

2 Regional movements

The numbers of hospital separations and RAC admissions for the states and territories largely reflected their population sizes (Table 2.1). However, closer inspection of the figures indicates that there were differences between the jurisdictions in the movement patterns from hospital to RAC.

As discussed previously, because the event-based linkage strategy underestimates the number of transitions from hospital to RAC, we present an estimated range for the proportion of all live hospital discharges that were transitions to RAC (see Section 1.3.1 and Box 2.1). Tasmania and the Northern Territory had relatively few transitions into RAC from hospital – around 6% to 7% of all live separations from hospital (Table 2.2). On the other hand, New South Wales, Queensland, Western Australia and South Australia had relatively high proportions moving to RAC, with discharges to RAC estimated at around 9% to 10% of all live discharges from hospital. Victoria and the Australian Capital Territory had rates between these two groups.

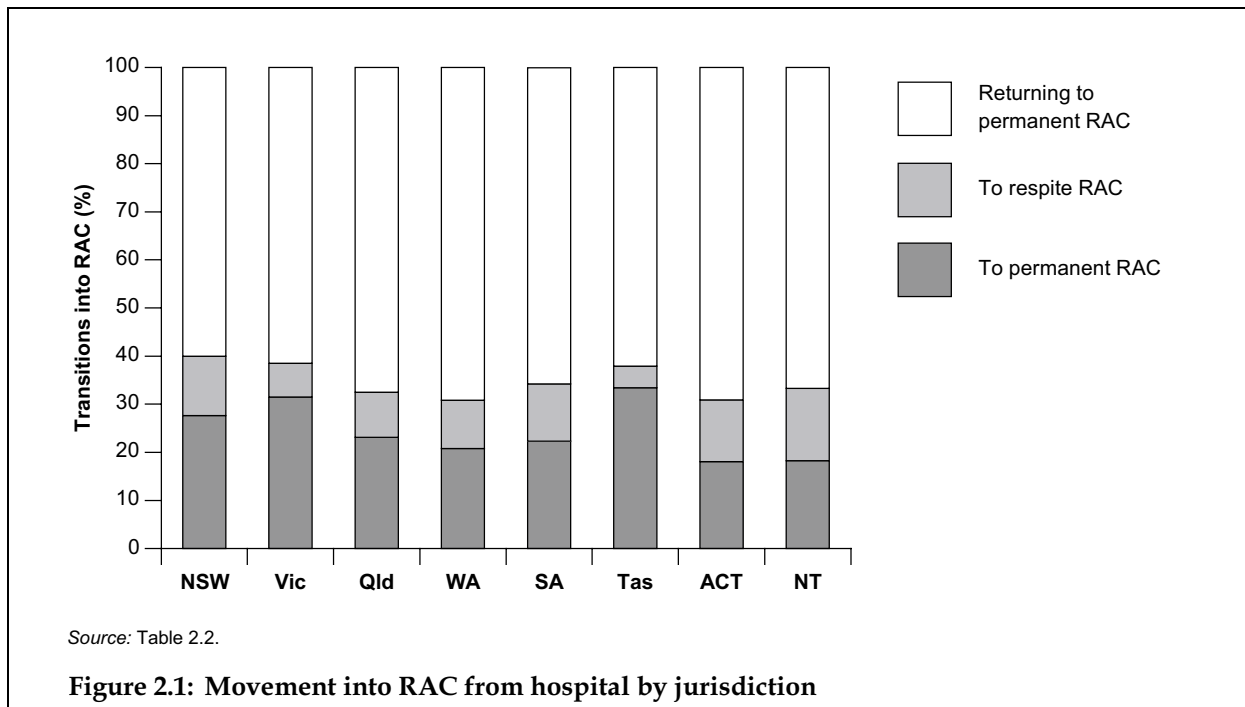
The mix of types of transitions to RAC also varied with jurisdiction (Figure 2.1). The split between returns and admissions showed some variation, with the percentage of admissions from hospital compared to returns to care ranging from around 31% for Western Australia and the Australian Capital Territory to 40% for New South Wales (Table 2.2). The ratio of permanent to respite admissions varied more widely with jurisdiction (Table 2.3), although for all states and territories there were more moves into permanent RAC than into respite care. For Tasmania and Victoria there was a relatively high use of permanent care: for every respite admission in Tasmania from hospital there were over 7 permanent care admissions from hospital while in Victoria there were over 4. For the other states and territories the ratio of permanent to respite admissions was below the national average of 2.6 to 1, with South Australia and the two territories having ratios of less than 2 to 1.

