4   Other sources of information

This chapter presents an overview of service use data obtained from mental health service delivery environments outside the admitted patient services already dealt with in preceding chapters. The focus of this publication has been those people who receive mental health care services in an admitted patient facility. There is, however, a range of health professionals who provide mental health care services in non-admitted patient settings, including general practitioners, consultant psychiatrists and various allied health professionals. The activity of these health professionals represents a significant component of mental health care service delivery in Australia and is useful to consider in comparison to admitted patient service use. This chapter has drawn on data from a number of sources including the Bettering the Evaluation and Care of Health (BEACH) study (Britt et al. 1999), the People Living with Psychotic Illness Study (Jablensky et al. 1999), and the Health Insurance Commission Medicare records. The relevant details of each data source are outlined throughout this chapter.

4.1 Mental health care in general practice

This section details relevant mental health findings from the first year (1998–99) of a study of general practice activity in Australia (known as BEACH). The survey is a collaborative study between the AIHW and the University of Sydney. The BEACH program has three primary aims:

- to provide a reliable and valid data collection process for general practice that is responsive to the needs of information users;

- to establish an ongoing database of general practitioner/patient encounter information; and

- to assess patient risk factors and health states and the relationship between these factors and health service activity (Britt et al. 1999).

The survey collection began on 1 April 1998 and data are now available for the first twelve months.

The sample comprised 984 general practitioners who each reported details of 100 consecutive general practitioner–patient encounters of all types on structured paper encounter forms. Each form collected information about the consultation (e.g. date, type of consultation), the patient (e.g. date of birth, sex, and reasons for encounter), the patient's presenting problems (e.g. diagnoses, status of each problem), and the management for each problem (e.g. treatment provided, prescriptions, referrals). Patient risk factors and health states data, and general practitioner characteristic data were also collected.

In total there were 98,400 encounters recorded, and 96,901 encounters included in the analysis[3]. There was at least one diagnosis or problem identified for each encounter, although up to four problems could be diagnosed for each patient. In total, there were 140,824 problems managed (i.e., the number of problems recorded by general practitioners that they would act upon in treatment, referral, etc.). Problems were coded according to ICPC-2 PLUS, an extension of the International Classification of Primary Care, 2nd Edition (ICPC-2). For the total problems managed during the survey period, 10,142 (7%) were mental health problems (defined here as those problems coded under the broader ICPC-2

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[3] The data were weighted to reduce the impact of possible sampling bias.

'psychological' classification), which include alcohol and other drug-related problems (Britt et al. 1999).

Patient reasons for encounter

For each encounter, patients could list up to three reasons for the encounter (RFE). RFEs are those concerns and expectations that patients bring to the doctor, which may be in the form of symptoms and complaints or requests for services or treatment (Britt et al. 1999). RFEs were also coded using ICPC-2 PLUS. There was a total of 141,766 RFEs reported at a rate of 146.3 per 100 encounters. The most frequent RFE was a request for a checkup, at a rate of 13.7 per 100 encounters, followed by a prescription request (8.2 per 100 encounters), and cough (6.2 per 100 encounters).

A total of 7,374 RFEs (5% of all RFEs) were for a mental health problem at a rate of 7.6 per 100 encounters. Depression was the mental health problem most frequently given by patients as a reason for their general practice consultation (accounting for 1% of all RFEs). Sleep disturbance and anxiety were the next most common mental health problems cited by patients (Table 4.1.1).

Table 4.1.1: Number of patient reasons for encounter (RFE) by most frequently provided mental health reasons

ICPC-2 descriptor	RFE	Number	Per cent total RFEs[a] (N=141,766)	Per cent MH RFEs[b] (N=7,374)	Rate per 100 encounters (N=96,901)
P03, P76	Depression[c]	2,047	1.4	27.8	2.1
P06	Sleep disturbance	1,149	0.8	15.6	1.2
P01, P74	Anxiety[c]	1,093	0.8	14.8	1.1
P02	Acute stress reaction	572	0.4	7.8	0.6
P19	Drug abuse	382	0.3	5.2	0.4
P50	Prescription request/renewal	329	0.2	4.5	0.3
P17	Tobacco abuse	159	0.1	2.2	0.2
P72	Schizophrenia	146	0.1	2.0	0.2
P70	Dementia	140	0.1	1.9	0.1
P29	Unspecified psychological complaint	134	0.1	1.8	0.1
Total		**6,151**	**4.4**	**83.4**	**6.3**

(a)   Percentage of all RFEs, not just mental health.

