71	25
Disability services	32.69	21
Palliative care	4.93	3
Policy advice	0.78	0.5
Total	152.76	

Source: Department of Treasury and Finance (2000). (Budget Paper No. 2, Chapter 4, Table 4.7).

Sources of funding for hospitals in Tasmania

As in the rest of Australia, Commonwealth and state governments, health insurance funds, workers' compensation and compulsory motor vehicle third party insurance cover finance hospital expenditure.

Table 5: Sources of funding for Tasmanian public and private hospitals (\$m)

Funding source	Expenditure public hospitals Tasmania	Expenditure private hospitals Tasmania	Expenditure public hospitals Australia	Expenditure private hospitals Australia
Government sector				
Commonwealth Government	155(58%)	4 (4%)	5771(44%)	550(15%)
Department of Veterans Affairs	15(0.6%)	11(11%)	na	-
State Government	68(25%)	-	6437(49%)	-
Government sector total	238(88%)	15(15%)	12223(93%)	550(15%)
Non-government sector				
Health Insurance funds	6(2%)	71(70%)	311(2.3%)	2295(63%)
Individual paid expenses	-	23(22%)	79(0.5%)	321(9%)
Other parties	25(9%)	14(14%)	595(5%)	493(13%)
Non-government sector total	31(11%)	88(85%)	985(7%)	3109(85%)
Total hospital funding	269(100%)	103(100%)	13208(100%)	3659(100%)

Source: Australian Institute of Health and Welfare (2000)

Table 5 shows the sources of funds for Tasmania's public and private hospitals compared with the sources for Australia as a whole. It shows that the state government provides substantially less funding (25 per cent) for its public hospitals than in the rest of Australia as a whole (49 per cent). The Victorian figure is 47 per cent. However, district hospital expenditure is not included for Tasmania, making comparisons misleading. Tasmania is far more dependent (58 per cent) on the Commonwealth government than other states (38 per cent).

Tasmania is also different in the funding configuration of its private hospitals. Significantly more Tasmanians pay for private hospitals as individuals (22 per cent) compared with the national figure (9 per cent) and the Victorian figure (12 per cent). This does not fit with the state's record of a relatively high level of private insurance as shown in Table 6 below.

Table 6: Persons covered by private health insurance in Tasmania 1996-2000

	Dec 96 %	Dec 97 %	Dec 98 %	Dec 99 %	Dec 2000 %
Population	36.5	34.7	33.2	33.6	44.6
Australian coverage	33.2	31.6	30.1	31.3	45.4

Source: Private Health Insurance Administrative Council, http://www.phiac.gov.au/phiac/fr_index.htm

Tasmanians have always been keen buyers of health insurance but the coverage fell to a low 33.2% in 1998. In 1997 the crisis in private health insurance in Australia saw the unsustainable situation in which some funds were paying back 97 per cent of every premium dollar compared with 84 per cent ten years before (Swan 1997). The Howard government's policy of a 30 per cent tax rebate and the promise of lower lifetime insurance premiums prompted an 11 per cent rise in health fund membership in Tasmania.

Hospital provision and activity

Tasmania's hospitals, as in most jurisdictions in Australia, have been undergoing significant changes in organisational basis, type of funding base, range and distribution of services and funding models over the past decade. There has been a return from regional to statewide reporting and accountability. There is a greater

diversity of funding types, from pure public provision through co-location of public and private facilities, to the contracting-out of hospital and rehabilitation services to market providers. The development of telehealth technology is also adding new facets to the relationship between health professional, client/patient and the state. Given these changes, the account of Tasmania's hospitals given here is necessarily that of a snapshot in a dynamic organisational landscape.

Number of separate hospitals

In Tasmania there are three major public hospitals providing inpatient, outpatient, emergency and teaching services: the Royal Hobart Hospital in the south; the Launceston General Hospital in the north and the North West Regional Hospital in the north west of the state. These hospitals are supplemented in the provision of public health services by a system of multi-purpose health centres and district hospitals in rural and remote areas, and by the purchase of services from private hospitals. These include maternity services from the North West Private Hospital, acute services from Mersey Community Hospital, ophthalmology services (Tasmanian Eye Clinic, Launceston Eye Clinic, North West Private Hospital), and some diagnostic and pathology services from private practices in Burnie and Launceston. However, there are ten public specialist services, including cardiac surgery, neurosurgery and neo-natal intensive care, that are provided only at the Royal Hobart Hospital.