Box 2.1: Technical note on interpretation of unadjusted numbers of transitions

The event-based linkage strategy underestimates the number of transitions from hospital to RAC by around 8% (see Table 1.3). It is not currently possible to accurately adjust estimates of transition types for sub-populations, such as age groups. Consequently, within any sub-population of interest, the proportion of all hospital discharges identified as relating to a move to RAC is underestimated and is not directly comparable with that of another group. However, because similar proportions of the three types of transitions to RAC are identified (Table B.3), the relative sizes of the three transition types into RAC can be compared. Therefore, to aid interpretation, an estimated range of the proportion of hospital separations relating to all transitions to RAC is presented for sub-populations under discussion and, within sub-populations, the relativities of the three types of transitions into RAC are given (see, for example, tables 2.2 and 2.3).

When looking at admissions into RAC, unadjusted estimates understate the relative importance of admissions from hospital compared with admissions from the community. Therefore, to better gauge the mix of admissions from hospital and from the community, adjusted estimates are presented for a small number of classifications only (see Section 4).

Source: Section 1.3.1.



As expected from the results for the states and territories, the numbers of hospital separations by remoteness of region largely reflected the population size of each region (Table 2.4). However, people from more remote regions were less likely than those from less remote regions to end their stay in hospital with a discharge to RAC (Table 2.5). For example, around 10% of hospital episodes (excluding those ending in death) for people who lived in a major city before hospitalisation were discharged to RAC compared with under 6% for those from remote and very remote regions.

The variation in the mix of transitions into permanent and respite RAC was less across region types than between the states and territories (Table 2.6). People living in major cities before going into hospital had the highest relative transition into permanent care, with just over 3 permanent admissions from hospital for every respite admission. However, this ratio decreased with remoteness such that relatively high numbers of those from outer regional, remote and very remote areas moved into respite care.

Whether people were moving between regions to access appropriate hospital care can be gauged by comparing the region of usual residence of the patient with the region of the hospital (Table 2.7). Not unexpectedly, across all movement types, increasing remoteness of a person's usual residence was associated with an increased likelihood of being treated in a hospital in a less remote area. Nearly all (98%) hospital separations for people whose usual residence was in a major city were associated with treatment in a hospital in a major city. In contrast, approximately three-quarters of separations for people usually living in inner and outer regional areas were related to hospitals in those areas, and around 60% of separations for people who usually lived in remote and very remote areas were from hospitals in those regions.

Generally, inter-regional travel to get hospital care was less common for people moving into or returning to RAC than for people returning to the community (Table 2.7), particularly among people living in regional and remote areas (for people living in major cities, there was little difference). For example, among those who usually lived in inner regional areas, 85% of separations for people moving into or returning to RAC were from hospitals in the same

region, compared with 75% for people returning to the community. A similar difference was seen for people usually living in outer regional, remote and very remote areas.

Table 2.1: Movement from hospital and into RAC for people aged 65+, by movement type and state/territory, 2001–02 (unadjusted)