(b)   Percentage of RFEs that were mental health problems.

(c)   Includes multiple ICPC-2 codes.

Note: Abbreviations: MH—mental health.

Source: BEACH 1998–99.

Mental health problems managed

A problem managed is a formal statement of the doctor's understanding of a health problem presented by the patient, which may at times be limited to the level of presenting symptoms. For each patient encounter up to four problems could be recorded by the GP (Britt et al. 1999).

General practitioners managed a diverse range of mental health problems at a rate of 10.5 per 100 encounters. Depression was the most frequently managed mental health problem, accounting for approximately 33% of all mental health problems managed and 2% of all

managed problems. The problems of anxiety (16%) and sleep disturbance (16%) were the next most frequently managed mental health problems (see Table 4.1.2).

Sex

Table 4.1.2 presents the sex breakdown and number of problems managed for mental health problems identified according to ICPC-2 codes. Table 4.1.2 shows that of the 10,142 mental health problems managed, 3,873 (38%) were recorded for male patients and 6,133 (61%) were recorded for female patients. Patient sex was not recorded for approximately 1% of mental health problems.

Mental health problems accounted for 7% of all problems managed for female patients, and 7% of all problems managed for male patients. The frequency of depression was particularly high for females with the problem accounting for 3% of all problems managed for female patients. Depression was also the most frequently managed mental health problem for males, accounting for 2% of all problems managed for male patients. In general, the problem of depression accounted for 33 out of every 100 mental health problems managed by general practitioners.

Age group

The rates per 100 encounters for mental health problems managed by specific age groups is presented in Figure 4.1.1. This figure shows that the rate per 100 encounters was highest for the 25–44-year-old age group (3.6), followed by the 45–64-year-old age group (2.9). The rates were relatively low in the other age groups.
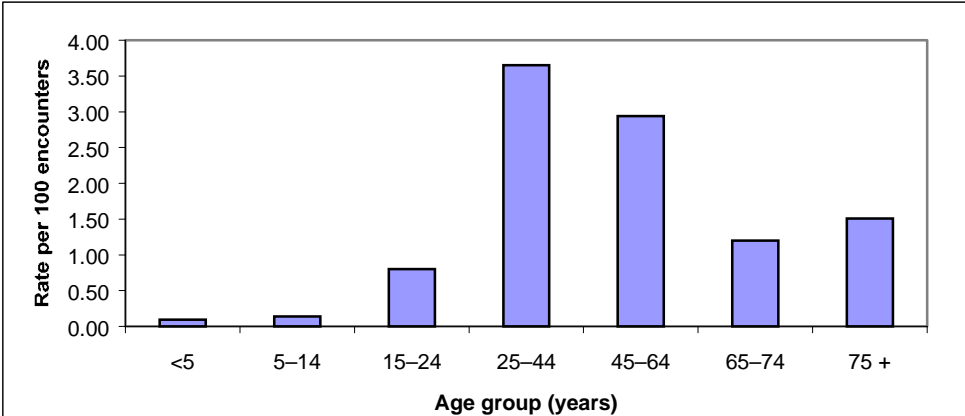
Source: BEACH 1998–99.