Table 7: Number of public hospitals and beds per 1000 population in Tasmania

Hospital type	Number	Beds per 1,000 population
Metropolitan	6	2.9
Rural	17	2
Remote	2	3.2
Total	25	2.4

Source: Australian Institute of Health and Welfare (2000). (Table 3.4, p. 30)

The Australian norm for available acute hospital beds is 2.9 per 1,000 population. Tasmania meets this level in the metropolitan and remote regions but falls considerably below this in rural areas where the population has the lowest access to services. Few beds in rural hospitals have been closed as departmental resource allocation has been reviewed. Rather most beds have been reclassified as aged care beds to reflect their actual utilisation. Two thirds of the state's public acute and psychiatric beds are located in the two main hospitals in Hobart and Launceston. People from rural areas requiring acute specialist care are treated in these hospitals. The majority of Tasmanian hospitals are small, with 14 of the 25 having 10 beds or less.

As at 30 June 2001 there were a total of 2,201 hospital beds available in Tasmania. Public hospitals provide 55 per cent of these (1,205) and private hospitals the remainder (996). Only 11 of these private beds are in free standing day hospital facilities. There are two denominational hospitals, Calvary Hospital in Hobart, and St Vincent's Hospital in Launceston. In 1998 the government allowed a co-location project between the Royal Hobart Hospital and the former Queen Alexandra Hospital next door renamed the Hobart Private Hospital by Australian Health Care Limited. The aim was to provide capital for redevelopment and facilities for medical staff to practise privately (Royal Hobart Hospital 1997) and to increase the critical mass of services on site to assist in the recruitment and retention of specialist medical staff and therefore improve the viability of the University of Tasmania Medical School

Mayne Health Care lease the former public Mersey General Hospital on the north west coast, now a private facility renamed the Mersey Community Hospital and providing 90 public beds, 20 private beds and 20 day only beds.

Overview of the private hospital sector

There are 10 private hospitals in Tasmania with 985 approved beds including 857 overnight beds and 128 day only beds. In addition there are three stand alone day facilities with a total of 11 beds. Private hospitals in

Tasmania provide approximately 45 per cent of the 2,201 beds provided in the State. This represents a significant increase on the 25 per cent of total beds provided by the private sector in 1992.

Table 8: Type, region and size of Tasmanian hospitals

Region	Facilities	Acute bed numbers
Northern	Launceston General	296
	Other public	107
	Private	269
	Sub-total	672
North-west	North-west Regional	131
	Other public	56
	Private*	210
	Sub-total	397
Southern	Royal Hobart	468
	Other public	43
	Private	621
	Sub-total	1132
TOTAL		2201

* Includes 104 beds in private hospitals with contracts for public patients

Source: Department of Health & Human Services.

Public hospital separations

Sixty five percent of Tasmanian separations took place in public hospitals. Acute non-psychiatric public hospitals provided 80,517 separations for 1998/99. Forty eight percent of acute hospital separations were same day separations. Tasmania has the nation's lowest rate of acute public hospital separations per 1,000 population (165) significantly lower than the total of 199. On the basis of AIHW data, the rate for private hospitals (94) is almost exactly the national rate (95). The low Tasmanian rate for private day procedures (2) compared with the national rate (13) indicates that this form of health care provision has not yet developed to the same extent as in mainland states. However, due to incomplete reporting, the above figures for the private sector need to be treated with caution.

Table 9: Summary of separations, same day separations, and separations per 1,000 population by hospital type for Tasmania 1998/99

	Total separations	Same day separations	Separations per 1,000 population
Public hospitals	80,517	38,705	165.2
Private hospitals	46,061	19,910	92.1
Private day procedure facilities	1,106	1,106	2.0
Total	127,684	59,721	259.3

Source: Australian Institute of Health and Welfare (2000). Table 4.2.

Average length of stay

Tasmania has the highest average length of stay (ALOS) excluding same day separations. The rate for private hospitals (5.3 days) is below the national norm (5.9), but the rate for acute public hospitals (7.2 days) is significantly longer than for the nation as a whole (6.3 days).

Table 10: Summary of average length of stay (ALOS) including and excluding same day separations, by hospital type, Tasmania 1998/99.

	ALOS all separations	ALOS excluding same day separations
Public hospitals*	4.2	7.2
Private hospitals	3.5	5.3
Private day procedure facilities	1	-
Total	4.3	7.1

Source: Australian Institute of Health and Welfare (2000). Table 4.2. *Excludes psychiatric hospitals

Part of this difference may be able to be explained by the lesser use of statistical discharges due to care type changes than in other States.

