

# 5 Ambulatory-equivalent mental health-related admitted patient care

## 5.1 Introduction

In addition to ambulatory (or non-admitted) care provided by community mental health services and hospital-based ambulatory care services (as discussed in the previous chapter), mental health care that could be considered to be equivalent to ambulatory care can be provided to patients admitted to hospital. In this chapter, information is presented on this form of care – that is, on *mental health-related* hospital *separations* that could be considered to be *ambulatory-equivalent* admitted patient care.

The data presented in this chapter are from the National Hospital Morbidity Database (NHMD). More detailed information on the NHMD is available in Appendix 1.

### Key concepts

A **separation** is defined as the process by which an episode of care for an admitted patient in hospital ceases. For more information, see Chapter 7.

A separation is classified as **ambulatory-equivalent** for this report if each of the following applies:

- the separation was a same-day separation (that is, admission and separation occurred on the same day);
- no procedure or other intervention was recorded, or any procedure recorded was identified as probably able to be provided in ambulatory mental health care; and
- the mode of admission did not include a care type change or transfer, and the mode of separation did not include a transfer (to another facility), a care type change, the patient leaving against medical advice, or death.

A separation is classified as **mental health-related** if:

- it had a mental health-related principal diagnosis which, for admitted patient care in this report, is defined as a principal diagnosis that is either a diagnosis that falls within the chapter on 'Mental and behavioural disorders' (Chapter 5) in the ICD-10-AM classification (codes F00–F99) or a number of other selected diagnoses (see Appendix 4 for the full list of applicable diagnoses); and/or
- it included any specialised psychiatric care.

A separation is classified as having **specialised psychiatric care** if the patient was reported as having spent one or more days in a specialised psychiatric unit or ward.

## 5.2 States and territories and hospital type

In 2005–06, a total of 7,311,983 separations were reported from public and private acute and psychiatric hospitals (AIHW 2007a). Of these, 4.4% (322,110) were mental health-related comprising ambulatory-equivalent and admitted patient separations (admitted patient separations are presented in Chapter 7).

There were 117,924 ambulatory-equivalent mental health-related separations reported in 2005–06, accounting for 1.6% of all separations and 36.6% (117,924 out of 322,110) of all mental health-related separations.

Table 5.1 shows the number of separations for each state and territory by hospital type. The number of separations per 1,000 population is provided to account for differences in population size between jurisdictions.

**Table 5.1: Ambulatory-equivalent mental health-related separations<sup>(a)</sup> with and without specialised psychiatric care, by hospital type, states and territories, 2005–06**

Hospital type	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>With specialised psychiatric care</b>									
Public acute hospitals	5,687	237	1,324	61	191	46	33	27	7,606
Public psychiatric hospitals	1,373	0	0	9	6	0	..	..	1,388
Private hospitals	22,091	33,200	18,630	6,851	19	n.p.	n.p.	n.p.	84,208
<i>All hospitals</i>	<i>29,151</i>	<i>33,437</i>	<i>19,954</i>	<i>6,921</i>	<i>216</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>93,202</i>
<b>Without specialised psychiatric care</b>									
Public acute hospitals	4,599	5,721	2,179	1,177	1,003	370	183	142	15,374
Public psychiatric hospitals	5	0	0	0	0	0	..	..	5
Private hospitals	275	3,697	3,232	546	13	n.p.	n.p.	n.p.	9,343
<i>All hospitals</i>	<i>4,879</i>	<i>9,418</i>	<i>5,411</i>	<i>1,723</i>	<i>1,016</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>24,722</i>
<b>Total</b>									
Public acute hospitals	10,286	5,958	3,503	1,238	1,194	416	216	169	22,980
Public psychiatric hospitals	1,378	0	0	9	6	0	..	..	1,393
Private hospitals	22,366	36,897	21,862	7,397	32	n.p.	n.p.	n.p.	93,551
<b>All hospitals</b>	<b>34,030</b>	<b>42,855</b>	<b>25,365</b>	<b>8,644</b>	<b>1,232</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>117,924</b>
<b>Rate (per 1,000 population)<sup>(b)</sup></b>									
Public acute hospitals	1.5	1.2	0.9	0.6	0.8	0.9	0.6	0.8	1.1
Public psychiatric hospitals	0.2	0.0	0.0	0.0	0.0	0.0	..	..	0.1
Private hospitals	3.3	7.2	5.4	3.6	0.0	n.p.	n.p.	n.p.	4.6
<b>All hospitals</b>	<b>5.0</b>	<b>8.4</b>	<b>6.3</b>	<b>4.2</b>	<b>0.8</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>5.8</b>

(a) Separations for which care type was reported as *Newborn* with no qualified days, and records for *Hospital boarders* and *Posthumous organ procurement* have been excluded.