Movement type	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Hospital separations	Number (unadjusted)								
To RAC									
Return to permanent RAC ^(a)	15,836	10,639	10,088	4,790	5,470	902	515	80	48,320
To permanent RAC	7,279	5,443	3,455	1,439	1,858	486	135	22	20,117
To respite RAC	3,265	1,203	1,410	693	993	65	95	18	7,742
<i>Subtotal</i>	<i>26,380</i>	<i>17,285</i>	<i>14,953</i>	<i>6,922</i>	<i>8,321</i>	<i>1,453</i>	<i>745</i>	<i>120</i>	<i>76,179</i>
To community/other	264,461	213,076	155,796	72,470	80,620	22,386	9,880	1,928	820,617
Died in hospital	17,874	13,740	9,048	4,297	4,636	1,074	591	105	51,365
Total separations	308,715	244,101	179,797	83,689	93,577	24,913	11,216	2,153	948,161
RAC admissions									
Permanent admissions									
From hospital to permanent RAC	7,275	5,470	3,442	1,440	1,858	487	133	20	20,125
From community into permanent RAC	5,966	4,877	3,424	1,742	1,498	529	181	44	18,261
Transfer into permanent RAC	7,720	4,297	3,218	1,557	2,114	321	245	36	19,508
<i>Subtotal</i>	<i>20,961</i>	<i>14,644</i>	<i>10,084</i>	<i>4,739</i>	<i>5,470</i>	<i>1,337</i>	<i>559</i>	<i>100</i>	<i>57,894</i>
Respite admissions									
From hospital to respite RAC	3,279	1,204	1,401	693	992	66	91	18	7,744
From community into respite RAC	11,551	8,520	5,575	2,390	2,690	1,369	619	180	32,894
Transfer into respite RAC	555	262	252	107	131	36	30	2	1,375
<i>Subtotal</i>	<i>15,385</i>	<i>9,986</i>	<i>7,228</i>	<i>3,190</i>	<i>3,813</i>	<i>1,471</i>	<i>740</i>	<i>200</i>	<i>42,013</i>
Total admissions	36,346	24,630	17,312	7,929	9,283	2,808	1,299	300	99,907
Row per cent									
All hospital separations	32.6	25.7	19.0	8.8	9.9	2.6	1.2	0.2	100.0
All RAC admissions	36.4	24.7	17.3	7.9	9.3	2.8	1.3	0.3	100.0
Population 65+, 31 December 2001^(b)	35.2	25.6	17.4	8.6	9.0	2.7	1.1	0.3	100.0

(a) Includes both links to RAC hospital leave (47,319) and links to RAC social leave (1,317).

(b) Total population excludes external territories (ABS 2001a).

Notes

1. Table is based on linked and unlinked hospital and RAC records. See notes to Table 1.3 for information on identification of transition groups.
2. Age is as at time of hospital admission or RAC event.
3. State/territory refers to hospital or RAC service.

Table 2.2: Summary of movements from hospital into RAC for people aged 65+, by movement type, Australia, 2001–02

	Returning to permanent RAC	To permanent RAC	To respite RAC	Total	Unadjusted number	As per cent of all live hospital separations: estimated range	
	Row per cent					Est'd min %	Est'd max %
New South Wales	60.0	27.6	12.4	100.0	26,380	9.1	10.1
Victoria	61.6	31.5	7.0	100.0	17,285	7.5	8.3
Queensland	67.5	23.1	9.4	100.0	14,953	8.8	9.7
Western Australia	69.2	20.8	10.0	100.0	6,922	8.7	9.7
South Australia	65.7	22.3	11.9	100.0	8,321	9.4	10.4
Tasmania	62.1	33.4	4.5	100.0	1,453	6.1	6.8
Australian Capital Territory	69.1	18.1	12.8	100.0	745	7.0	7.8
Northern Territory	66.7	18.3	15.0	100.0	120	5.9	6.5
All	63.4	26.4	10.2	100.0	..	8.5	9.4
Total separations (number)	48,320	20,117	7,742	..	76,179	896,796	

Notes

1. Table is based on linked hospital and RAC records. See notes to Table 1.3 for information on identification of transition groups. Estimated minimum per cent to RAC is based on unadjusted figures; estimated maximum per cent to RAC is derived by applying the maximum adjustment to all identified transition records (see Box 2.1).
2. Age is as at time of hospital admission.
3. State/territory refers to hospital.

Table 2.3: Ratio of permanent to respite admissions from hospital into RAC for people aged 65+, Australia, 2001–02 (unadjusted hospital separations)

	To permanent RAC	To respite RAC	Total	Permanent : respite admissions
	Number (unadjusted hospital separations)			Ratio
New South Wales	7,279	3,265	10,544	2.2 : 1
Victoria	5,443	1,203	6,646	4.5 : 1
Queensland	3,455	1,410	4,865	2.5 : 1
Western Australia	1,439	693	2,132	2.1 : 1
South Australia	1,858	993	2,851	1.9 : 1
Tasmania	486	65	551	7.5 : 1
Australian Capital Territory	135	95	230	1.4 : 1
Northern Territory	22	18	40	1.2 : 1
All	20,117	7,742	27,859	2.6 : 1

Notes

1. Table is based on linked hospital and RAC records. See notes to Table 1.3 for information on identification of transition groups; see Box 2.1 concerning interpretation of unadjusted numbers.
2. Age is as at time of hospital admission.
3. State/territory refers to hospital.

