# 9 Overnight acute admitted patient care

This chapter presents information on overnight acute admitted patient care provided by public and private hospitals in Australia. An overnight separation occurs when the patient is admitted and separated on different dates. The information in this chapter is presented for overnight separations for which the care type was reported as *Acute, Newborn* (with at least one qualified day) or was *Not reported*. Separations for other care types were excluded (see *Chapter 7*). The data are sourced from the AIHW's National Hospital Morbidity Database (NHMD).

Of all overnight separations, 95.0% were reported as *Acute* (2.3 million of the 2.4 million in the public sector and 1.0 million of the 1.1 million in the private sector).

### Box 9.1

### Definitions

A summary of terms and classifications relating to admitted patient care can be found in *Chapter 7* (Box 7.1).

The information in this chapter is presented for overnight separations for which the care type was reported as *Acute, Newborn* (with at least one qualified day) or was *Not reported*.

### What are the limitations of the data?

The reader should understand that there are important limitations to the data drawn from the NHMD. These limitations are discussed in *Chapter 7* (Box 7.2).

#### What methods were used?

Details of the methods used to extract and interpret NHMD are discussed in *Chapter 7* (Box 7.3).

## How has activity care changed over time?

Between 2004–05 and 2008–09, the number of overnight acute separations (in both sectors combined) increased by an average of 2.5% per year, with an average annual increase of 2.8% in public hospitals and 1.7% in private hospitals (Table 9.1).

## How much activity was there in 2008–09?

In 2008-09 there were 3.3 million overnight acute separations, accounting for 40.9% of separations (Table 9.2). The overnight acute separation rate varied across states and territories, particularly in public hospitals, ranging from 84 per 1,000 population in Tasmania to 178 per 1,000 in the Northern Territory.

						Change (	per cent) <sup>(a)</sup>
	2004–05	2005–06	2006–07	2007–08	2008–09	Ave since 2004–05	Since 2007–08
Public hospitals							
Public acute hospitals	2,053,012	2,130,287	2,204,943	2,254,140	2,298,098	2.9	2.0
Public psychiatric hospitals	11,904	12,278	11,686	11,405	9,197	-6.2	-19.4
Total	2,064,916	2,142,565	2,216,629	2,265,545	2,307,295	2.8	1.8
Private hospitals							
Private free-standing day hospital facilities	2,654	2,440	2,423	2,341	1,247	-17.2	-46.7
Other private hospitals	952,408	971,076	984,954	1,014,107	1,021,094	1.8	0.7
Total	955,062	973,516	987,377	1,016,448	1,022,341	1.7	0.6
All hospitals	3,019,978	3,116,081	3,204,006	3,281,993	3,329,636	2.5	1.5

#### Table 9.1: Overnight acute separations, public and private hospitals, 2004-05 to 2008-09

Notes: See Box 9.1 for notes on data limitations and methods.

(a) Annual average change, not adjusted for changes in coverage and recategorisation.

#### Table 9.2: Overnight acute separations, public and private hospitals, states and territories, 2008-09

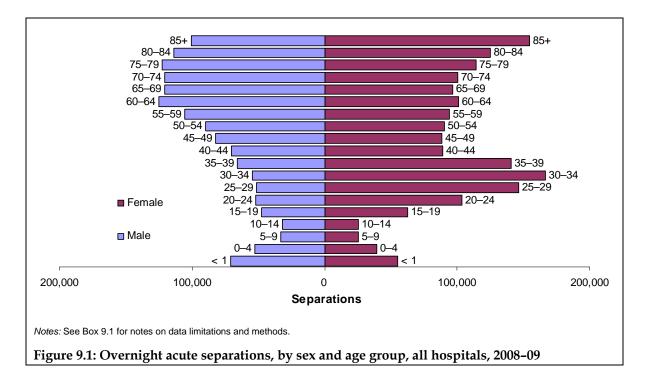
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Public hospitals									
Public acute hospitals	801,465	555,365	418,956	212,666	196,599	42,749	35,664	34,634	2,298,098
Public psychiatric hospitals	5,079	491	4	1,381	1,582	660	0	0	9,197
Total	806,544	555,856	418,960	214,047	198,181	43,409	35,664	34,634	2,307,295
Separation rate	110.9	101.0	97.4	99.1	115.6	83.8	108.5	177.9	105.0
Private hospitals									
Private free-standing day hospital facilities	0	85	0	1,160	0	n.p.	n.p.	n.p.	1,247
Other private hospitals	260,688	258,788	254,922	114,018	88,856	n.p.	n.p.	n.p.	1,021,094
Total	260,688	258,873	254,922	115,178	88,856	n.p.	n.p.	n.p.	1,022,341
Separation rate	35.6	46.1	58.8	53.0	49.8	n.p.	n.p.	n.p.	45.8
All hospitals	1,067,232	814,729	673,882	329,225	287,037	n.p.	n.p.	n.p.	3,329,636
Separation rate	146.5	147.1	156.2	152.1	165.4	n.p.	n.p.	n.p.	150.8

Notes: See Box 9.1 for notes on data limitations and methods.

## Who used these services?

### Sex and age group

Males accounted for less than half (45.8%) of overnight acute separations (Figure 9.2). However, there were more overnight separations for males than females in the age groups from 0 to 19 years and 60 to 84 years. People aged 55 years and over accounted for almost half of all overnight separations.



## Aboriginal and Torres Strait Islander people

#### Box 9.2 Quality of Indigenous status data

The quality of the data provided for Indigenous status in 2008–09 for admitted patient care varied by jurisdiction. See *Chapter 7* and *Appendix 1* for more information on the quality of Indigenous data in the NHMD.

Separations for Aboriginal and Torres Strait Islander people are likely to be underenumerated. It should also be noted that data presented for the six jurisdictions with data of acceptable quality for analysis purposes are not necessarily representative of the jurisdictions excluded.

Nationally, 3.5% of overnight acute separations were for Aboriginal or Torres Strait Islander people (Table 9.3).

In 2008–09, the overnight acute separation rate for *Indigenous Australians* was almost twice the rate for *Other Australians*. South Australia had the highest rate of overnight separations involving *Indigenous Australians*, and Victoria recorded the lowest rate.

## Table 9.3: Overnight acute separations per 1,000 population, by Indigenous status, selected states and territories<sup>(a)</sup>, 2008–09

	NSW	Vic	Qld	WA	SA	NT	Total <sup>(a)</sup>
Indigenous Australians	235.0	196.8	264.5	349.1	357.2	350.2	278.3
Other Australians	146.1	148.1	153.6	146.5	164.7	112.2	149.4
Total	147.8	148.4	156.4	152.2	167.5	172.8	152.1

Notes: See Boxes 9.1 and 9.2 for notes on data limitations and methods.

(a) Excludes data for Tasmania and the Australian Capital Territory and private hospitals in the Northern Territory.

The separation rates presented in Table 9.3 differ from those presented in Table 9.2 due to differences in the population age groups used for calculating the age-standardised rates.

#### **Remoteness area**

In 2008–09, people usually resident in *Very remote* areas had 252.5 overnight acute separations per 1,000 population, compared with 150.8 per 1,000 nationwide (Table 9.4). The separation rate ratio (SRR) of 1.67 for this area indicates that the separation rate was 67% higher than the national separation rate. The 95% confidence intervals applying to the SRRs for all areas indicate that the differences in the separation rates were statistically significant (Table 9.4).

## Table 9.4: Overnight acute separation statistics, by remoteness area of residence, all hospitals,2008-09

	Major cities	Inner regional	Outer regional	Remote	Very remote	Total <sup>(a)</sup>
Separations	2,090,419	740,573	371,097	66,151	39,339	3,329,636
Separation rate	138.9	166.4	179.1	218.3	252.5	150.8
Standardised separation rate ratio (SRR)	0.92	1.10	1.19	1.45	1.67	
95% confidence interval of SRR	0.92–0.92	1.10–1.11	1.18–1.19	1.44–1.46	1.66–1.69	

Notes: See Box 9.1 for notes on data limitations and methods.

(a) The total includes separations for which the remoteness area was not able to be categorised.

### Socioeconomic status

Socioeconomic status (SES) groups in this report are based on the Index of Relative Advantage/Disadvantage (from SEIFA 2006) for the area of usual residence (SLA) of the patient. See *Appendix 1* for details.

Each SES group accounted for between 17.0% and 22.7% of total overnight acute separations. Separation rates varied from 127.9 per 1,000 population for patients living in areas classified as being the highest SES group to 169.1 per 1,000 for the lowest (Table 9.5). The 95% confidence intervals applying to the SRRs for all SES groups indicate that the differences in separation rates from the national rate were statistically significant.

# Table 9.5: Selected overnight acute separation statistics, by socioeconomic status group, all hospitals, 2008–09

	1—Lowest	2	3	4	5—Highest	Total <sup>(a)</sup>
Separations	755,275	712,221	678,022	610,942	565,322	3,329,636
Separation rate	168.9	156.5	155.2	144.0	127.7	150.8
Standardised separation rate ratio (SRR)	1.12	1.04	1.03	0.95	0.85	
95% confidence interval of SRR	1.12–1.12	1.04–1.04	1.03–1.03	0.95–0.96	0.84–0.85	

Notes: See Box 9.1 for notes on data limitations and methods.