Utilisation

Table 9 shows that there were 80,517 separations in public hospitals in 1998/99 (differs from previous figure quoted). Department of Veterans Affairs patients accounted for 5 per cent of these, and 7.3 per cent were private patients. Doubts have been raised as to whether this figure is a true representation of all patients with private health insurance that are treated in public hospitals. It is estimated that 24 per cent of all separations sustained by people with private hospital insurance were undertaken in public hospitals as publicly accommodated patients. If this logic is applied to the figures in Table 8 an estimate can be made of the degree of subsidisation in Tasmania.

Table 11: Ten AR-DRGs with the most separations in public hospitals, 1998/99 (percentage of acute separations)

	Tasmania	Australia
Renal dialysis	12.4	11.3
Chemotherapy	5.1	3.3
Vaginal delivery without complications	2.5	2.9
Other gastroscopy for non-major digestive disease, same day	2.0	1.7
Other colonoscopy, same day	1.5	1.6
Other ante-natal admission with moderate or no complicating diagnosis	1.2	1.1
Oesophagitis, gastroenteritis and misc. digestive disorders age >9	0.8	1.1
Bronchitis and asthma age <50	0.6	1.0
Chest pain	0.5	1.0
Abortion with D&C, aspiration curettage or hysterectomy	1.1	1.0
Per cent of acute separations accounted for by ten AR-DRGs with most separations	27.7	26

Source: SCRCSSP (2001). Chapter 5, Table 5.1.

Ten AR-DRGs account for 26 per cent of all separations in public hospitals in Australia. In Tasmania the figure is only marginally above at 27.7 per cent, the closest of all states and territories to the national norm. The highest deviations from the national norm occur in bronchitis and chest pain. These can probably be explained by the high rates of private insurance that allow people to be treated in private hospitals. The deviation from the national norm for chemotherapy is probably explained by the lack of facilities in private hospitals in the State.

Table 12: Separations and bed days by accommodation status and hospital sector, Tasmania 1998/99

Accommodation status	Separations	Bed days
Public Hospitals		
Eligible public patient	69,111	323,244
Eligible private patient	5,838	20,679
Eligible Department of Veterans Affairs patient	3,986	20,574
Eligible other patient	1,333	7,014
Ineligible patient	76	234
Total	80,517	383,163
Private Hospitals		
Eligible public patient	314	393
Eligible private patient	34,851	115,104
Eligible Department of Veterans Affairs patient	4,197	22,600
Eligible other patient	1,866	5,184
Ineligible patient	5,936	7
Total	47,167	160,082
All Hospitals		
Eligible public patient	69,425	323,637
Eligible private patient	40,689	135,783
Eligible Department of Veterans Affairs patient	8,183	43,174
Eligible other patient	3,199	12,198
Ineligible patient	79	241
Total	127,684	543,245

Source: Australian Institute of Health and Welfare (2000). Table 5.4.

Hospital performance

Accreditation by the Australian Council on Healthcare Standards (ACHS) is considered by the Productivity Commission to be one of the few comparative measures by which performance in Australian hospitals can be compared. Tasmania is third only to Victoria and the Australian Capital Territory in the proportion of public hospital beds accredited by the ACHS (SCRCSSP 2001). The relatively low proportion of hospitals (rather than beds) shown as accredited in Table 13 is because ACHS accreditation is deemed to be both too expensive and inappropriate for the actual role for many of the rural hospitals managed by the Division of Community and

Rural Health. Table 13 shows that these rural hospitals account for only 24 per cent of accredited beds in the public sector. These hospitals are accredited through the Quality Improvement and Community Accreditation program (QICSA). Private sector beds account for 41 per cent of all hospital beds in Tasmania, but for reasons of confidentiality it is not possible to calculate the number of beds that are accredited in this sector.

Table 13: Number of hospitals and available beds by sector and ACHS accreditation status, Tasmania, 1998-99

Public Hospitals	Accredited hospitals	4
	Non-accredited hospitals	21
	Hospitals accredited (%)	16
	Total public hospitals	25
	Accredited beds	861
	Non-accredited beds	278
	Beds accredited (%)	76
	Total available beds for admitted patients	1,139
Private hospitals	Accredited hospitals	8
	Non-accredited hospitals	1
	Hospitals accredited (%)	89
	Total private hospitals	9
	Accredited beds	n.p.
	Non-accredited beds	n.p.
	Beds accredited (%)	n.p.
	Total available beds for admitted patients	778

Source: Australian Institute of Health and Welfare (2000).