Table 2.4: Hospital separations for people aged 65+, by movement type and remoteness of usual residence prior to admission into hospital, 2001–02 (unadjusted)

Movement type	Major cities	Inner regional	Outer regional	Remote	Very remote	Australia
Number (unadjusted)						
To RAC						
Return to permanent RAC	32,526	10,532	4,707	442	95	48,302
To permanent RAC	14,073	4,242	1,641	107	33	20,096
To respite RAC	4,510	2,027	1,042	112	37	7,728
<i>Subtotal</i>	<i>51,109</i>	<i>16,801</i>	<i>7,390</i>	<i>661</i>	<i>165</i>	<i>76,126</i>
To community/other	501,819	202,326	96,345	12,095	4,529	817,114
Died in hospital	32,927	11,681	5,761	664	220	51,253
Total separations	585,855	230,808	109,496	13,420	4,914	944,493
Row per cent						
All hospital separations	62.0	24.4	11.6	1.4	0.5	100.0
Population 65+, 30 June 2002^(a)	64.7	23.3	10.5	1.2	0.4	100.0

(a) Total population excludes external territories (ABS 2002).

Notes

1. Table is based on linked and unlinked hospital and RAC records. See notes to Table 1.3 for information on identification of transition groups; see Box 2.1 concerning interpretation of unadjusted numbers.
2. Age is as at time of hospital admission.
3. The table uses the Australian Standard Geographical Classification Remoteness Structure as developed by the ABS (ABS 2001b).
4. 3,667 records were missing valid postcodes for remoteness coding (53 for movements into RAC, 112 for deaths in hospital and 3,502 for separations to the community).

Table 2.5: Summary of movements from hospital into RAC for people aged 65+, by movement type and remoteness of usual residence prior to admission into hospital, Australia, 2001–02

	Returning to permanent RAC	To permanent RAC	To respite RAC	Total	Unadjusted number	As per cent of all live hospital separations: estimated range	
	Row per cent					Est'd min %	Est'd max %
Major cities	63.6	27.5	8.8	100.0	51,109	9.2	10.3
Inner regional	62.7	25.2	12.1	100.0	16,801	7.7	8.5
Outer regional	63.7	22.2	14.1	100.0	7,390	7.1	7.9
Remote	66.9	16.2	16.9	100.0	661	5.2	5.8
Very remote	57.6	20.0	22.4	100.0	165	3.5	3.9
All	63.5	26.4	10.2	100.0	..	8.5	9.5
Total separations (number)	48,302	20,096	7,728	..	76,126	893,240	

Notes

1. Table is based on linked and unlinked hospital and RAC records. See notes to Table 1.3 for information on identification of transition groups. Estimated minimum per cent to RAC is based on unadjusted figures; estimated maximum per cent to RAC is derived by applying the maximum adjustment to all identified transition records (see Box 2.1).
2. Age is as at time of hospital admission.
3. The table uses the Australian Standard Geographical Classification Remoteness Structure as developed by the ABS (ABS 2001b).
4. 53 records relating to movements into RAC were missing valid postcodes for remoteness coding.

Table 2.6: Ratio of permanent to respite admissions from hospital into RAC for people aged 65+, by remoteness of usual residence prior to admission into hospital, Australia, 2001–02 (unadjusted hospital separations)

Remoteness area	To permanent RAC	To respite RAC	Total	Permanent : respite admissions
	Number (unadjusted hospital separations)			Ratio
Major cities	14,073	4,510	18,583	3.1 : 1
Inner regional	4,242	2,027	6,269	2.1 : 1
Outer regional	1,641	1,042	2,683	1.6 : 1
Remote	107	112	219	1.0 : 1
Very remote	33	37	70	0.9 : 1
All	20,096	7,728	27,824	2.6 : 1

Notes

1. Table is based on linked and unlinked hospital and RAC records. See notes to Table 1.3 for information on identification of transition groups; see Box 2.1 concerning interpretation of unadjusted numbers.
2. Age is as at time of hospital admission.
3. The table uses the Australian Standard Geographical Classification Remoteness Structure as developed by the ABS (ABS 2001b).
4. 53 records relating to movements into RAC were missing valid postcodes for remoteness coding.