(a) The total includes separations for which the socioeconomic status group was not able to be categorised.

## How did people access these services?

The Mode of admission records the mechanism by which a patient begins an episode of care.

In both public and private hospitals, most overnight separations had a Mode of admission of *Other* (93% overall), the term used to refer to all planned and unplanned admissions except transfers from other hospitals and statistical admissions (Table 9.6). Public hospitals recorded higher proportions of *Admitted patient transferred from another hospital* than private hospitals (7% and 5%, respectively) (Table 9.6).

Table 9.6: Overnight acute separations, by mode of admission, public and private hospitals,2008-09

Mode of admission	Public hospitals	Private hospitals	Total
Admitted patient transferred from another hospital	161,697	51,208	212,905
Statistical admission: care type change	8,662	6,272	14,934
Other	2,133,590	964,399	3,097,989
Not reported	3,346	462	3,808
Total	2,307,295	1,022,341	3,329,636

Notes: See Box 9.1 for notes on data limitations and methods.

## Why did people receive the care?

The reasons that patients receive admitted patient care are usually described in terms of the principal diagnosis. The principal diagnosis is the diagnosis established after study to be chiefly responsible for occasioning the episode of admitted patient care.

## **Principal diagnosis**

Overall, half of all overnight acute separations in 2008–09 had a principal diagnosis from one of five ICD-10-AM chapters:

- Diseases of the digestive system
- Diseases of the respiratory system
- Diseases of the circulatory system
- Pregnancy, childbirth and the puerperium
- Injury and poisoning.

The relative distribution of separations by diagnosis chapter varied across public and private hospitals. For *Certain infectious and parasitic diseases* 88% of overnight separations were in public hospitals. For *Diseases of the musculoskeletal system and connective tissue,* the majority of separations were in private hospitals (60%) (Table 9.7).

The most common principal diagnosis (at the 3-character level) reported for overnight separations was *Pain in throat and chest,* accounting for 2.4% of overnight separations in public hospitals and 1.2% in private hospitals. The 20 most common principal diagnoses included several childbirth-related and heart-related conditions, as well as chronic

conditions such as *Type 2 diabetes mellitus* and *Other chronic obstructive pulmonary disease* (Table 9.8). Comparing this table with Table 8.8, it can be seen that the top 20 principal diagnoses for overnight separations and same-day separations are different, suggesting that there are differences in the types of conditions that are most commonly treated on an overnight basis compared with those that are not.

		Public	Private	
Principal d	iagnosis chapter	hospitals	hospitals	Total
A00–B99	Certain infectious and parasitic diseases	71,183	10,009	81,192
C00–D48	Neoplasms	125,905	102,015	227,920
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	23,044	7,286	30,330
E00-E90	Endocrine, nutritional and metabolic diseases	59,545	32,041	91,586
F00–F99	Mental and behavioural disorders	128,831	32,381	161,212
G00–G99	Diseases of the nervous system	61,592	52,587	114,179
H00–H59	Diseases of the eye and adnexa	11,006	10,223	21,229
H60–H95	Diseases of the ear and mastoid process	12,420	6,019	18,439
100–199	Diseases of the circulatory system	239,669	102,898	342,567
J00–J99	Diseases of the respiratory system	231,946	71,062	303,008
K00–K93	Diseases of the digestive system	212,958	98,537	311,495
L00–L99	Diseases of the skin and subcutaneous tissue	57,781	12,943	70,724
M00-M99	Diseases of the musculoskeletal system and connective tissue	98,124	149,294	247,418
N00-N99	Diseases of the genitourinary system	114,956	70,215	185,171
O00–O99	Pregnancy, childbirth and the puerperium	256,203	92,846	349,049
P00-P96	Certain conditions originating in the perinatal period	41,069	11,708	52,777
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	12,627	4,231	16,858
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	198,423	50,860	249,283
S00–T98	Injury, poisoning and certain other consequences of external causes	293,214	68,792	362,006
Z00–Z99	Factors influencing health status and contact with health services	56,706	35,393	92,099
	Not reported	93	1,001	1,094
Total		2,307,295	1,022,341	3,329,636

# Table 9.7: Overnight acute separations, by principal diagnosis in ICD-10-AM chapters, public and private hospitals, 2008-09

Notes: See Box 9.1 for notes on data limitations and methods.

Additional information by state and territory is available in tables S9.1 and S9.1 at the end of this chapter.

Princip	pal diagnosis	Public hospitals	Private hospitals	Total
R07	Pain in throat and chest	54,582	11,972	66,554
J18	Pneumonia, organism unspecified	45,768	9,202	54,970
G47	Sleep disorders	14,856	39,906	54,762
J44	Other chronic obstructive pulmonary disease	45,164	7,508	52,672
K80	Cholelithiasis	31,955	17,632	49,587
120	Angina pectoris	34,383	15,185	49,568
I21	Acute myocardial infarction	38,859	8,416	47,275
O70	Perineal laceration during delivery	33,691	12,475	46,166
150	Heart failure	31,679	8,865	40,544
R10	Abdominal and pelvic pain	32,345	7,445	39,790
M17	Gonarthrosis [arthrosis of knee]	13,420	25,543	38,963
N39	Other disorders of urinary system	29,089	8,554	37,643
K40	Inguinal hernia	15,139	20,085	35,224
L03	Cellulitis	29,238	5,721	34,959
I48	Atrial fibrillation and flutter	23,362	10,419	33,781
E11	Type 2 diabetes mellitus	25,473	8,182	33,655
O34	Maternal care for known or suspected abnormality of pelvic organs	19,732	13,858	33,590
J35	Chronic diseases of tonsils and adenoids	13,533	19,434	32,967
O80	Single spontaneous delivery	24,279	5,588	29,867
T81	Complications of procedures, not elsewhere classified	20,262	9,315	29,577
Other		1,730,486	757,036	2,487,522
Total		2,307,295	1,022,341	3,329,636

Table 9.8: Separations for the top 20 principal diagnoses in 3-character ICD-10-AM groupings with the highest number of overnight acute separations, public and private hospitals, 2008–09

*Notes:* See Box 9.1 for notes on data limitations and methods.

Additional information by state and territory is available in tables S9.3 and S9.4 at the end of this chapter.

## How urgent was the care?

Admissions to hospital can be categorised as *Emergency* (required within 24 hours), or *Elective* (required at some stage beyond 24 hours). Urgency of admission is *Not assigned* for some admissions, such as admissions for normal delivery and birth, statistical admissions and planned readmissions for some treatments.

For both the private and public sectors combined, 50% of overnight separations were *Emergency* admissions, 38% were *Elective* admissions and almost 12% had a *Not assigned* status. For overnight separations, 91% of *Emergency* admissions were treated in public hospitals and 61% in private hospitals. In private hospitals, 75% of overnight separations were *Elective* admissions and two out of three of these were for *Surgical* care (Table 9.9).

		Publi	c hospitals	Privat	e hospitals		Total
Urgency of admi of care	ission and type	Separations	Per cent (column)	Separations	Per cent (column)	Separations	Per cent (column)
Emergency							
Sur	gical	210,890	9.1	27,967	2.7	238,857	7.2
Med	dical	1,255,407	54.4	116,633	11.4	1,372,040	41.2
Oth	er	49,896	2.2	9,250	0.9	59,146	1.8
Tota	al emergency	1,516,193		153,850		1,670,043	
Elective							
Sur	gical	322,961	14.0	506,609	49.6	829,570	24.9
Med	dical	162,357	7.0	226,703	22.2	389,060	11.7
Oth	er	19,603	0.8	37,018	3.6	56,621	1.7
Tota	al elective	504,921		770,330		1,275,251	
Not assigned		285,633	12.4	92,273	9.0	377,906	11.3
Not reported		548	0.0	5,888	0.6	6,436	0.2
Total		2,307,295	100	1,022,341	100	3,329,636	100

Table 9.9: Overnight acute separations, by urgency of admission and type of care<sup>(a)</sup>, public and private hospitals, 2008–09

Notes: See Box 9.1 for notes on data limitations and methods.

(a) The type of care is assigned according to the Medical/Surgical/Other partitions of the AR-DRG classification.

Additional information by state and territory is available in Table S9.5 at the end of this chapter.

## What care was provided?

The care that the patient received can be described in a variety of ways. This section presents information on overnight acute separations describing care by:

- the overall type of care: *Surgical* (involving an operating room procedure), *Medical* (not involving a procedure) and *Other* (involving a non-operating room procedure such as endoscopy)
- Major Diagnostic Categories and Australian Refined Diagnosis Related Groups (AR-DRGs), based on the AR-DRG classification of acute care separations
- the type of surgical or other procedure undertaken.

#### Medical, surgical or other care

In this section, separations are grouped according to categories of care, using the Australian Refined Diagnosis Group (AR-DRG) classification. Acute care activity can be classified as *Medical, Surgical* and *Other* care based on the *Medical, Surgical* and *Other* partitions of the AR-DRG classification (see Box 7.1).

*Medical* DRGs accounted for 62% of overnight separations and *Surgical* DRGs accounted for 35% of overnight separations (Table 9.10). For public hospitals, over 71% of overnight separations were for *Medical* care, and for private hospitals, about 56% were for *Surgical* care.