Hospital funding arrangements

Broad overview

Tasmania has chosen not to move to the output-based casemix method of funding hospitals. In 1997 the then Department of Community and Health Services (DCHS) introduced a casemix funding formula that allocated budget across the three major hospitals using a model that incorporated adjusted weighted inlier payments and block grants. Additionally a reporting mechanism using locally developed software was created and implemented. There were no reliable costing studies on local data at this time, so initially a draft version of the 1996-97 National Hospital Cost Data Collection AN-DRG 3.1 cost weights were used. Adjustments for scale disability and severity were made based on studies undertaken in association with South Australia and the Northern Territory. The difficulty with this decision was that local cost centre datasets were incomplete or non-existent (Hindle and Braithwaite 1998). Cost studies in place in Tasmania at this time were at the DRG level only and relied on national NHCDC service weights. Additionally a consistent costing methodology for Tasmanian hospitals was not documented with the National Hospital Cost Data Collection Hospital Reference Manual being the only available resource. The standard AN-DRG rate for 1998/99 was calculated using the previous year's activity levels and 1998/99 budget data to which a scale disability factor was applied to compensate for the cost differential between Tasmania and the mainland states (DHHS 1998). Casemix was

used as part of the budget setting process rather than as a “live” funding model as in most other jurisdictions. Previous year’s activity was used to construct a casemix-based budget for the current financial year.

Nature of casemix reporting in 1998/99

The three major hospitals were funded through a mix of variable, fixed, special purpose, site specific and transition payments. Variable payments based on the level of activity of care provided the greatest proportion of these funds. Hospitals were allowed to draw down funds to a level designated by an agreed workload as long as that workload was achieved. Patient separations were identified using the National Hospital Costing Data Collection 1996/97 for Version 3.1 AN-DRGs. The individual components were then converted to Tasmanian weighted inlier equivalent separations (TWIES). The formula for this process was:

$$\text{InlierEquivalents} = \frac{(\text{wis} \times \text{severity} \times \text{rate}) + (\text{lsoowobd} \times \text{ssowobdp})}{+(\text{ssowts} \times \text{ssotp}) + (\text{lsoowobd} \times \text{lsoobdp})} \times \text{rate}$$

Where:

- wis is the total weighted inlier separations, including the inlier component of long stay outliers
- severity is the severity index (6 per cent for all teaching hospitals in 1998/99)
- rate is the standard AN-DRG rate, including scale disability
- ssowobd is the total short stay outlier weighted occupied bed days
- ssowobdp is the short stay outlier occupied bed day payment
- ssowts is the total weighted short stay separations coded to surgical AN-DRGs
- ssotp is the short stay outlier theatre payment
- lsoowobd is the total weighted occurred bed days occurring after the long stay trim points
- lsoobdp is the long stay outlier occupied bed day payment

The only separations not calculated in this way were patients designated as palliative care, rehabilitation, mental health, nursing home type and unqualified neonates. All weighted inliers for teaching hospitals were indexed by 6 per cent (DHHS Technical Bulletin 4).

Inliers and Outliers

The standard payment rate for admitted patients was based on the national average cost for patients admitted to public hospitals. While this rate is appropriate for most patients, it was recognised that there are some patients whose cost of treatment will be much higher or lower than average. This may be due to variations in lengths of stay in hospital or to exceptionally high or low treatment costs. Patients with costs above or below the average are termed ‘outliers’ and attract a short stay or long stay weighting. Short stay patients are those who fall below the short stay trim point, calculated by dividing the AN-DRG by three. The long stay trim point is calculated by multiplying the AN-DRG by three. The short or long stay weightings are calculated by dividing the AN-DRG by the respective trim points. For surgical AN-DRGs, the theatre component of the cost weight is subtracted before calculating the short stay outlier day weight. Hospitals would also receive a per diem payment for short stay outliers, calculated by multiplying the standard rate by the short stay outlier weight.

For long stay outlier patients, hospitals were to be paid the standard inlier rate per weighted separation plus an additional payment per weighted occupied bed day beyond the long stay trim point (long stay days). The payment for each long stay day is calculated by subtracting the theatre component from the AN-DRG cost weight to determine a long stay weight and then multiplying this weight by the long stay outlier occupied bed day rate. The minimum payment rate for these long stay days has been set at the nursing home type patient occupied bed day payment.