Figure 4.1.1: Mental health problems managed per 100 encounters, by age group

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Table 4.1.2: Number of problems managed for mental health problems by sex

ICPC-2 descriptor	Mental health problem	Males			Females			Total problems[a]		
		Number	Per cent[b]	Rate per 100 MH probs managed	Number	Per cent[b]	Rate per 100 MH probs managed	Number	Per cent[b]	Rate per 100 MH probs managed
P03, P76	Depression[c]	1,067	1.9	10.52	2,254	2.8	22.2	3,367	2.4	33.2
P01, P74	Anxiety[c]	543	1.0	5.36	1,074	1.3	10.6	1,638	1.2	16.2
P06	Sleep disturbance	588	1.0	5.80	984	1.2	9.7	1,579	1.1	15.6
P02	Acute stress reaction	159	0.3	1.56	413	0.5	4.1	584	0.4	5.8
P19	Drug abuse	297	0.5	2.93	200	0.3	2.0	500	0.4	4.9
P70	Dementia	128	0.2	1.26	216	0.3	2.1	350	0.2	3.4
P72	Schizophrenia	192	0.3	1.90	145	0.2	1.4	345	0.2	3.4
P15, P16	Alcohol abuse[c]	206	0.4	2.03	75	0.1	0.7	288	0.2	2.8
P17	Tobacco abuse	145	0.3	1.43	128	0.2	1.3	275	0.2	2.7
P73	Affective psychosis	41	0.1	0.41	90	0.1	0.9	132	0.1	1.3
P29	Psychological symptom	41	0.1	0.40	54	0.1	0.5	96	0.1	0.9
P22, P23	Child/adolescent behaviour complaint[c]	42	0.1	0.41	40	0.1	0.4	85	0.1	0.8
P07–P09	Sexual problems[c]	49	0.1	0.49	34	<0.1	0.3	84	0.1	0.8
P82	Post-traumatic stress disorder	48	0.1	0.47	33	<0.1	0.3	82	0.1	0.8
P79	Phobia, compulsive disorder	27	<0.1	0.27	49	0.1	0.5	80	0.1	0.8
P50	Medication, treatment procedures	25	<0.1	0.24	45	0.1	0.4	72	0.1	0.7
P81	Hyperkinetic disorder	54	0.1	0.53	10	<0.1	0.1	64	<0.1	0.6
P80	Personality disorder	27	0.1	0.27	33	<0.1	0.3	61	<0.1	0.6
P18	Medication abuse	18	<0.1	0.18	31	<0.1	0.3	52	<0.1	0.5
P20	Memory disturbance	22	<0.1	0.21	25	<0.1	0.3	50	<0.1	0.5
P75	Somatisation disorder	14	<0.1	0.14	30	<0.1	0.3	45	<0.1	0.4
P30, P31	Screening & preventative procedures[c]	26	<0.1	0.25	16	<0.1	0.2	42	<0.1	0.4
P28	Psychological disability	13	<0.1	0.12	19	<0.1	0.2	33	<0.1	0.3
	Other[c]	102	0.2	1.01	134	0.2	1.3	240	0.2	2.4
Subtotal of mental health problems		*3,873*	*6.5*		*6,133*	*7.3*		*10,142*	*6.9*	
Total problems[d]		**57,221**	**40.6**		**81,548**	**57.9**		**140,824**	**100.0**	

(a)   Persons includes data for which the sex was missing, therefore figures may total more than combination of male and female numbers.

(b)   Percentage of all problems managed, not just mental health.

(c)   Includes multiple ICPC-2 codes.

(d)   All problems managed, not just mental health.

Note: Abbreviations: MH—mental health, probs—problems.

Source: BEACH 1998–99.

Referrals to other professionals

For every problem managed, GPs could record up to two referrals, which included referrals to medical specialists, allied health professionals, and to hospitals (Britt et al. 1999). The total number of referrals recorded was 10,860 (4,604 for male patients and 6,118 for female patients) made at a rate of 11.2 per 100 encounters. Most referrals were made to medical specialists (71%), which included psychiatrists (accounting for 3% of all referrals).

Approximately 843 (8%) of all referrals were made in response to mental health problems at a rate of 0.9 per 100 encounters. Only 590 of these referrals were made to specialist mental health service providers (Table 4.1.3). Table 4.1.3 shows that most referrals for a mental health specialist were to a private psychiatrist, at a rate of 2.7 per 100 mental health problems managed, followed by referrals to a psychologist at a rate of 1.4 per 100 mental health problems managed.