(b) Rates were directly age-standardised as detailed in Appendix 2.

.. Not applicable. The Australian Capital Territory and the Northern Territory do not have any public psychiatric hospitals.

n.p. Not published. Private hospital figures for Tasmania, the Australian Capital Territory and the Northern Territory are not published due to confidentiality reasons. However, the figures are included in the national totals.

Source: National Hospital Morbidity Database.

The data show that private hospitals were the predominant providers (79.3%, 93,551 out of 117,924) of ambulatory-equivalent mental health-related admitted patient care. The number of separations reported by public psychiatric hospitals constituted 1.2% (1,393 out of 117,924) with New South Wales being the major provider (98.9%).

Specialised psychiatric care was provided in 79% of all separations (93,202 out of 117,924) primarily by private hospitals (90.3%). This was particularly significant in Victoria where private hospital separations constituted 99.3% of all separations (33,200 out of 33,437).

Public acute hospitals played a more significant role in separations without specialised psychiatric care (15,374 out of 24,722 or 62.2%).

Victoria reported the highest number of separations per 1,000 population (8.4) while South Australia has the lowest (0.8). South Australia was also the only state where public acute hospitals were the major providers of ambulatory-equivalent admitted patient care.

### 5.3 Mental health legal status

Table 5.2 shows the number of ambulatory-equivalent mental health-related separations with specialised psychiatric care by hospital type and the patient's mental health legal status. The mental health legal status of about 36% of the separations was not reported, and the majority of these separations were reported by private hospitals. Among the separations for which mental health legal status was reported, 1.7% were involuntary and 77.3% of those (799 out of 1,034) were public acute hospital separations.

**Table 5.2: Ambulatory-equivalent mental health-related separations<sup>(a)</sup> with specialised psychiatric care, by mental health legal status and hospital type, 2005–06**

Mental health legal status	Public acute hospitals	Public psychiatric hospitals	Private hospitals	Total
Involuntary	799	90	145	1,034
Voluntary	6,761	1,298	50,511	58,570
Not reported	46	0	33,552	33,598
<b>Total</b>	<b>7,606</b>	<b>1,388</b>	<b>84,208</b>	<b>93,202</b>

(a) Separations for which care type was reported as *Newborn* with no qualified days, and records for *Hospital boarders* and *Posthumous organ procurement* have been excluded.

Source: National Hospital Morbidity Database.

### 5.4 Patient demographics

Table 5.3 presents information on the number of ambulatory-equivalent mental health-related separations and the corresponding percentage of these separations for a number of demographic groups. A rate (per 1,000 population) has been provided to compare numbers of separations relative to the size of the respective population. As the data report on the number of separations rather than the number of patients, it is not possible to determine how many separations an individual patient had.

The highest proportions of ambulatory-equivalent mental health-related separations were for patients aged 35–44 years and 45–54 years (19.2% and 20.4%, respectively). However, the highest number of separations per 1,000 population was for patients aged 55–64 years (9.4).

**Table 5.3: Ambulatory-equivalent mental health-related separations<sup>(a)</sup>, by patient demographic characteristics, 2005–06**