### **Major Diagnostic Categories**

Table 9.10 presents overnight acute separations by Major Diagnostic Categories (MDCs) for public and private hospitals. *Diseases and disorders of the musculoskeletal system and connective tissue* accounted for one in eight overnight acute separations for the combined public and private sectors, with 54% of this activity occurring in public hospitals. For *Diseases and disorders of the kidney and urinary tract*, seven in ten separations were in public hospitals.

Majo	or Diagnostic Category	Public hospitals	Private hospitals	Total
PR	Pre-MDC (tracheostomies, transplants, ECMO)	11,751	1,457	13,208
01	Diseases and disorders of the nervous system	146,294	32,062	178,356
02	Diseases and disorders of the eye	16,848	12,517	29,365
03	Diseases and disorders of the ear, nose, mouth and throat	94,721	60,664	155,385
04	Diseases and disorders of the respiratory system	229,240	80,242	309,482
05	Diseases and disorders of the circulatory system	284,678	114,854	399,532
06	Diseases and disorders of the digestive system	248,666	105,610	354,276
07	Diseases and disorders of the hepatobiliary system and pancreas	70,349	29,228	99,577
08	Diseases and disorders of the musculoskeletal system and connective tissue	228,718	193,914	422,632
09	Diseases and disorders of the skin, subcutaneous tissue and breast	91,412	51,374	142,786
10	Endocrine, nutritional and metabolic diseases and disorders	52,204	30,757	82,961
11	Diseases and disorders of the kidney and urinary tract	98,314	38,154	136,468
12	Diseases and disorders of the male reproductive system	20,961	25,575	46,536
13	Diseases and disorders of the female reproductive system	42,368	40,315	82,683
14	Pregnancy, childbirth and puerperium	263,615	94,249	357,864
15	Newborns and other neonates	59,794	18,057	77,851
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	25,404	7,797	33,201
17	Neoplastic disorders (haematological and solid neoplasms)	19,408	11,671	31,079
18	Infectious and parasitic diseases	46,589	10,330	56,919
19	Mental diseases and disorders	97,316	26,330	123,646
20	Alcohol/drug use and alcohol/drug induced organic mental disorders	24,821	6,011	30,832
21	Injuries, poisoning and toxic effects of drugs	91,684	14,594	106,278
22	Burns	5,365	188	5,553
23	Factors influencing health status and other contacts with health services	33,092	12,735	45,827
ED	Error DRGs <sup>(d)</sup>	3,683	3,656	7,339
	Surgical	587,454	567,081	1,154,535
	Medical	1,648,230	407,673	2,055,903
	Other	71,611	47,587	119,198
Tota	1	2,307,295	1,022,341	3,329,636

Table 9.10: Overnight acute separations, by Major Diagnostic Category, AR-DRG version 5.2, public and private hospitals, 2008–09

Notes: See Box 9.1 for notes on data limitations and methods.

Abbreviation: ECMO—extracorporeal membrane oxygenation; DRG—Diagnosis Related Group; MDC—Major Diagnostic Category.

Additional information by state and territory is available in tables S9.6 and S9.7 at the end of this chapter.

### Most common AR-DRGs

In 2008–09, the 20 most common AR-DRGs accounted for about a quarter of overnight acute separations. Childbirth-related AR-DRGs were the two most common overnight separations, and the top 20 included several heart- and respiratory-related AR-DRGs (Table 9.11). Public hospitals provided the majority of separations for childbirth and *Chest pain*. Private hospitals provided the majority of separations for AR-DRGs such as *Sleep apnoea*, *Knee replacement and reattachment* and *Other shoulder procedures*.

Table 9.11: Separations for the top 20 AR-DRGs version 5.2 with the highest number of overnight
acute separations, public and private hospitals, 2008–09

AR-DR	G	Public hospitals	Private hospitals	Total
O60B	Vaginal Delivery W/O Catastrophic or Severe CC	101,564	36,766	138,330
O01C	Caesarean Delivery W/O Catastrophic or Severe CC	43,619	28,775	72,394
F74Z	Chest Pain	51,335	7,717	59,052
G67B	Oesophagitis, Gastroent & Misc Digestive Systm Disorders Age>9 W/O Cat/Sev CC	43,118	8,900	52,018
E63Z	Sleep Apnoea	6,711	34,761	41,472
J64B	Cellulitis (Age >59 W/O Catastrophic or Severe CC) or Age <60	35,834	5,466	41,300
O66A	Antenatal and Other Obstetric Admission	31,203	7,126	38,329
H08B	Laparoscopic Cholecystectomy W/O Closed CDE W/O Cat or Sev CC	19,222	16,688	35,910
104Z	Knee Replacement and Reattachment	12,163	23,008	35,171
D11Z	Tonsillectomy and/or Adenoidectomy	14,840	19,200	34,040
I16Z	Other Shoulder Procedures	5,641	27,552	33,193
G09Z	Inguinal and Femoral Hernia Procedures Age>0	12,548	18,427	30,975
U63B	Major Affective Disorders Age <70 W/O Catastrophic or Severe CC	17,860	12,126	29,986
O60C	Vaginal Delivery Single Uncomplicated W/O Other Condition	24,262	5,586	29,848
P67D	Neonate, AdmWt >2499 g W/O Significant OR Procedure W/O Problem	21,039	8,343	29,382
E62C	Respiratory Infections/Inflammations W/O CC	23,840	4,697	28,537
G66B	Abdominal Pain or Mesenteric Adenitis W/O CC	24,533	3,986	28,519
E65B	Chronic Obstructive Airways Disease W/O Catastrophic or Severe CC	23,605	4,636	28,241
F71B	Non-Major Arrhythmia and Conduction Disorders W/O Catastrophic or Severe CC	21,196	6,445	27,641
F62B	Heart Failure and Shock W/O Catastrophic CC	21,243	5,977	27,220
Other		1,751,919	736,159	2,488,078
Total		2,307,295	1,022,341	3,329,636

Notes: See Box 9.1 for notes on data limitations and methods.

Abbreviation: Abbreviations: AdmWt—admission weight; CC—complications and comorbidities; Cat/Sev—catastrophic or severe; Gastroent—gastroenterological; Misc—miscellaneous; Sys—system; W—with; W/O—without.

Additional information by state and territory is available in tables S9.8 and S9.9 at the end of this chapter.

#### **Procedures**

A procedure is defined as a clinical intervention that is surgical in nature, carries a procedural risk, carries an anaesthetic risk, requires specialised training, and/or requires special facilities or equipment available only in an acute care setting (HDSC 2006).

Procedures therefore encompass surgical procedures and non-surgical investigative and therapeutic procedures such as X-rays and chemotherapy. Client support interventions that are neither investigative nor therapeutic (such as anaesthesia) are also included.

In 2008–09, 4.7 million procedures were reported for overnight acute separations, about 2.9 million in the public sector and 1.7 million in the private sector. Public hospitals accounted for 63% of the overnight acute separations for which a procedure was reported, although they accounted for 69% of the separations overall (Table 9.12). In public hospitals, 70% of overnight acute separations involved a procedure (1.6 million). In contrast, 88% of overnight acute separations involved a procedure (0.9 million).

## Table 9.12: Overnight acute separations<sup>(a)</sup>, by procedure in ACHI chapters, public and private hospitals, 2008–09

Procedure of	chapters	Public hospitals	Private hospitals	Total
1–86	Procedures on nervous system	44,358	41,455	85,813
110–129	Procedures on endocrine system	6,553	6,721	13,274
160–256	Procedures on eye and adnexa	12,300	11,420	23,720
300–333	Procedures on ear and mastoid process	9,487	8,363	17,850
370–422	Procedures on nose, mouth and pharynx	40,618	48,062	88,680
450–490	Dental services	5,664	3,647	9,311
520–570	Procedures on respiratory system	80,176	24,330	104,506
600–777	Procedures on cardiovascular system	138,183	91,838	230,021
800–817	Procedures on blood and blood-forming organs	20,492	15,202	35,694
850–1011	Procedures on digestive system	198,181	142,636	340,817
1040–1129	Procedures on urinary system	73,774	48,016	121,790
1160–1203	Procedures on male genital organs	18,475	26,717	45,192
1240–1299	Gynaecological procedures	46,972	41,087	88,059
1330–1347	Obstetric procedures	179,962	79,405	259,367
1360–1579	Procedures on musculoskeletal system	172,405	169,931	342,336
1600–1718	Dermatological and plastic procedures	97,047	49,351	146,398
1740–1759	Procedures on breast	11,186	20,525	31,711
1786–1799	Radiation oncology procedures	7,657	2,689	10,346
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	1,345,738	817,965	2,163,703
1940–2016	Imaging services	421,778	109,804	531,582
	Procedures reported	2,931,006	1,759,164	4,690,170
	Separations with no procedure reported	697,694	117,941	815,635
Total overn	ight separations	2,307,295	1,022,341	3,329,636

Notes: See Box 9.1 for notes on data limitations and methods.

(a) A separation is counted once for the group if it has at least one procedure reported within the group. As more than one procedure can be reported for each separation, the data are not additive and therefore the totals in the tables may not equal the sum of counts in the rows. *Abbreviation*: n.e.c—not elsewhere classified.