While a casemix funding model was prepared for the 2000/2001 financial year it was unable to provide sufficient accuracy for significant elements of the activities of major and rural hospitals. A historical methodology was developed using the FTE establishment as a bases and historical non salaries and wage cost to allocate funds to the major and rural hospitals. Moneys being also allocated for special purpose.

There where a number of areas identified as requiring additional work for the acceptance of a funding model. These areas were:

- state weights from this year were not considered reliable;
- fundamental differences in the cost structures between the major and District Tasmanian hospitals; and
- insufficient detail in funding for activities other than admitted inpatient episodes.

In the 2001/2002 financial year the historical allocation methodology was used with moneys being also allocated for special purpose as follows;

- public hospital equipment replacement and upgrading;
- aged care facilities building certification program;
- family group home infrastructure improvements;
- ambulance radio and communications system upgrade; and
- Clifford Craig Medical Research Trust infrastructure development grant.

While a casemix funding model is not being use to fund or allocate funds it is being used to report hospital activity on a state and national level. The Tasmanian Department of Health and Human Services has also used casemix information to negotiate episode payments for Department of Veteran Affairs patients treated in the public health setting.

Lessons learned during the negotiations for episode payments for Department of Veteran Affairs' patients treated in public health settings will possibly be used in the development of future output funding models.

Sub-acute and non-acute care

Sub-acute and non-acute care is provided to persons who require health services but whose principal medical diagnoses do not adequately explain the need for the services they receive. Sub-acute care includes rehabilitation, palliative care and some types of psychogeriatric care. Non-acute care includes nursing home type patients, patients receiving respite care and patients in mental or psychogeriatric units who require care over an indefinite period when there is little chance of improved functioning.

Rehabilitation

Rehabilitation services in Tasmania are provided in a variety of ways. The three major public hospitals provide in-patient services. Specialist rehabilitation services are purchased from St John's private hospital from the Royal Hobart Hospital budget. There is an aged care rehabilitation facility at the former Repatriation Hospital in Hobart. Outpatient facilities are available in community health centres which also provide services in rural hospitals and domiciliary services upon referral from a health professional. Public palliative care services are provided by the Division of Community and Rural Health through specialist inpatient and community outreach services.

Aged care

The Division of Community and Rural Health is also responsible for beds in rural hospitals and for aged care services. In 1999/00 4452 assessments were undertaken. There was an average waiting period of 193 days for placements. This long waiting time can increase the average length of stay in rural beds as older patients are accommodated.

Palliative care

In 1998 responsibility for palliative care was transferred from the hospitals to the Division of Community and Rural Health. In particular this involved the facilities in Whittle Ward situated in the former Repatriation General Hospital.

Hospital-in-the-home

Each of the three major hospitals (Royal Hobart Hospital, Launceston General Hospital and the North West Regional Hospital) run their own hospital in the home services.

Mental health services

Mental health services in Tasmania have been undergoing restructuring since 1989 when the Mental Health Services Commission was amalgamated into the Department of Health. In 1991 all operational activity was devolved to the three regions overseen by a central Mental Health Unit, itself later absorbed into a State Advisory Unit under the Chief Medical Officer. Following de-regionalisation in 1997, a Mental Health Services sub-division was created to plan and co-ordinate increasingly de-institutionalised services across the state in a wide variety of categories from day-care to secure support accommodation.

The Mental Health Services sub-division of the DHHS provides mental care for the Tasmanian community. Since 1996 the Mental Health Act 1963 has been gradually replaced by four new pieces of legislation: the Guardianship and *Administration Act 1995*; the *Sentencing Act 1997*; the *Criminal Justice (Mental Impairment) Bill 1998*; and the *Mental Health Act 1996*. The services are administered from a central state office in the Division of Community and Rural Health and from offices in the south and north/north west. Acute care services in the south are delivered at the Department of Psychological Medicine, Royal Hobart Hospital; the Royal Derwent Hospital (formerly the major mental hospital in the state); and at the Roy Fagan Centre, Lenah Valley. In the north and north west acute services are delivered at colocated centres within the Launceston General Hospital and the North West Regional Hospital respectively. Case management and community support are provided through various community and specialised mental health centres throughout the state. There is increasing use of telehealth facilities in delivering outreach services. Supported accommodation for forensic, secure and other mental health services is provided in four centres throughout the state. In 1998/99 the sub-divisional budget was divided as shown in Table 14. The budget for the south is 66 per cent of the total and includes the Royal Derwent Hospital which provides state-wide services and which accounts for 50 per cent of the budget in the south. The sub-division as a whole had approximately 495 full-time positions which accounted for 610 establishment staff (DHHS 1999).