Patient demographics	Number of separations <sup>(b)</sup>	Per cent of separations <sup>(c)</sup>	Rate (per 1,000 population) <sup>(d)</sup>
<b>Age (years)</b>			
Less than 15	6,861	5.8	1.7
15–24	15,643	13.3	5.5
25–34	16,748	14.2	5.8
35–44	22,674	19.2	7.4
45–54	23,998	20.4	8.5
55–64	20,836	17.7	9.4
65+	11,164	9.5	4.2
<b>Sex</b>			
Male	45,057	38.2	4.3
Female	72,867	61.8	7.0
<b>Indigenous status<sup>(e)</sup></b>			
Indigenous Australians	1,477	1.3	3.4
Other Australians <sup>(f)</sup>	110,818	98.7	5.7
<b>Country of birth</b>			
Australia	93,284	84.2	6.3
Overseas	17,509	15.8	3.0
<b>Remoteness area of usual residence</b>			
Major cities	97,728	84.7	7.1
Inner regional	13,718	11.9	3.2
Outer regional	3,229	2.8	1.6
Remote	467	0.4	1.5
Very remote	215	0.2	1.2
<b>Marital status<sup>(g)</sup></b>			
Never married	37,689	41.0	..
Widowed	4,353	4.7	..
Divorced	6,244	6.8	..
Separated	4,146	4.5	..
Married	39,486	43.0	..
<b>Total</b>	<b>117,924</b>	<b>100.0</b>	<b>5.8</b>

(a) Separations for which care type was reported as *Newborn* with no qualified days, and records for *Hospital boarders* and *Posthumous organ procurement* have been excluded.

(b) The numbers of separations for each demographic variable may not sum to the total due to missing and/or not reported data.

(c) The percentages shown do not include those service contacts for which the demographic information was missing and/or not reported.

(d) Rates were directly age-standardised, with the exception of age which is a crude rate, as detailed in Appendix 2.

(e) Only Indigenous status data for New South Wales, Victoria, Queensland, Western Australia, South Australia and public hospitals in the Northern Territory have been included in this table as they are the only jurisdictions which consider the data to be of sufficient quality for analysis. However, caution should be used in the interpretation of these data due to jurisdictional data quality differences. The data does not necessarily represent the national trend.

(f) Includes separations where Indigenous status was missing or not reported (see AIHW 2005b).

(g) Information on this data element was missing or not reported for more than 20% of separations.

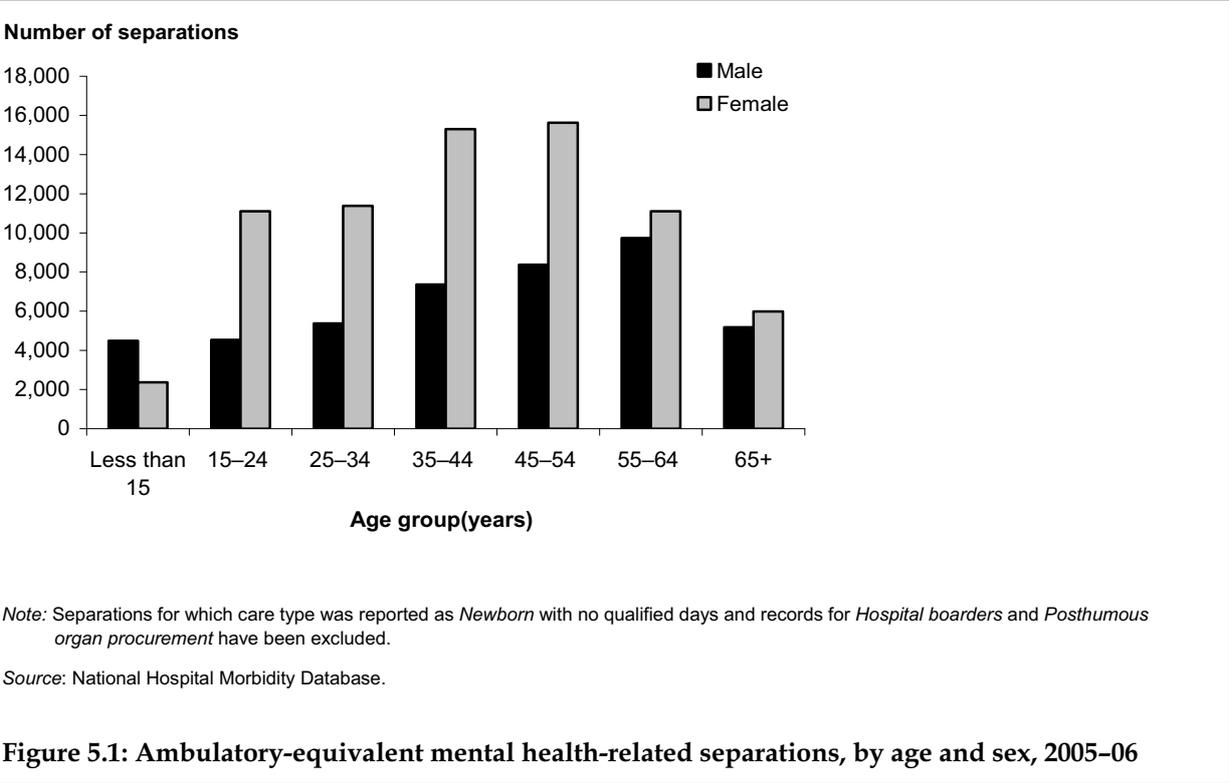
.. Not applicable.