Additional information by state and territory is available in tables S9.10 and S9.11 at the end of this chapter.

In 2008–09, *Cerebral anaesthesia* (general anaesthesia) was the most common procedure block reported for overnight acute separations, reflecting that it is a companion procedure for many other procedures. *General allied health interventions*, which include physiotherapy and other rehabilitation procedures or interventions, was the next most frequently reported procedure block (Table 9.13).

Table 9.13: Procedure statistics for the top 20 ACHI procedure blocks with the highest number of overnight acute separations, public and private hospitals, 2008–09

		Public	Private	
Proce	dure block	hospitals	hospitals	Total
1910	Cerebral anaesthesia	616,167	579,243	1,195,410
1916	Generalised allied health interventions	869,047	326,036	1,195,083
1909	Conduction anaesthesia	113,788	117,008	230,796
1893	Transfusion of blood and gamma globulin	125,692	57,418	183,110
1952	Computerised tomography of brain	160,473	19,286	179,759
1912	Postprocedural analgesia	57,796	55,058	112,854
1920	Administration of pharmacotherapy	71,890	28,447	100,337
1963	Computerised tomography of abdomen and pelvis	77,861	16,596	94,457
1340	Caesarean section	56,864	34,214	91,078
1344	Postpartum suture	62,746	23,432	86,178
668	Coronary angiography	40,454	36,413	76,867
1333	Analgesia and anaesthesia during labour and delivery procedure	45,681	27,556	73,237
1334	Medical or surgical induction of labour	47,903	22,942	70,845
1966	Other computerised tomography	51,952	12,335	64,287
1335	Medical or surgical augmentation of labour	46,170	16,232	62,402
2015	Magnetic resonance imaging	46,794	14,438	61,232
738	Venous catheterisation	46,892	12,123	59,015
607	Examination procedures on ventricle	22,416	27,425	49,841
965	Cholecystectomy	26,625	20,167	46,792
412	Tonsillectomy or adenoidectomy	19,865	25,107	44,972
	Other	1,696,164	1,270,598	2,966,762
	Total procedures reported	4,303,240	2,742,074	7,045,314
	Separations with no procedure reported	697,694	117,941	815,635
Total s	separations	2,307,295	1,022,341	3,329,636

Notes: See Box 9.1 for notes on data limitations and methods.

(a) As more than one procedure may be reported within each ACHI block, the total number of procedures may not sum to the total of the rows. Additional information by state and territory is available in tables S9.12 and S9.13 at the end of this chapter.

## How long did patients stay?

The lengths of stay for overnight acute separations varied by the type of care received, and between public and private hospitals. Separations with *Surgical DRGs* had longer lengths of stay in public hospitals than in private hospitals, and separations for *Medical DRGs* had longer lengths of stay in private hospitals.

	Public hos	pitals	Private hos	pitals	Total	
AR-DRG Partition	Patient days	Average length of stay	Patient days	Average length of stay	Patient days	Average length of stay
Surgical DRG	3,452,269	5.9	2,172,309	3.8	5,624,578	4.9
Medical DRG	8,551,267	5.2	2,548,013	6.3	11,099,280	5.4
Other DRG	401,812	5.6	150,357	3.2	552,169	4.6
Total	12,405,348	5.4	4,870,679	4.8	17,276,027	5.2

Table 9.14: Patient days and average length of stay, for overnight acute separations, by *Medical/Surgical/Other DRG* partition, public and private hospitals, 2008–09

Notes: See Box 9.1 for notes on data limitations and methods.

## Who paid for the care?

Over 84% of overnight acute separations from public hospitals were for *Public patients* (mainly funded through the *Australian Health Care Agreements*), and over 83% of overnight acute separations from private hospitals were funded by *Private health insurance* (Table 9.15). The *Department of Veterans' Affairs* funded about 3% of overnight acute separations in public hospitals and 8% in private hospitals.

## Table 9.15: Overnight acute separations, by principal source of funds, public and private hospitals, 2008–09

	Public hospitals	Private hospitals	Total
Public patients <sup>(a)</sup>	1,942,018	9,725	1,951,743
Private health insurance	232,039	850,818	1,082,857
Self-funded <sup>(b)</sup>	23,731	38,372	62,103
Workers compensation	13,246	26,183	39,429
Motor vehicle third party personal claim	15,378	2,124	17,502
Department of Veterans' Affairs	66,187	83,599	149,786
Other <sup>(c)</sup>	14,696	11,520	26,216
Total	2,307,295	1,022,341	3,329,636

Notes: See Box 9.1 for notes on data limitations and methods.

(a) 'Public patients' includes separations with a funding source of Australian Health Care Agreements, Reciprocal health care agreements, Other hospital or public authority (with a public patient election status) and No charge raised (in public hospitals). The majority of separations with a funding source of No charge raised in public hospitals were in Western Australia, reflecting that some public patient services were funded through the Medicare Benefit Schedule.

(b) Tasmania was unable to identify all patients whose funding source may have been *Self-funded*, therefore the number of separations in this category may be underestimated and others may be overestimated.

(c) 'Other' includes separations with a funding source of Other compensation, Department of Defence, Correctional facilities, Other hospital or public authority (without a public patient election status), Other, No charge raised (in private hospitals) and Not reported.

## How was the care completed?

The Mode of separation records the status of the patient at the time of separation and, for some categories, the place to which the person was discharged or transferred

Around 88% of overnight acute separations had a Mode of separation of *Other*, suggesting that most patients go home after their episode of care (Table 9.16). This was particularly the case in private hospitals, where 94% of separations reported a Mode of separation of *Other* compared with 85% in public hospitals.

## Table 9.16: Overnight acute separations, by mode of separation, public and private hospitals,2008-09

Mode of separation	Public hospitals	Private hospitals	Total
Discharge/transfer to an (other) acute hospital	170,212	35,779	205,991
Discharge/transfer to residential aged care service	34,995	6,479	41,474
Discharge/transfer to an (other) psychiatric hospital	4,301	152	4,453
Discharge/transfer to other health care accommodation	8,698	1,487	10,185
Statistical discharge: type change	52,203	10,177	62,380
Left against medical advice/discharge at own risk	25,037	1,349	26,386
Statistical discharge from leave	4,891	58	4,949
Died	39,162	9,951	49,113
Other	1,967,789	956,901	2,924,690
Not reported	7	8	15
Total	2,307,295	1,022,341	3,329,636

## Supplementary tables

The following supplementary tables provide more information on diagnosis and procedure information provided for overnight acute separations, by state and territory.

### Box 9.3: Methods – Chapter 9 Supplementary tables

### Table S9.5:

(a) The type of care is assigned according to the *Medical/Surgical/Other* partitions of the AR-DRG classification.

### Tables S9.6 to S9.9

(b) An *Error DRG* is assigned to hospital records that contain clinically atypical or invalid information.

Abbreviations: AdmWt – admission weight; Cat/Sev – catastrophic or severe; CC – complications and comorbidities; CDE – common bile duct exploration; DRG – Diagnosis Related Group; ECMO – extracorporeal membrane oxygenation; Gastroent – gastroenterological; MDC – Major Diagnostic Category; Misc – miscellaneous; Sys – system; URI – upper respiratory tract infection; W – with; W/O – without.

### Tables S9.10 to S9.13:

- (a) For tables with counts of separations by groups of procedures, a separation is counted once for the group if it has at least one procedure reported within the group. As more than one procedure can be reported for each separation, the data are not additive and therefore the totals in the tables may not equal the sum of counts in the rows.
- (b) For data on the number of procedures, all procedures within a group are counted, even if more than one is reported for a separation.
- (c) These are counts of Australian Classification of Health Interventions (ACHI) procedure codes. It is possible that a single procedure code may represent multiple procedures or that a specific procedure may require the reporting of more than one code. Therefore the number of procedure codes reported does not necessarily equal the number of separate procedures performed.

Principal dia	agnosis	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
A00–B99	Certain infectious and parasitic diseases	27,553	16,389	11,950	6,453	5,085	1,012	995	1,746	71,183
C00–D48	Neoplasms	42,155	33,733	22,060	10,781	11,655	2,709	2,058	754	125,905
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	8,011	6,037	3,787	1,829	2,460	371	316	233	23,044
E00-E90	Endocrine, nutritional and metabolic diseases	18,593	15,188	11,029	5,743	5,637	1,196	901	1,258	59,545
F00–F99	Mental and behavioural disorders	47,675	27,583	20,553	13,619	13,117	3,339	1,782	1,163	128,831
G00–G99	Diseases of the nervous system	19,147	18,708	10,778	5,096	5,565	1,004	766	528	61,592
H00–H59	Diseases of the eye and adnexa	4,280	2,762	1,635	1,163	806	67	145	148	11,006
H60–H95	Diseases of the ear and mastoid process	3,863	3,049	2,108	1,324	1,174	204	179	519	12,420
100–199	Diseases of the circulatory system	86,298	57,998	44,332	18,886	21,069	4,829	4,075	2,182	239,669
J00–J99	Diseases of the respiratory system	83,105	55,030	39,647	20,816	21,693	3,996	3,132	4,527	231,946
K00–K93	Diseases of the digestive system	74,027	52,384	37,735	20,369	18,445	3,852	3,401	2,745	212,958
L00–L99	Diseases of the skin and subcutaneous tissue	19,040	12,135	12,060	6,265	4,401	923	765	2,192	57,781
M00–M99	Diseases of the musculoskeletal system and connective tissue	33,604	24,342	16,519	10,208	8,760	2,034	1,683	974	98,124
N00-N99	Diseases of the genitourinary system	39,373	28,542	20,576	10,728	10,540	1,862	1,785	1,550	114,956
O00–O99	Pregnancy, childbirth and the puerperium	87,593	59,589	52,383	25,563	17,809	4,507	4,463	4,296	256,203
P00-P96	Certain conditions originating in the perinatal period	13,010	10,674	8,049	3,584	3,204	743	1,045	760	41,069
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	4,334	3,269	2,343	1,180	994	240	188	79	12,627
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	71,677	48,927	36,547	15,668	17,873	3,223	2,147	2,361	198,423
S00-T98	Injury, poisoning and certain other consequences of external causes	100,526	66,944	54,887	30,877	23,052	6,157	5,338	5,433	293,214
Z00–Z99	Factors influencing health status and contact with health services	22,587	12,573	9,982	3,895	4,842	1,141	500	1,186	56,706
	Not reported	93	0	0	0	0	0	0	0	93
Tota	al	806,544	555,856	418,960	214,047	198,181	43,409	35,664	34,634	2,307,295