In 1999/00 there were 2,486 separations from co-located acute facilities with an average length of stay of 8.43 days. This represents a reduction of 30 per cent since 1996 at the Royal Derwent Hospital and 19 per cent in other hospitals as community-based services increased (DHHS 2000).

Table 14: Tasmanian mental health budget 1998/99

Region	1998/9 \$'000
South	20,114
North	5,944
North West	4,365
Total	30,423

Conclusion

Tasmania is unique amongst the Australian states in de-emphasising the role of casemix in its funding of hospitals over the last five years. The casemix budgeting and reporting programs of 1998/99 have been replaced by a "historical methodology" based on staffing establishment for 2001/02. This move may not be as surprising as it may first appear in that the two methodologies may end up with very similar results. This is because Tasmania is the smallest of the states with three major public hospitals (Royal Hobart, Launceston General, and North West Regional) accounting for almost half of all beds in Tasmania and over 80 per cent of all public hospital beds. Essentially, with only three major hospitals to be funded, a casemix funding system may be an example of overkill in terms of funding system design unless it simply involved the application of the funding policies of the larger state. This was not the case in the earlier Tasmanian trial.

A major effort has been underway since 1999 to improve the casemix reporting within Tasmania with the introduction of software to provide episode level costing for the major hospitals. This has progressed to the

point where virtually all cost elements are allocated by local consumption data rather than relying on national service weights. Hospitals and Ambulance Service is currently undertaking a project to define Costing and Utilization standards for Tasmanian hospitals. The current ability to produce reliable cost weights reflecting the local cost drivers places Tasmania advantageously to consider more refined funding options in the future.

Additionally a project is currently nearing finalization to introduce an output funding methodology for Department of Veterans Affairs clients treated in Tasmanian public hospitals. In association with local costing standards, this will provide rigor in funding systems that could prove to be a model for future budgeting efforts.

REFERENCES

- Australian Bureau of Statistics (2000a), *Australian Demographic Statistics*, Cat. No. 3101.0, pp.11- 37.
- Australian Bureau of Statistics (2000b), *Australian Social Trends*, Cat. No. 4102.
- Australian Bureau of Statistics (1999), *Demography Tasmania*, Cat. No. 3311.6.
- Australian Institute of Health and Welfare (1999). *Australian hospital statistics 1997-98*. Cat No. HSE-6, Canberra, Ausinfo.
- Australian Institute of Health and Welfare (2000). *Health Expenditure Bulletin No. 16: Australia's health services expenditure to 1998-99*. AIHW cat no. HWE15, Canberra, AIHW.
- Commonwealth Grants Commission (1999), *Report on General Revenue Grant Relativities 1999*, Volumes I, II, and III, Commonwealth of Australia, Canberra.
- Department of Community and Health Services (1996), *Internal Review Final Report*.
- Department of Health and Human Services (1998), 'Activity Payment Rates for 1998-99' Casemix Based Funding Technical Bulletin no. 4.
- Department of Health and Human Services (1999), *A Plan for Now and the Future*, Mental Health Services Tasmania, Strategic Plan for 1999-2002.
- Royal Hobart Hospital (1998), *Annual Report 1997-98*, CD Rom.
- Department of Treasury and Finance (2000), 2000-2001 Budget Documents. <http://www.treasury.tas.gov.au/domino/dtf/dtf.nsf/main-v/budget> (6.12.2001).
- Hindle, D & Braithwaite, J (1998) 'Product costing, managerialism and organisational learning: some insights from a case study in the Tasmanian health sector', *Australian Journal of Public Administration* 57 (2): 36-45.
- Swan, David (1997), 'Resource Allocation in the Private Sector'. *Health Care in the Balance*, Catholic Chaplaincy/School of Health Science, University of Tasmania.
- Steering Committee for the Review of Commonwealth/State Service Provision (SCRCSSP) (2001). Report on Government Services. Productivity Commission (<http://www.pc.gov.au/gsp/2001/index.html>) (6.12.2001).
- Private Health Insurance Administrative Council, http://www.phiac.gov.au/phiac/fr_index.htm (6.12.2001)