Source: National Hospital Morbidity Database.

The separation rate for females (7.0 per 1,000 population) was nearly double that of males (4.3). Likewise, the rate of separations of Australian-born patients (6.3) was more than twice that of those born overseas (3.0).

The data show that the typical separation involves a patient who is an Australian-born non-Indigenous female, aged 35–54 years, who is or was married at some stage of her life and lives in a major city.

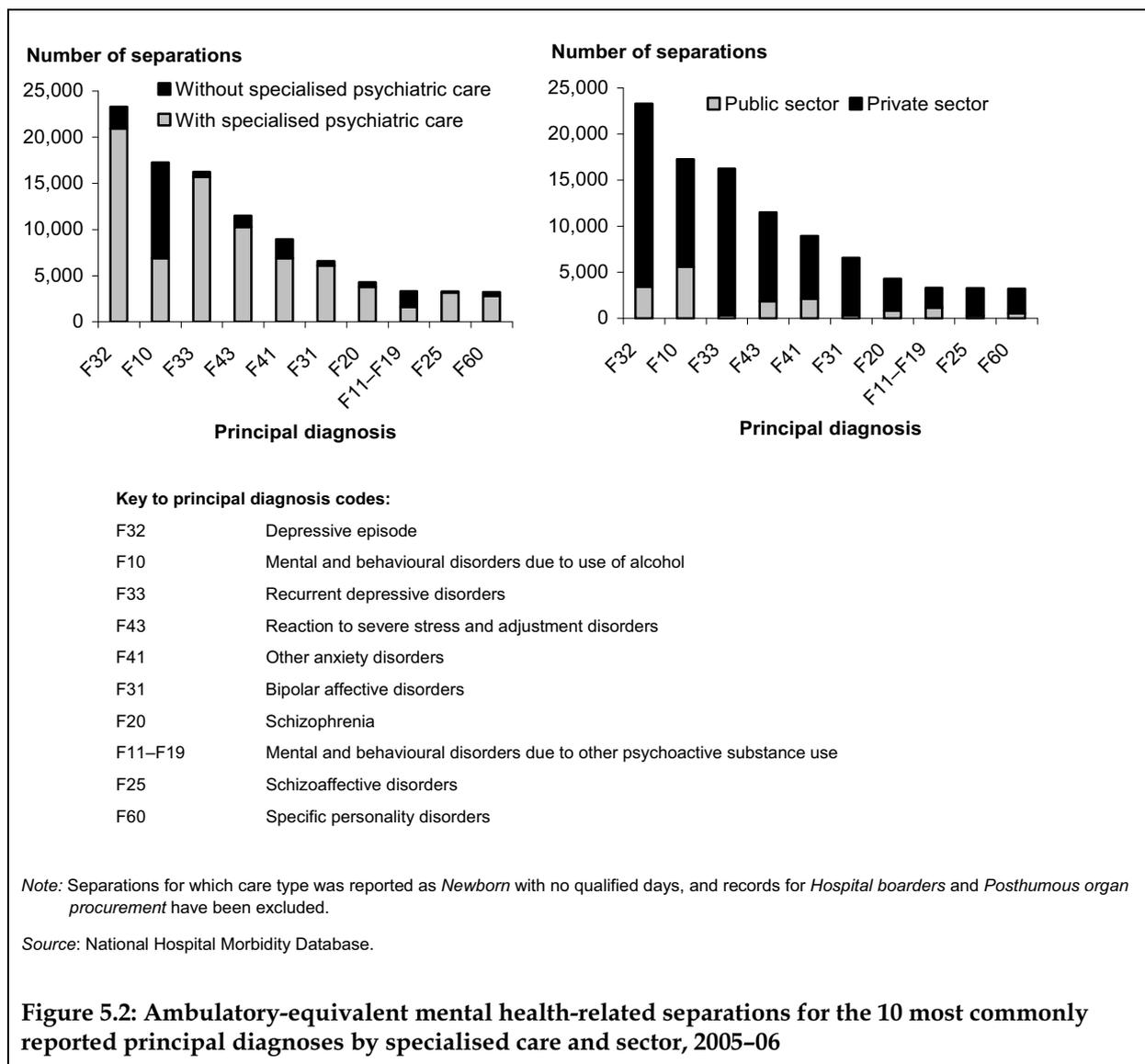
Figure 5.1 shows the number of ambulatory-equivalent mental health-related separations by age and sex. The dominance of female separations was noticeable in those aged 15–54 years. The differences evened out in separations involving people aged 55 and older. The situation was reversed in the less than 15 years age group, where male separations were dominant.