Table S9.1: Overnight acute separations, by principal diagnosis in ICD-10-AM chapters, public hospitals, states and territories, 2008-09

Principal d	liagnosis	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
A00–B99	Certain infectious and parasitic diseases	1,480	2,869	3,761	811	748	n.p.	n.p.	n.p.	10,009
C00–D48	Neoplasms	25,000	27,892	25,335	10,911	9,128	n.p.	n.p.	n.p.	102,015
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	1,141	2,190	2,084	798	844	n.p.	n.p.	n.p.	7,286
E00-E90	Endocrine, nutritional and metabolic diseases	7,874	7,464	7,275	4,781	3,139	n.p.	n.p.	n.p.	32,041
F00–F99	Mental and behavioural disorders	9,567	8,446	7,382	3,922	1,731	n.p.	n.p.	n.p.	32,381
G00–G99	Diseases of the nervous system	14,142	13,656	14,596	4,355	4,545	n.p.	n.p.	n.p.	52,587
H00–H59	Diseases of the eye and adnexa	3,122	1,913	1,532	2,276	988	n.p.	n.p.	n.p.	10,223
H60–H95	Diseases of the ear and mastoid process	1,863	1,221	1,338	707	655	n.p.	n.p.	n.p.	6,019
100–199	Diseases of the circulatory system	23,641	29,687	28,673	9,271	8,518	n.p.	n.p.	n.p.	102,898
J00–J99	Diseases of the respiratory system	17,575	16,838	19,366	7,098	6,992	n.p.	n.p.	n.p.	71,062
K00–K93	Diseases of the digestive system	24,239	24,452	26,838	9,933	8,643	n.p.	n.p.	n.p.	98,537
L00–L99	Diseases of the skin and subcutaneous tissue	2,843	3,306	3,690	1,436	1,129	n.p.	n.p.	n.p.	12,943
M00–M99	Diseases of the musculoskeletal system and connective tissue	39,708	37,284	31,668	20,305	13,869	n.p.	n.p.	n.p.	149,294
N00-N99	Diseases of the genitourinary system	19,552	16,052	16,963	7,521	7,024	n.p.	n.p.	n.p.	70,215
O00–O99	Pregnancy, childbirth and the puerperium	25,888	22,245	21,618	11,240	5,797	n.p.	n.p.	n.p.	92,846
P00-P96	Certain conditions originating in the perinatal period	2,876	3,335	2,515	1,813	751	n.p.	n.p.	n.p.	11,708
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	1,494	1,055	854	377	346	n.p.	n.p.	n.p.	4,231
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	8,070	15,175	14,904	5,261	5,426	n.p.	n.p.	n.p.	50,860
S00–T98	Injury, poisoning and certain other consequences of external causes	16,475	15,910	18,819	8,325	6,403	n.p.	n.p.	n.p.	68,792
Z00–Z99	Factors influencing health status and contact with health services	14,138	6,885	5,711	4,037	2,180	n.p.	n.p.	n.p.	35,393
	Not reported	0	998	0	0	0	n.p.	n.p.	n.p.	1,001
Total		260,688	258,873	254,922	115,178	88,856	n.p.	n.p.	n.p.	1,022,341

Table S9.2: Overnight acute separations, by principal diagnosis in ICD-10-AM chapters, private hospitals, states and territories, 2008–09

Princi	pal diagnosis	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
R07	Pain in throat and chest	19,243	11,864	12,004	4,057	5,357	805	576	676	54,582
J18	Pneumonia, organism unspecified	16,565	11,569	7,318	4,040	3,589	854	639	1,194	45,768
J44	Other chronic obstructive pulmonary disease	16,989	10,306	8,296	3,309	4,204	943	481	636	45,164
l21	Acute myocardial infarction	13,340	9,586	8,251	2,886	2,864	822	716	394	38,859
120	Angina pectoris	11,524	7,591	7,481	2,904	3,124	943	477	339	34,383
O70	Perineal laceration during delivery	15,035	6,640	6,307	2,353	1,592	468	825	471	33,691
R10	Abdominal and pelvic pain	11,024	8,658	5,736	2,974	2,658	542	382	371	32,345
K80	Cholelithiasis	10,741	8,408	5,888	2,885	2,636	576	452	369	31,955
150	Heart failure	11,849	7,993	4,998	2,798	2,705	599	431	306	31,679
L03	Cellulitis	10,169	6,456	6,039	2,882	2,126	469	394	703	29,238
N39	Other disorders of urinary system	11,382	6,332	5,238	2,557	2,419	353	455	353	29,089
E11	Type 2 diabetes mellitus	7,796	6,335	4,680	2,748	2,494	435	406	579	25,473
O80	Single spontaneous delivery	9,026	3,584	6,622	2,136	1,562	457	395	497	24,279
J45	Asthma	8,400	6,425	3,661	2,108	2,706	269	270	348	24,187
148	Atrial fibrillation and flutter	9,326	5,174	4,068	1,751	2,136	400	335	172	23,362
S52	Fracture of forearm	7,698	5,128	3,684	2,169	1,629	477	587	427	21,799
F20	Schizophrenia	7,047	5,106	4,199	1,946	1,824	520	258	245	21,145
S72	Fracture of femur	7,970	4,744	3,368	2,050	1,540	529	425	136	20,762
T81	Complications of procedures, not elsewhere classified	7,089	4,836	3,488	2,009	1,721	396	346	377	20,262
K35	Acute appendicitis	6,831	4,793	3,648	2,341	1,451	376	457	264	20,161
Other		587,500	414,328	303,986	161,144	147,844	32,176	26,357	25,777	1,699,112
Total	(All principal diagnoses)	806,544	555,856	418,960	214,047	198,181	43,409	35,664	34,634	2,307,295

Table S9.3: Overnight acute separations, for the top 20 principal diagnoses, public hospitals, states and territories, 2008-09

Princi	pal diagnosis	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
G47	Sleep disorders	11,289	10,428	10,902	2,907	3,550	n.p.	n.p.	n.p.	39,906
M17	Gonarthrosis [arthrosis of knee]	8,056	5,424	5,582	2,891	2,553	n.p.	n.p.	n.p.	25,543
M75	Shoulder lesions	4,710	5,214	4,195	3,631	1,977	n.p.	n.p.	n.p.	20,469
K40	Inguinal hernia	6,484	4,664	4,404	2,045	1,649	n.p.	n.p.	n.p.	20,085
J35	Chronic diseases of tonsils and adenoids	7,092	3,414	4,052	2,263	1,744	n.p.	n.p.	n.p.	19,434
K80	Cholelithiasis	5,032	4,220	4,182	1,775	1,540	n.p.	n.p.	n.p.	17,632
120	Angina pectoris	3,185	4,658	4,592	1,241	992	n.p.	n.p.	n.p.	15,185
M16	Coxarthrosis [arthrosis of hip]	4,089	3,785	2,445	1,462	1,489	n.p.	n.p.	n.p.	13,995
O34	Maternal care for known or suspected abnormality of pelvic organs	3,723	3,047	3,717	1,859	855	n.p.	n.p.	n.p.	13,858
E66	Obesity	3,221	2,602	2,523	2,431	1,328	n.p.	n.p.	n.p.	12,833
O70	Perineal laceration during delivery	4,276	2,888	2,784	1,060	731	n.p.	n.p.	n.p.	12,475
125	Chronic ischaemic heart disease	4,124	3,406	2,802	971	764	n.p.	n.p.	n.p.	12,325
R07	Pain in throat and chest	1,463	3,623	3,695	1,012	1,804	n.p.	n.p.	n.p.	11,972
C61	Malignant neoplasm of prostate	3,481	3,015	2,435	1,018	675	n.p.	n.p.	n.p.	11,125
M23	Internal derangement of knee	2,323	2,617	2,504	1,562	1,507	n.p.	n.p.	n.p.	11,010
C50	Malignant neoplasm of breast	2,679	3,099	2,275	1,056	935	n.p.	n.p.	n.p.	10,506
148	Atrial fibrillation and flutter	1,744	2,867	3,335	961	1,200	n.p.	n.p.	n.p.	10,419
M51	Other intervertebral disc disorders	2,605	2,327	2,851	1,446	767	n.p.	n.p.	n.p.	10,394
J34	Other disorders of nose and nasal sinuses	3,638	2,518	1,460	1,082	1,044	n.p.	n.p.	n.p.	10,227
N40	Hyperplasia of prostate	3,421	2,758	1,945	792	849	n.p.	n.p.	n.p.	10,164
Other		174,053	182,299	182,242	81,713	60,903	n.p.	n.p.	n.p.	712,784
Total	(All principal diagnoses)	260,688	258,873	254,922	115,178	88,856	n.p.	n.p.	n.p.	1,022,341