Table 4.1.3: Number and type of referrals for specialist mental health services made by GPs

Type of service	Number	Per cent of refs (N=10,860)[a]	Per cent of refs to MH services (N=590)	Rate per 100 MH probs managed (N=10,142)
Referral to psychiatrist (private)	270	2.5	45.8	2.7
Referral to psychologist	141	1.3	23.9	1.4
Referral to drug & alcohol treatment	70	0.7	11.9	0.7
Referral to counsellor	50	0.5	8.5	0.5
Referral to mental health team	25	0.2	4.2	0.2
Referral to psychiatrist (hospital)	12	0.1	2.0	0.1
Referral to psychiatrist (clinic)	12	0.1	2.0	0.1
Referral to hypnotherapy	8	0.1	1.4	0.1
Other	2	<0.1	0.3	<0.1
Total	**590**	**5.5**	**100.0**	

(a)   Percentage of all referrals made, not just for mental health problems.

Note: Abbreviations: MH—mental health, refs—referrals, probs—problems.

Source: BEACH 1998–99.

Table 4.1.4 presents the number of referrals by sex made for the most frequently managed mental health problems, and shows that depression was the mental health problem that GPs most frequently referred to other professionals. Depression accounted for 3% of all referrals made, with 9 out of every 100 patients being managed for depression given a referral to another professional. Referrals for other mental health problems were made by general practitioners relatively infrequently, however, patients being managed for the problems of drug abuse (a rate of 12.2 per 100) or dementia (10.3 per 100) were more likely to be given a referral than patients being managed for depression.

Table 4.1.4: Number of referrals [a] made for most frequently managed mental health problems by sex

ICPC-2 descriptor	MH problem	Males		Females		Total referrals[b]		
		Number	Per cent refs (N=4,604)[c]	Number	Per cent refs (N=6,118)[c]	Number	Per cent all refs (N=10,860)[c]	Rate per 100 of each MH prob managed
P03, P76	Depression[d]	102	2.2	203	3.3	305	2.8	9.0
P01, P74	Anxiety[d]	35	0.8	55	0.9	91	0.8	5.6
P06	Sleep disturbance	42	0.9	26	0.4	69	0.6	4.4
P19	Drug abuse	38	0.8	22	0.4	61	0.6	12.2
P02	Acute stress reaction	11	0.2	30	0.5	42	0.4	7.2
P70	Dementia	14	0.3	22	0.4	36	0.3	10.3
Total		**242**	**5.2**	**358**	**5.9**	**604**	**5.5**	

(a)   Includes referrals to specialists, allied health professionals, and hospitals.

(b)   Persons includes data for which the sex was missing, therefore figures may total more than combination of male and female numbers.

(c)   Percentage of all referrals made, not just for mental health problems.

(d)   Includes multiple ICPC-2 PLUS codes.

Note: Abbreviations: MH—mental health, refs—referrals.

Source: BEACH 1998–99.

Non-pharmacological treatment for mental health problems

For each problem managed, GPs could record up to two non-pharmacological treatments provided. These were divided into the categories of clinical treatments (e.g. advice and counselling) and procedural treatments (e.g. removal of sutures, application/removal of plaster) (Britt et al. 1999). A total of 41,839 non-pharmacological treatments were recorded for all encounters (a rate of 43.0 per 100 encounters). Clinical treatments were considerably more common than procedural treatments. A total of 4,436 treatments (11%) were coded as psychological treatment, with psychological counselling making up 8% of all non-pharmacological treatments, followed by psychological advice and education with 2%. Table 4.1.5 presents the number and type of psychological treatments administered by GPs.

Table 4.1.5: Number and type of psychological treatments[a] administered by GPs

ICPC-2(+) Descriptor	Psychological treatment	Number	Per cent of treatments (N=41,839)[b]	Rate per 100 MH probs managed (N=10,142)
P58	Counselling—psychological	3,358	8.1	33.1
P45	Advice/education/observe/wait	976	2.3	9.6
P58 (002)	Psychotherapy	76	0.2	0.7
	Other[c]	26	0.1	0.3
Total		**4,436**	**10.7**	

(a)   Non-pharmacological treatments.

(b)   Total of all non-pharmacological treatments, not just for mental health problems.