## 5.5 Principal diagnosis

Principal diagnosis refers to the diagnosis deemed to be chiefly responsible for the patient’s episode of admitted patient care. Table 5.4 shows the distribution of ambulatory-equivalent mental health-related separations by principal diagnosis, broken down by hospital type and whether they involved specialised psychiatric care. Diagnoses are classified according to the *International Statistical Classification of Diseases and Related Health Problems, 10th revision, Australian Modification (ICD-10-AM)*, 4th edition. Further information on this classification is included in Appendix 3.

In 2005–06, the principal diagnosis of *Depressive episode (F32)* accounted for the largest number of separations (23,296 or 19.8%) across all hospitals and all separations with and without specialised psychiatric care. However, for separations that did not involve specialised care, *Mental and behavioural disorders due to use of alcohol (F10)* was the leading principal diagnosis.



The majority of separations reported by public psychiatric hospitals involved the diagnoses of *Conduct disorders* (F91) and *Other and unspecified disorders with onset in childhood or adolescence* (F92–F98).

Figure 5.2 shows the 10 most commonly reported principal diagnoses by specialised care and sector. Mental disorders with an affective component featured prominently with *Depressive disorders* (F32 and F33) among the top three diagnoses. For most of the commonly reported diagnoses, the majority of separations involved specialised psychiatric care. *Recurrent depressive disorders* (F33) was the principal diagnosis with the highest proportion of separations with specialised psychiatric care (96.6%). *Mental and behavioural disorders due to use of alcohol or other psychoactive substance use* (F10 and F11–F19) were the only commonly reported principal diagnoses having a markedly higher proportion of separations that did not involve specialised psychiatric care (60% and 51%, respectively). These were also the two principal diagnoses with higher proportions of separations reported by the public sector (more than 30%). The private sector accounted for the majority of separations for all the commonly reported diagnoses.

**Table 5.4: Ambulatory-equivalent mental health-related separations<sup>(a)</sup> with and without specialised psychiatric care, by principal diagnosis and hospital type, 2005–06**

Principal diagnosis	Public acute hospitals		Public psychiatric hospitals		Private hospitals		Total separations
	Public acute hospitals	Public psychiatric hospitals	Private hospitals	Total specialised psychiatric care	Total separations		
F00–F03	1	0	80	81	0.1		
F04–F09	8	0	203	211	0.2		
F10	214	52	6,634	6,900	7.4		
F11–F19	92	7	1,508	1,607	1.7		
F20	362	14	3,398	3,774	4.0		
F21, F24, F28, F29	37	0	335	372	0.4		
F22	18	1	244	263	0.3		
F23	19	6	149	174	0.2		
F25	224	6	2,937	3,167	3.4		
F30	8	0	69	77	0.1		
F31	149	4	5,956	6,109	6.6		
F32	2,252	5	18,661	20,918	22.4		
F33	264	2	15,446	15,712	16.9		
F34	79	2	1,261	1,342	1.4		
F38–F39	43	2	118	163	0.2		
F40	153	0	457	610	0.7		
F41	560	23	6,315	6,898	7.4		
F42	76	0	843	919	1.0		
F43	825	38	9,402	10,265	11.0		
F44	20	0	807	827	0.9		
F45, F48	81	0	144	225	0.2		
F50	8	0	2,286	2,294	2.5		
F51–F59	9	0	266	275	0.3		
F60	209	14	2,575	2,798	3.0		
F61–F69	10	2	174	186	0.2		
F70–F79	8	1	0	9	0.0		
F80–F89	149	20	70	239	0.3		
F90	257	82	13	352	0.4		
F91	685	717	31	1,433	1.5		
F92–F98	304	336	31	671	0.7		
F99	9	2	31	42	0.0		
G30	0	0	107	107	0.1		
	149	43	18	210	0.2		
	15	2	1	18	0.0		
	309	7	3,638	3,954	4.2		
<b>Total</b>	<b>7,606</b>	<b>1,388</b>	<b>84,208</b>	<b>93,202</b>			