Table S9.4: Overnight acute separations, for the top 20 principal diagnoses, private hospitals, states and territories, 2008-09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Public hospitals									
Surgical DRG	187,786	153,314	104,898	59,470	51,454	11,976	11,501	7,055	587,454
Medical DRG	593,820	384,398	302,359	148,492	139,781	29,983	23,081	26,316	1,648,230
Other DRG	24,938	18,144	11,703	6,085	6,946	1,450	1,082	1,263	71,611
Total	806,544	555,856	418,960	214,047	198,181	43,409	35,664	34,634	2,307,295
Private hospitals									
Surgical DRG	161,183	134,154	126,696	71,263	50,016	n.p.	n.p.	n.p.	567,081
Medical DRG	89,189	109,823	115,051	40,221	34,803	n.p.	n.p.	n.p.	407,673
Other DRG	10,316	14,896	13,175	3,694	4,037	n.p.	n.p.	n.p.	47,587
Total	260,688	258,873	254,922	115,178	88,856	n.p.	n.p.	n.p.	1,022,341

Table S9.5: Overnight acute separations, by *Medical/Surgical/Other* partition of AR-DRG version 5.2, public and private hospitals, states and territories, 2008–09

Major	Diagnostic Category	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
PR	Pre-MDC (tracheostomies, transplants, ECMO)	4,025	3,079	2,081	997	1,033	223	176	137	11,751
01	Diseases and disorders of the nervous system	52,255	36,456	24,757	13,216	12,639	3,114	2,168	1,689	146,294
02	Diseases and disorders of the eye	6,136	4,166	2,763	1,902	1,266	129	219	267	16,848
03	Diseases and disorders of the ear, nose, mouth and throat	28,814	24,562	16,698	10,147	9,125	1,786	1,630	1,959	94,721
04	Diseases and disorders of the respiratory system	82,891	55,477	39,507	19,362	21,140	3,811	2,777	4,275	229,240
05	Diseases and disorders of the circulatory system	101,515	66,667	56,387	21,730	25,982	5,188	4,379	2,830	284,678
06	Diseases and disorders of the digestive system	87,837	61,615	43,402	23,148	21,646	4,464	3,599	2,955	248,666
07	Diseases and disorders of the hepatobiliary system and pancreas	24,655	18,119	12,369	6,135	5,730	1,253	1,083	1,005	70,349
08	Diseases and disorders of the musculoskeletal system and connective tissue	79,399	54,581	40,118	23,833	18,338	5,009	4,511	2,929	228,718
09	Diseases and disorders of the skin, subcutaneous tissue and breast	30,542	19,802	18,471	9,582	7,717	1,451	1,251	2,596	91,412
10	Endocrine, nutritional and metabolic diseases and disorders	17,361	12,992	9,501	4,768	4,882	1,061	772	867	52,204
11	Diseases and disorders of the kidney and urinary tract	33,821	23,334	18,549	9,090	8,778	1,389	1,663	1,690	98,314
12	Diseases and disorders of the male reproductive system	6,909	5,661	3,323	2,028	1,968	457	393	222	20,961
13	Diseases and disorders of the female reproductive system	13,443	11,747	7,620	3,771	3,804	922	536	525	42,368
14	Pregnancy, childbirth and puerperium	90,186	61,301	53,570	26,401	18,288	4,627	4,572	4,670	263,615
15	Newborns and other neonates	23,377	13,608	10,693	4,446	4,220	1,184	1,211	1,055	59,794
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	8,680	6,568	4,321	2,083	2,608	416	370	358	25,404
17	Neoplastic disorders (haematological and solid neoplasms)	6,612	5,228	3,062	1,719	1,873	442	381	91	19,408
18	Infectious and parasitic diseases	17,727	11,001	8,084	4,344	3,107	715	696	915	46,589
19	Mental diseases and disorders	32,469	23,168	16,822	10,063	10,343	2,474	1,149	828	97,316
20	Alcohol/drug use and alcohol/drug induced organic mental disorders	11,059	3,847	3,733	2,802	1,961	571	569	279	24,821
21	Injuries, poisoning and toxic effects of drugs	31,116	21,732	16,972	9,322	7,563	1,945	1,324	1,710	91,684
22	Burns	1,389	1,053	1,116	639	678	129	42	319	5,365
23	Factors influencing health status and other contacts with health services	13,253	9,100	4,519	1,963	3,114	582	155	406	33,092
ED	Error DRGs <sup>(b)</sup>	1,073	992	522	556	378	67	38	57	3,683
Total		806,544	555,856	418,960	214,047	198,181	43,409	35,664	34,634	2,307,295

Table S9.6: Overnight acute separations, by Major Diagnostic Category, AR-DRG version 5.2, public hospitals, states and territories, 2008-09

Major	Diagnostic Category	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
PR	Pre-MDC (tracheostomies, transplants, ECMO)	288	350	530	109	140	n.p.	n.p.	n.p.	1,457
01	Diseases and disorders of the nervous system	7,151	8,672	9,234	3,282	2,568	n.p.	n.p.	n.p.	32,062
02	Diseases and disorders of the eye	3,743	2,391	2,010	2,721	1,176	n.p.	n.p.	n.p.	12,517
03	Diseases and disorders of the ear, nose, mouth and throat	19,019	12,852	12,710	7,010	6,334	n.p.	n.p.	n.p.	60,664
04	Diseases and disorders of the respiratory system	17,122	22,093	24,856	6,400	7,297	n.p.	n.p.	n.p.	80,242
05	Diseases and disorders of the circulatory system	25,086	33,887	32,024	10,111	10,484	n.p.	n.p.	n.p.	114,854
06	Diseases and disorders of the digestive system	23,259	27,295	30,352	10,778	9,410	n.p.	n.p.	n.p.	105,610
07	Diseases and disorders of the hepatobiliary system and pancreas	7,521	7,458	7,653	2,774	2,464	n.p.	n.p.	n.p.	29,228
08	Diseases and disorders of the musculoskeletal system and connective tissue	51,261	47,221	43,467	25,540	18,330	n.p.	n.p.	n.p.	193,914
09	Diseases and disorders of the skin, subcutaneous tissue and breast	12,840	13,027	12,090	6,897	4,255	n.p.	n.p.	n.p.	51,374
10	Endocrine, nutritional and metabolic diseases and disorders	7,909	6,964	7,124	4,325	2,915	n.p.	n.p.	n.p.	30,757
11	Diseases and disorders of the kidney and urinary tract	8,486	10,214	10,061	3,850	3,895	n.p.	n.p.	n.p.	38,154
12	Diseases and disorders of the male reproductive system	8,060	6,767	5,403	2,345	1,909	n.p.	n.p.	n.p.	25,575
13	Diseases and disorders of the female reproductive system	12,382	8,289	9,581	4,446	3,766	n.p.	n.p.	n.p.	40,315
14	Pregnancy, childbirth and puerperium	26,693	22,531	21,752	11,305	5,846	n.p.	n.p.	n.p.	94,249
15	Newborns and other neonates	7,842	3,672	2,885	2,221	805	n.p.	n.p.	n.p.	18,057
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	1,235	2,312	2,235	876	894	n.p.	n.p.	n.p.	7,797
17	Neoplastic disorders (haematological and solid neoplasms)	1,646	3,569	3,398	1,651	1,140	n.p.	n.p.	n.p.	11,671
18	Infectious and parasitic diseases	1,888	2,788	3,290	1,049	872	n.p.	n.p.	n.p.	10,330
19	Mental diseases and disorders	7,627	6,823	5,659	3,503	1,512	n.p.	n.p.	n.p.	26,330
20	Alcohol/drug use and alcohol/drug induced organic mental disorders	2,105	1,578	1,465	521	217	n.p.	n.p.	n.p.	6,011
21	Injuries, poisoning and toxic effects of drugs	3,133	3,554	4,211	1,951	1,043	n.p.	n.p.	n.p.	14,594
22	Burns	30	57	60	10	14	n.p.	n.p.	n.p.	188
23	Factors influencing health status and other contacts with health services	3,885	2,868	2,205	1,085	1,168	n.p.	n.p.	n.p.	12,735
ED	Error DRGs <sup>(b)</sup>	477	1,641	667	418	402	n.p.	n.p.	n.p.	3,656
Total		260,688	258,873	254,922	115,178	88,856	n.p.	n.p.	n.p.	1,022,341

Table S9.7: Overnight acute separations, by Major Diagnostic Category, AR-DRG version 5.2, private hospitals, states and territories, 2008–09