(c)   Includes multiple ICPC–2 codes.

Note: Abbreviations: MH—mental health, probs—problems.

Source: BEACH 1998–99.

Table 4.1.6: Number of psychological treatments provided by GPs for the mental health problems most frequently managed by these treatments

ICPC-2 Descriptor	Mental health problem	Number	Per cent total treatments (N=41,839)[a]	Per cent treatment for MH probs (N=4,436)	Rate per 100 of each MH prob managed
P03, P76	Depression[b]	1,668	4.0	37.6	49.5
P01, P74	Anxiety[b]	799	1.9	18.0	48.8
P02	Acute stress reaction	486	1.2	11.0	83.2
P06	Sleep disturbance	290	0.7	6.5	18.4
P17	Tobacco abuse	203	0.5	4.6	73.8
P19	Drug abuse	198	0.5	4.5	39.6
P15, P16	Alcohol abuse[b]	195	0.5	4.4	71.0
P72	Schizophrenia	95	0.2	2.1	27.5
P70	Dementia	78	0.2	1.8	22.3
P29	Unspecified psychological symptom	53	0.1	1.2	55.2
Total		**4,065**	**9.7**	**91.6**	

(a)   All non-pharmacological treatments, not just for mental health problems.

(b)   Includes multiple ICPC-2 PLUS codes.

Note: Abbreviations: MH—mental health, probs—problems.

Source: BEACH 1998–99.

Table 4.1.6 presents the number of treatments provided for the top ten problems for which psychological treatment was provided. Table 4.1.6 shows that the problem most commonly managed with psychological treatments was depression, accounting for 38% of problems managed with psychological treatment (4% of all non-pharmacological treatments provided), at a rate of 49.5 per 100 depression problems managed. This was followed by anxiety (18% of problems managed with psychological treatment) and acute stress reaction (11%). General practitioners were most likely to provide psychological treatment for the problems of acute stress reaction (83.2 per 100), followed by tobacco abuse (73.8 per 100), and alcohol abuse (71.0 per 100).

Medications for mental health problems

For each problem managed the survey form allowed the recording of up to four drugs that could be prescribed, recommended for 'over the counter' purchase or supplied by the GP (Britt et al. 1999). Most medications were prescribed (85%). GPs provided a total of 90,710 prescriptions, with 6,894 prescriptions for treatment of mental health problems (8%) at a rate of 7.1 per 100 encounters.

Table 4.1.7: Number of prescriptions provided for mental health problems most frequently managed by medication

ICPC-2 descriptors	Mental health problem	Number	Per cent of scripts (N=90,710)[a]	Per cent scripts for MH probs (N=6,894)	Rate per 100 MH probs managed (N=10,142)
P03, P76	Depression[b]	2,626	2.9	38.1	25.9
P06	Sleep disturbance	1,421	1.6	20.6	14.0
P01, P74	Anxiety[b]	1,098	1.2	15.9	10.8
P19	Drug abuse	417	0.5	6.0	4.1
P72	Schizophrenia	328	0.4	4.8	3.2
P73	Affective psychosis	143	0.2	2.1	1.4
P02	Acute stress reaction	122	0.1	1.8	1.2
P70	Dementia	118	0.1	1.7	1.2
P17	Tobacco abuse	123	0.1	1.8	1.2
P15, P16	Alcohol abuse[b]	82	0.1	1.2	0.8
Total		**6,478**	**7.2**	**94.0**	

(a) Percentage of all prescriptions, not just for mental health.

(b) Includes multiple ICPC-2 codes.

Note: Abbreviations: scripts—prescriptions, MH—mental health, probs—problems.

Source: BEACH 1998–99.

Table 4.1.7 shows that depression was the mental health problem that most prescriptions were provided for, accounting for 3% of total prescriptions, at a rate of 25.9 per 100 mental health problems managed. Medication was also frequently prescribed for sleep disturbance (2% of all prescriptions), at a rate of 14.0 per 100 mental health problems managed, and anxiety (1% of all prescriptions), at a rate of 10.8 per 100 mental health problems managed.