(continued)

**Table 5.4 (continued): Ambulatory-equivalent mental health-related separations<sup>(a)</sup> with and without specialised psychiatric care, by principal diagnosis and hospital type, 2005-06**

Principal diagnosis	Public acute hospitals	Public psychiatric hospitals	Private hospitals	Total separations	Per cent of separations
	Without specialised psychiatric care				
F00-F03	97	0	2	99	0.4
F04-F09	85	1	2	88	0.4
F10	5,322	1	5,042	10,365	41.9
F11-F19	1,061	1	634	1,696	6.9
F20	471	0	45	516	2.1
F21, F24, F28, F29	129	0	0	129	0.5
F22	93	0	1	94	0.4
F23	111	0	0	111	0.4
F25	66	0	63	129	0.5
F30	24	0	3	27	0.1
F31	196	0	258	454	1.8
F32	1,180	1	1,197	2,378	9.6
F33	78	0	471	549	2.2
F34	51	0	26	77	0.3
F38-F39	13	0	13	26	0.1
F40	7	0	57	64	0.3
F41	1,527	0	505	2,032	8.2
F42	21	0	25	46	0.2
F43	999	0	240	1,239	5.0
F44	138	0	1	139	0.6
F45, F48	74	0	3	77	0.3
F50	327	0	53	380	1.5
F51-F59	54	0	53	107	0.4
F60	332	0	81	413	1.7
F61-F69	28	0	15	43	0.2
F70-F79	30	0	0	30	0.1
F80-F89	33	0	1	34	0.1
F90	12	0	0	12	0.0
F91	94	0	0	94	0.4
F92-F98	47	0	0	47	0.2
F99	36	0	0	36	0.1
G30	27	0	1	28	0.1
	106	1	1	108	0.4
	2,505	0	550	3,055	12.4
<b>Total</b>	<b>15,374</b>	<b>5</b>	<b>9,343</b>	<b>24,722</b>	<b>100</b>

(continued)

**Table 5.4 (continued): Ambulatory-equivalent mental health-related separations<sup>(a)</sup> with and without specialised psychiatric care, by principal diagnosis and hospital type, 2005–06**

Principal diagnosis	Public acute psychiatric hospitals		Public psychiatric hospitals		Private hospitals	Total	Per cent of separations
	hospitals	hospitals	hospitals	hospitals			
F00–F03	98	0	82	180	0.2		
F04–F09	93	1	205	299	0.3		
F10	5,536	53	11,676	17,265	14.6		
F11–F19	1,153	8	2,142	3,303	2.8		
F20	833	14	3,443	4,290	3.6		
F21, F24, F28, F29	166	0	335	501	0.4		
F22	111	1	245	357	0.3		
F23	130	6	149	285	0.2		
F25	290	6	3,000	3,296	2.8		
F30	32	0	72	104	0.1		
F31	345	4	6,214	6,563	5.6		
F32	3,432	6	19,858	23,296	19.8		
F33	342	2	15,917	16,261	13.8		
F34	130	2	1,287	1,419	1.2		
F38–F39	56	2	131	189	0.2		
F40	160	0	514	674	0.6		
F41	2,087	23	6,820	8,930	7.6		
F42	97	0	868	965	0.8		
F43	1,824	38	9,642	11,504	9.8		
F44	158	0	808	966	0.8		
F45, F48	155	0	147	302	0.3		
F50	335	0	2,339	2,674	2.3		
F51–F59	63	0	319	382	0.3		
F60	541	14	2,656	3,211	2.7		
F61–F69	38	2	189	229	0.2		
F70–F79	38	1	0	39	0.0		
F80–F89	182	20	71	273	0.2		
F90	269	82	13	364	0.3		
F91	779	717	31	1,527	1.3		
F92–F98	351	336	31	718	0.6		
F99	45	2	31	78	0.1		
G30	27	0	108	135	0.1		
	255	44	19	318	0.3		
	2,520	2	551	3,073	2.6		
	309	7	3,638	3,954	3.4		
<b>Total</b>	<b>22,980</b>	<b>1,393</b>	<b>93,551</b>	<b>117,924</b>	<b>100</b>		