AR-DRG		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
O60B	Vaginal Delivery W/O Catastrophic or Severe CC	35,134	26,608	19,150	9,381	6,535	1,704	1,800	1,252	101,564
F74Z	Chest Pain	17,989	11,239	11,454	3,724	5,045	731	516	637	51,335
O01C	Caesarean Delivery W/O Catastrophic or Severe CC	14,775	10,578	9,076	4,016	3,177	802	651	544	43,619
G67B	Oesophagitis, Gastroent & Misc Digestive System Disorders Age>9 W/O Cat/Sev CC	16,075	9,687	7,834	3,893	3,970	719	541	399	43,118
J64B	Cellulitis (Age >59 W/O Catastrophic or Severe CC) or Age <60	11,432	7,067	8,052	4,158	2,522	540	453	1,610	35,834
O66A	Antenatal and Other Obstetric Admission	10,820	5,937	6,745	3,502	2,171	599	532	897	31,203
G66B	Abdominal Pain or Mesenteric Adenitis W/O CC	8,533	6,441	4,384	2,265	1,957	423	279	251	24,533
O60C	Vaginal Delivery Single Uncomplicated W/O Other Condition	9,019	3,583	6,618	2,133	1,562	457	395	495	24,262
E62C	Respiratory Infections/Inflammations W/O CC	9,118	4,763	4,524	2,315	1,733	477	327	583	23,840
E65B	Chronic Obstructive Airways Disease W/O Catastrophic or Severe CC	9,101	4,352	4,545	2,041	2,240	620	245	461	23,605
F62B	Heart Failure and Shock W/O Catastrophic CC	8,357	4,603	3,487	2,005	1,806	473	295	217	21,243
E69C	Bronchitis and Asthma Age <50 W/O CC	8,366	4,900	3,115	1,842	2,300	229	214	272	21,238
F71B	Non-Major Arrhythmia and Conduction Disorders W/O Catastrophic or Severe CC	8,669	4,346	4,051	1,483	1,786	403	288	170	21,196
P67D	Neonate, AdmWt >2499 g W/O Significant OR Procedure W/O Problem	11,708	3,524	3,003	819	1,029	451	242	263	21,039
U67Z	Personality Disorders and Acute Reactions	7,078	3,862	3,399	2,935	2,163	698	181	176	20,492
E65A	Chronic Obstructive Airways Disease W Catastrophic or Severe CC	7,167	5,312	3,637	1,224	1,893	293	189	353	20,068
E62B	Respiratory Infections/Inflammations W Severe or Moderate CC	7,127	4,754	3,002	1,826	1,596	358	269	652	19,584
G07B	Appendicectomy W/O Catastrophic or Severe CC	6,797	4,594	3,370	2,299	1,403	363	420	244	19,490
H08B	Laparoscopic Cholecystectomy W/O Closed CDE W/O Cat or Sev CC	6,425	5,169	3,465	1,797	1,628	323	263	152	19,222
D63B	Otitis Media and URI W/O CC	6,970	3,878	3,825	1,865	1,731	291	234	355	19,149
Total		806,544	555,856	418,960	214,047	198,181	43,409	35,664	34,634	2,307,295

Table S9.8: Overnight acute separations, for the top 20 AR-DRGs version 5.2, public hospitals, states and territories, 2008-09

AR-DRG		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
O60B	Vaginal Delivery W/O Catastrophic or Severe CC	10,927	9,394	7,460	4,123	2,419	n.p.	n.p.	n.p.	36,766
E63Z	Sleep Apnoea	10,077	9,438	9,690	1,854	3,016	n.p.	n.p.	n.p.	34,761
O01C	Caesarean Delivery W/O Catastrophic or Severe CC	7,794	6,406	7,433	3,798	1,797	n.p.	n.p.	n.p.	28,775
I16Z	Other Shoulder Procedures	6,988	6,508	6,056	4,520	2,477	n.p.	n.p.	n.p.	27,552
104Z	Knee Replacement and Reattachment	7,418	4,870	5,105	2,378	2,325	n.p.	n.p.	n.p.	23,008
D11Z	Tonsillectomy and/or Adenoidectomy	6,830	3,529	4,154	2,084	1,766	n.p.	n.p.	n.p.	19,200
G09Z	Inguinal and Femoral Hernia Procedures Age>0	5,951	4,351	3,917	1,908	1,530	n.p.	n.p.	n.p.	18,427
H08B	Laparoscopic Cholecystectomy W/O Closed CDE W/O Cat or Sev CC	5,194	3,738	4,043	1,682	1,267	n.p.	n.p.	n.p.	16,688
F42B	Circulatory Disorders W/O AMI W Invasive Cardiac Inves Proc W/O Complex DX/Pr	3,641	5,656	3,939	928	948	n.p.	n.p.	n.p.	15,428
N04Z	Hysterectomy for Non-Malignancy	4,227	2,599	3,478	1,553	1,117	n.p.	n.p.	n.p.	13,749
K04Z	Major Procedures for Obesity	3,654	2,916	2,540	2,466	1,271	n.p.	n.p.	n.p.	13,658
103C	Hip Replacement W/O Catastrophic or Severe CC	3,776	3,331	2,429	1,320	1,428	n.p.	n.p.	n.p.	12,928
U63B	Major Affective Disorders Age <70 W/O Catastrophic or Severe CC	3,509	3,284	2,428	1,686	656	n.p.	n.p.	n.p.	12,126
M02B	Transurethral Prostatectomy W/O Catastrophic or Severe CC	3,840	3,205	2,353	946	917	n.p.	n.p.	n.p.	11,686
I10B	Other Back and Neck Procedures W/O Catastrophic or Severe CC	3,626	2,508	2,400	1,663	893	n.p.	n.p.	n.p.	11,416
I18Z	Other Knee Procedures	2,304	2,556	2,273	1,751	1,771	n.p.	n.p.	n.p.	11,157
120Z	Other Foot Procedures	2,936	2,890	1,571	1,557	940	n.p.	n.p.	n.p.	10,356
D10Z	Nasal Procedures	3,465	2,618	1,362	1,379	822	n.p.	n.p.	n.p.	10,122
F15Z	Percutaneous Coronary Intervention W/O AMI W Stent Implantation	2,778	3,018	2,175	1,134	652	n.p.	n.p.	n.p.	10,051
D06Z	Sinus, Mastoid and Complex Middle Ear Procedures	3,066	1,949	1,813	1,066	1,355	n.p.	n.p.	n.p.	9,777
Total		260,688	258,873	254,922	115,178	88,856	n.p.	n.p.	n.p.	1,022,341

Table S9.9: Overnight acute separations, for the top 20 AR-DRGs version 5.2, private hospitals, states and territories, 2008–09

Procedure c	hapters	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
1–86	Procedures on nervous system	15,144	11,943	7,017	4,518	3,322	951	903	560	44,358
110–129	Procedures on endocrine system	2,358	1,798	1,074	537	512	143	99	32	6,553
160–256	Procedures on eye and adnexa	4,182	3,350	1,950	1,528	927	68	147	148	12,300
300–333	Procedures on ear and mastoid process	2,359	2,371	1,814	1,230	918	173	165	457	9,487
370–422	Procedures on nose, mouth and pharynx	10,515	12,771	6,579	4,773	4,054	740	824	362	40,618
450–490	Dental services	1,273	1,299	1,343	642	566	107	134	300	5,664
520–570	Procedures on respiratory system	25,804	22,345	14,089	7,011	6,580	1,513	1,504	1,330	80,176
600–777	Procedures on cardiovascular system	46,440	34,212	25,088	11,845	12,728	2,764	3,263	1,843	138,183
800–817	Procedures on blood and blood-forming organs	7,007	5,186	3,909	1,916	1,577	334	446	117	20,492
850–1011	Procedures on digestive system	66,275	51,644	34,399	19,138	17,806	3,695	3,197	2,027	198,181
1040–1129	Procedures on urinary system	22,489	18,227	13,475	8,093	7,076	1,175	1,466	1,773	73,774
1160–1203	Procedures on male genital organs	5,746	5,469	2,844	1,736	1,765	433	325	157	18,475
1240–1299	Gynaecological procedures	14,752	12,601	8,716	4,640	4,098	1,004	598	563	46,972
1330–1347	Obstetric procedures	60,486	42,240	36,492	19,643	12,631	3,062	3,077	2,331	179,962
1360–1579	Procedures on musculoskeletal system	56,215	42,187	30,966	18,739	13,579	4,195	3,810	2,714	172,405
1600–1718	Dermatological and plastic procedures	27,914	24,179	19,084	11,374	8,379	1,649	1,402	3,066	97,047
1740–1759	Procedures on breast	3,226	2,870	2,182	1,212	1,237	155	194	110	11,186
1786–1799	Radiation oncology procedures	2,727	2,042	1,400	622	550	185	131	0	7,657
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	460,855	341,142	231,124	128,765	117,414	26,106	22,794	17,538	1,345,738
1940–2016	Imaging services	168,983	104,537	62,965	33,763	31,243	8,028	7,376	4,883	421,778
Separations v	with no procedure reported	247,476	152,312	140,442	60,874	62,601	13,166	8,063	12,760	697,694
Total		806,544	555,856	418,960	214,047	198,181	43,409	35,664	34,634	2,307,295