Table 2.7: Hospital separations for people aged 65+: remoteness of usual residence prior to admission into hospital, by remoteness of hospital and movement type, 2001–02 (unadjusted)

Movement type/remoteness of usual residence prior to hospital	Remoteness of hospital				Total	N
	Major cities	Inner regional	Outer regional	Remote and very remote		
Return to permanent RAC	Row per cent					
Major cities	99.0	0.9	—	—	100.0	24,139
Inner regional	14.1	84.6	1.3	—	100.0	7,389
Outer regional	2.8	13.3	83.3	0.5	100.0	4,128
Remote and very remote	2.7	3.1	15.4	78.7	100.0	512
<i>All</i>	69.3	19.5	10.0	1.2	100.0	..
<i>Total separations (number)</i>	25,069	7,045	3,625	429	..	36,168
To permanent RAC						
Major cities	98.7	1.2	0.1	—	100.0	11,157
Inner regional	13.6	83.8	2.5	—	100.0	3,295
Outer regional	2.6	16.3	80.2	0.9	100.0	1,507
Remote and very remote	<3.3	<3.6	29.9	64.2	100.0	137
<i>All</i>	71.4	19.6	8.3	0.6	100.0	..
<i>Total separations (number)</i>	11,500	3,149	1,344	103	..	16,096
To respite RAC						
Major cities	97.5	2.3	0.2	—	100.0	2,952
Inner regional	9.4	87.9	2.6	—	100.0	1,410
Outer regional	1.7	12.7	84.7	0.8	100.0	943
Remote and very remote	<3.5	<3.5	20.3	75.5	100.0	143
<i>All</i>	55.6	26.3	16.0	2.1	100.0	..
<i>Total separations (number)</i>	3,031	1,431	870	116	..	5,448
All to RAC						
Major cities	98.8	1.1	0.1	—	100.0	38,248
Inner regional	13.4	84.8	1.8	—	100.0	12,094
Outer regional	2.6	13.9	82.8	0.7	100.0	6,578
Remote and very remote	2.8	2.8	18.8	75.6	100.0	792
<i>All</i>	68.6	20.1	10.1	1.1	100.0	..
<i>Total separations (number)</i>	39,600	11,625	5,839	648	..	57,712

(continued)

Table 2.7 (continued): Hospital separations for people aged 65+: remoteness of usual residence prior to admission into hospital, by remoteness of hospital and movement type, 2001-02 (unadjusted)

Movement type/remoteness of usual residence prior to hospital	Remoteness of hospital				Total	N
	Major cities	Inner regional	Outer regional	Remote and very remote		
To community/other						
Major cities	98.2	1.4	0.3	0.1	100.0	290,477
Inner regional	22.9	75.0	2.0	0.2	100.0	121,867
Outer regional	9.0	19.2	70.5	1.4	100.0	72,884
Remote and very remote	10.0	5.0	20.1	65.0	100.0	14,044
<i>All</i>	64.3	22.1	11.5	2.1	100.0	..
<i>Total separations (number)</i>	321,047	110,175	57,464	10,586	..	499,272
Died in hospital						
Major cities	98.9	1.0	0.1	—	100.0	25,096
Inner regional	18.8	79.3	1.9	—	100.0	9,129
Outer regional	6.6	17.4	74.9	1.1	100.0	5,124
Remote and very remote	9.4	5.3	18.9	66.4	100.0	852
<i>All</i>	67.0	20.9	10.4	1.6	100.0	..
<i>Total separations (number)</i>	26,950	8,422	4,195	634	..	40,201
All						
Major cities	98.3	1.4	0.3	0.1	100.0	353,821
Inner regional	21.8	76.1	2.0	0.1	100.0	143,090
Outer regional	8.3	18.7	71.7	1.3	100.0	84,586
Remote and very remote	9.6	4.9	19.9	65.6	100.0	15,688
All	64.9	21.8	11.3	2.0	100.0	..
Total separations (number)	387,597	130,222	67,498	11,868	..	597,185

Notes

1. Table is based on linked and unlinked hospital and RAC records. See notes to Table 1.3 for information on identification of transition groups; see Box 2.1 concerning interpretation of unadjusted numbers.
2. Age is as at time of hospital admission.
3. The table uses the Australian Standard Geographical Classification Remoteness Structure as developed by the ABS (ABS 2001b).
4. Postcodes of private hospitals are not recorded on the NHMD. 350,976 records were excluded due mostly to missing hospital and, in a small number of records, missing postcode of usual residence.