(a) Separations for which care type was reported as *Newborn* with no qualified days, and records for *Hospital boarders* and *Posthumous organ procurement* have been excluded.

(b) Includes ICD-10-AM codes Z00.4, Z03.2, Z04.6, Z09.3, Z13.3, Z54.3, Z63.1, Z63.8, Z63.9, Z65.8, Z65.9, Z71.4, Z71.5 and Z76.0.

(c) Includes separations for which the principal diagnosis was any other mental health-related principal diagnosis as listed in Appendix 4.

(d) Includes all other codes not included as a mental health principal diagnosis as listed in Appendix 4.

Source: National Hospital Morbidity Database.

## 5.6 Procedures

Table 5.5 details the number of separations relating to the 10 procedures (or interventions) most frequently reported for ambulatory-equivalent mental health-related hospital separations. The procedures are classified according to the *Australian Classification of Health Interventions, 5th edition*. Further information on the classification is included in Appendix 3.

A total of 59,252 procedures were reported in relation to 48,875 separations. This reflects the fact that more than one procedure can be reported for each separation, with an average of 1.2 procedures being reported. No procedures were reported for 58.6% (69,049 out of 117,924) of the separations. The most frequently reported procedures were *Cognitive behaviour therapy* (15,827 procedures for 15,820 separations). Psychotherapies of various forms were often reported among the other procedures.

**Table 5.5: The 10 most frequently reported procedures for ambulatory-equivalent mental health-related separations<sup>(a)</sup>, 2005–06**

Procedure	Procedures <sup>(b)</sup>		Separations <sup>(b) (c)</sup>	
	Number	Per cent	Number	Per cent
96101–00 Cognitive behaviour therapy	15,827	26.7	15,820	13.4
96001–00 Psychological skills training	6,483	10.9	6,476	5.5
95550–10 Allied health intervention, psychology	5,279	8.9	5,279	4.5
96180–00 Other psychotherapies or psychosocial therapies	4,090	6.9	4,085	3.5
96073–00 Substance addiction counselling or education	3,883	6.6	3,875	3.3
96090–00 Other counselling or education	3,385	5.7	3,385	2.9
92002–00 Alcohol rehabilitation	3,364	5.7	3,360	2.8
95550–02 Allied health intervention, occupational therapy	2,957	5.0	2,957	2.5
96185–00 Supportive psychotherapy, not elsewhere classified	2,087	3.5	2,084	1.8
96177–00 Interpersonal psychotherapy	1,619	2.7	1,617	1.4
Other reported procedures	10,278	17.3	10,256	8.7
<b>Totals</b>				
Number of separations with at least one procedure	..	..	48,875	41.4
No procedure reported	..	..	69,049	58.6
<b>Total</b>	<b>59,252</b>	<b>100.0</b>	<b>117,924</b>	<b>100.0</b>

(a) Separations for which care type was reported as *Newborn* with no qualified days, and records for *Hospital boarders* and *Posthumous organ procurement* have been excluded.

(b) The number of procedures may not equal the number of separations, as the same procedure may have been performed more than once for each separation.

(c) The sum of the number of separations is not necessarily equivalent to the total, as multiple procedures can be reported for each separation.