Table S9.10: Overnight acute separations, by procedure in ACHI chapters, public hospitals, states and territories, 2008–09

Procedure c	hapters	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
1–86	Procedures on nervous system	11,466	10,049	8,897	6,151	3,479	n.p.	n.p.	n.p.	41,455
110–129	Procedures on endocrine system	2,492	1,346	1,435	752	505	n.p.	n.p.	n.p.	6,721
160–256	Procedures on eye and adnexa	3,438	2,126	1,753	2,573	1,106	n.p.	n.p.	n.p.	11,420
300–333	Procedures on ear and mastoid process	2,790	1,353	1,807	1,205	856	n.p.	n.p.	n.p.	8,363
370–422	Procedures on nose, mouth and pharynx	15,698	9,723	9,626	6,073	4,835	n.p.	n.p.	n.p.	48,062
450–490	Dental services	1,195	740	718	414	421	n.p.	n.p.	n.p.	3,647
520–570	Procedures on respiratory system	4,923	6,047	8,123	2,019	2,751	n.p.	n.p.	n.p.	24,330
600–777	Procedures on cardiovascular system	22,247	28,134	23,404	8,616	7,283	n.p.	n.p.	n.p.	91,838
800–817	Procedures on blood and blood-forming organs	4,140	3,451	4,056	1,552	1,399	n.p.	n.p.	n.p.	15,202
850–1011	Procedures on digestive system	35,731	34,895	37,305	16,004	12,709	n.p.	n.p.	n.p.	142,636
1040–1129	Procedures on urinary system	12,720	11,083	12,122	5,135	4,974	n.p.	n.p.	n.p.	48,016
1160–1203	Procedures on male genital organs	8,794	6,912	5,296	2,553	1,999	n.p.	n.p.	n.p.	26,717
1240–1299	Gynaecological procedures	12,656	8,398	9,825	4,453	3,833	n.p.	n.p.	n.p.	41,087
1330–1347	Obstetric procedures	22,460	19,118	18,105	9,929	5,096	n.p.	n.p.	n.p.	79,405
1360–1579	Procedures on musculoskeletal system	45,513	41,106	36,993	22,777	16,250	n.p.	n.p.	n.p.	169,931
1600–1718	Dermatological and plastic procedures	13,333	12,631	10,250	7,025	4,131	n.p.	n.p.	n.p.	49,351
1740–1759	Procedures on breast	5,564	4,525	4,145	3,401	1,919	n.p.	n.p.	n.p.	20,525
1786–1799	Radiation oncology procedures	739	627	862	117	308	n.p.	n.p.	n.p.	2,689
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	215,855	203,799	198,829	94,429	72,840	n.p.	n.p.	n.p.	817,965
1940–2016	Imaging services	20,740	33,051	31,117	10,913	10,191	n.p.	n.p.	n.p.	109,804
Separations v	with no procedure reported	23,969	30,140	35,993	10,345	10,369	n.p.	n.p.	n.p.	117,941
Total		260,688	258,873	254,922	115,178	88,856	n.p.	n.p.	n.p.	1,022,341

Table S9.11: Overnight acute separations, by procedure in ACHI chapters, private hospitals, states and territories, 2008-09

Table S9.12: Procedure statistics for the top 20 ACHI procedure blocks for overnight acute separations, public hospitals, states and territories, 2008–09

	Procedure block	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
1916	Generalised allied health interventions	301,660	220,878	147,387	81,045	75,523	17,511	14,284	10,759	869,047
1910	Cerebral anaesthesia	200,352	158,726	109,016	61,014	54,186	12,475	12,170	8,228	616,167
1952	Computerised tomography of brain	65,771	41,430	22,841	12,271	10,954	2,975	2,582	1,649	160,473
1893	Transfusion of blood and gamma globulin	44,009	33,390	19,994	11,785	10,900	2,405	2,075	1,134	125,692
1909	Conduction anaesthesia	35,610	32,718	18,698	12,187	8,612	2,620	1,599	1,744	113,788
1963	Computerised tomography of abdomen and pelvis	34,015	20,726	10,682	4,057	4,955	1,535	903	988	77,861
1920	Administration of pharmacotherapy	25,194	20,494	12,129	5,846	4,886	1,197	1,297	847	71,890
1344	Postpartum suture	23,842	14,885	11,136	5,483	4,108	973	1,517	802	62,746
1912	Postprocedural analgesia	23,482	9,552	8,336	8,590	5,677	1,687	324	148	57,796
1340	Caesarean section	18,945	13,824	11,521	5,530	4,324	1,062	883	775	56,864
1966	Other computerised tomography	19,412	12,708	8,992	4,239	4,228	922	922	529	51,952
1334	Medical or surgical induction of labour	15,749	11,506	9,060	5,163	4,153	920	759	593	47,903
738	Venous catheterisation	15,199	11,117	9,385	4,072	4,311	702	1,163	943	46,892
2015	Magnetic resonance imaging	17,671	12,540	6,963	3,692	3,748	1,046	664	470	46,794
1335	Medical or surgical augmentation of labour	15,976	10,394	9,714	4,655	3,190	764	855	622	46,170
1333	Analgesia and anaesthesia during labour and delivery procedure	14,793	9,981	8,452	6,259	4,174	888	823	311	45,681
668	Coronary angiography	14,283	9,314	7,045	3,442	3,821	1,201	901	447	40,454
569	Continuous ventilatory support	10,389	8,296	5,736	2,610	2,802	656	639	484	31,612
1959	Computerised tomography of spine	11,435	8,969	4,482	2,372	1,564	704	560	417	30,503
965	Cholecystectomy	8,767	7,306	4,759	2,395	2,322	455	391	230	26,625
Other		556,438	430,387	293,132	172,019	140,704	32,010	29,939	21,701	1,676,330
Separ	ations with no procedure reported	247,476	152,312	140,442	60,874	62,601	13,166	8,063	12,760	697,694
Total <sup>(†</sup>	)	1,472,992	1,099,141	739,460	418,726	359,142	84,708	75,250	53,821	4,303,240

Table S9.13: Procedure statistics for the top 20 ACHI procedure blocks for overnight acute separations, private hospitals, states and territories,
2008-09

Proce	dure block	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
1910	Cerebral anaesthesia	160,423	140,838	131,993	70,500	51,662	n.p.	n.p.	n.p.	579,243
1916	Generalised allied health interventions	82,210	83,310	85,749	30,796	32,341	n.p.	n.p.	n.p.	326,036
1909	Conduction anaesthesia	33,336	32,033	23,072	15,341	9,161	n.p.	n.p.	n.p.	117,008
1893	Transfusion of blood and gamma globulin	12,020	16,310	14,288	6,731	6,131	n.p.	n.p.	n.p.	57,418
1912	Postprocedural analgesia	23,299	4,932	11,194	8,572	6,578	n.p.	n.p.	n.p.	55,058
1828	Sleep study	10,930	9,704	9,939	2,143	3,603	n.p.	n.p.	n.p.	37,177
668	Coronary angiography	8,823	12,551	9,483	2,428	2,282	n.p.	n.p.	n.p.	36,413
1340	Caesarean section	9,168	7,823	8,750	4,486	2,165	n.p.	n.p.	n.p.	34,214
1920	Administration of pharmacotherapy	4,006	9,883	7,723	3,748	2,342	n.p.	n.p.	n.p.	28,447
1333	Analgesia and anaesthesia during labour and delivery procedure	8,806	6,019	5,166	4,325	2,183	n.p.	n.p.	n.p.	27,556
607	Examination procedures on ventricle	5,621	10,236	7,584	1,967	1,568	n.p.	n.p.	n.p.	27,425
412	Tonsillectomy or adenoidectomy	8,595	4,452	5,534	3,228	2,199	n.p.	n.p.	n.p.	25,107
1344	Postpartum suture	7,347	5,748	4,798	2,507	1,604	n.p.	n.p.	n.p.	23,432
1334	Medical or surgical induction of labour	6,474	5,182	4,866	3,193	1,746	n.p.	n.p.	n.p.	22,942
1518	Arthroplasty of knee	7,187	4,229	4,987	2,284	1,879	n.p.	n.p.	n.p.	21,497
965	Cholecystectomy	6,116	4,548	4,998	2,021	1,571	n.p.	n.p.	n.p.	20,167
990	Repair of inguinal hernia	6,613	4,585	4,409	2,042	1,588	n.p.	n.p.	n.p.	20,055
986	Division of abdominal adhesions	5,256	4,740	5,076	1,988	1,646	n.p.	n.p.	n.p.	19,421
1952	Computerised tomography of brain	3,095	5,934	6,249	1,384	1,858	n.p.	n.p.	n.p.	19,286
1963	Computerised tomography of abdomen and pelvis	2,554	5,631	5,077	1,472	1,039	n.p.	n.p.	n.p.	16,596
Other		333,142	301,842	282,563	151,158	112,339	n.p.	n.p.	n.p.	1,227,576
Separ	ations with no procedure reported	23,969	30,140	35,993	10,345	10,369	n.p.	n.p.	n.p.	117,941
Total <sup>(</sup>	b)	745,021	680,530	643,498	322,314	247,485	n.p.	n.p.	n.p.	2,638,848