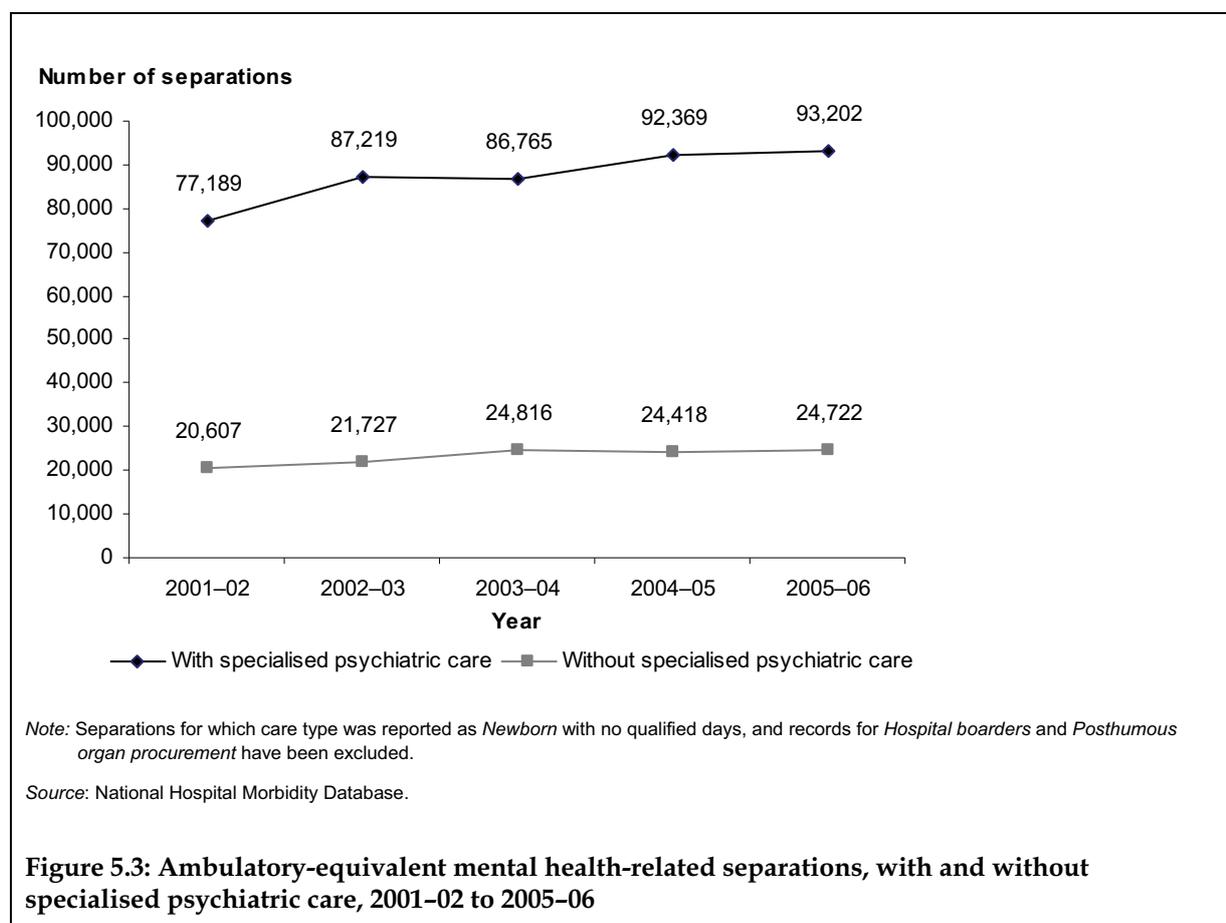
.. Not applicable.

Source: National Hospital Morbidity Database.

## 5.7 Change over time, 2001–02 to 2005–06

Figure 5.3 depicts the number of ambulatory-equivalent mental health-related separations, with and without specialised care from 2001–02 to 2005–06. It should be noted that the scope of the data collection and the actual definitions used by the data providers may vary from year to year. Consequently, caution should be exercised when making comparisons between reporting years.

The total number of ambulatory-equivalent mental health-related separations increased by 20.6% between 2001–02 (97,796) and 2005–06 (117,924). Separations involving specialised psychiatric care increased by 20.7% during the same period. A similar increase (20.0%) was observed for separations without specialised psychiatric care.



## 5.8 Additional data

Additional tables containing data on ambulatory-equivalent mental health-related separations are available from the AIHW website. Additional data on ambulatory-equivalent mental health-related separations from the NHMD can also be accessed via interactive data cubes on the AIHW website. The data cubes allow users to create customised tables based on the number of separations by age group, sex, sector, mental health legal status and year and type of separation, for each principal diagnosis. Section 1.5 details how to access these additional resources.