The most commonly prescribed drugs for mental health problems were antidepressants (3% of total prescriptions), followed by anti-anxiety (2%) and sedative hypnotics (2%). The medications of temazepam and diazepam were particularly common for mental health problems, being prescribed at a rate of 13.8 and 10.7, respectively, per 100 mental health problems managed (Table 4.1.8).

Table 4.1.8: Distribution of drugs most commonly prescribed for mental health problems by drug group and generic drug name

Drug group and generic drugs		Number	Per cent of scripts (N=90,710)	Rate per 100 MH probs managed (N=10,142)
Sedative hypnotics		*1,902*	*2.2*	*18.8*
	Temazepam	1,397	1.6	13.8
Anti-anxiety		*2,025*	*2.3*	*20.0*
	Diazepam	1,082	1.3	10.7
	Oxazepam	755	0.9	7.4
Phenothiazines		*584*	*0.7*	*5.8*
Anti-depressants		*2,806*	*3.2*	*27.7*
	Sertraline	503	0.6	5.0
Total		***7,317***	***8.4***	

Note: Abbreviations: scripts—prescriptions, MH—mental health, probs—problems.

Source: Britt et al. 1999.

4.2 Clinical service delivery for low-prevalence disorders

People with psychotic disorders are a relatively small proportion of the total population of people with mental disorders. The Low Prevalence Disorder Study, a component of the National Survey of Mental Health and Wellbeing, aimed to evaluate the patterns of admitted and non-admitted patient mental health service use by this group. This section presents the service-use data from the Low Prevalence Disorder Study. This study entailed of a one-month census of 3,800 people with psychotic disorders who were in contact with a mental health service within defined areas of Brisbane and surrounds, Melbourne, Perth and the Australian Capital Territory (Jablensky et al. 1999). The census was followed by clinical interviews of 980 individuals randomly selected from the census sample to obtain a detailed profile including patterns of service utilisation. Further details of this study's methodology are described in Chapter 1.

The interview phase of the study questioned interviewees about their contact with admitted patient and outpatient health services. It needs to be noted that the participants in the study were between 18 to 64 years of age and resided within the defined urban areas. This limits the conclusions that can be drawn with respect to psychotic disorders amongst rural populations or older people.

Almost two-thirds of the interviewees (60%) had had contact with an outpatient or community mental health service in the twelve months before interview. As Table 4.2.1 indicates, the majority of these contacts were with community mental health services (64%) or, to a lesser extent, psychiatric outpatient clinics in general hospitals (26%).

Table 4.2.1: Persons with outpatient or community mental health service contact: services used in year before interview

Outpatient service type[a]	Proportion of those who had contact

	(%)
Community mental health clinic	63.7
Psychiatric outpatient clinic, general hospital	25.8
Outpatient clinic, public psychiatric hospital	2.5
Private outpatient facility	1.9
General outpatient clinic, general hospital	1.7
Public drug and alcohol outpatient facility	1.0
Other	10.2

(a)   An individual may have used more than one type of outpatient services in the year before interview.

Source: Jablensky et al. 1999.

A large majority (90%) of the participants, who had contact with an outpatient service in the twelve months before interview had seen a psychiatrist or other medical officer during the reported contact or contacts (Table 4.2.2). Nurses, social workers and psychologists were also seen during these contacts, but at a more moderate rate (34%, 16% and 13% respectively). Contact with drug and alcohol counsellors occurred in less than 1%of the contacts.

Around four out of five interview participants (81%) had been in contact with a general practitioner in the past year, with an average of twelve visits in that year. The corresponding levels of contact for private psychiatrists and private psychologists were 24% and 7% respectively.

Table 4.2.2: Persons with outpatient or community mental health service contact: health professionals most frequently seen at service in year before interview

Health professional seen[a]	Proportion of those who had contact
	(%)
Psychiatrist or other medical officer	90.0
Nurse	33.6
Social worker	16.1
Psychologist	12.7
Occupational therapist	7.8
Drug and alcohol counsellor	0.8

(a)   An individual may have seen more than one type of health professional at outpatient services in the year before interview.
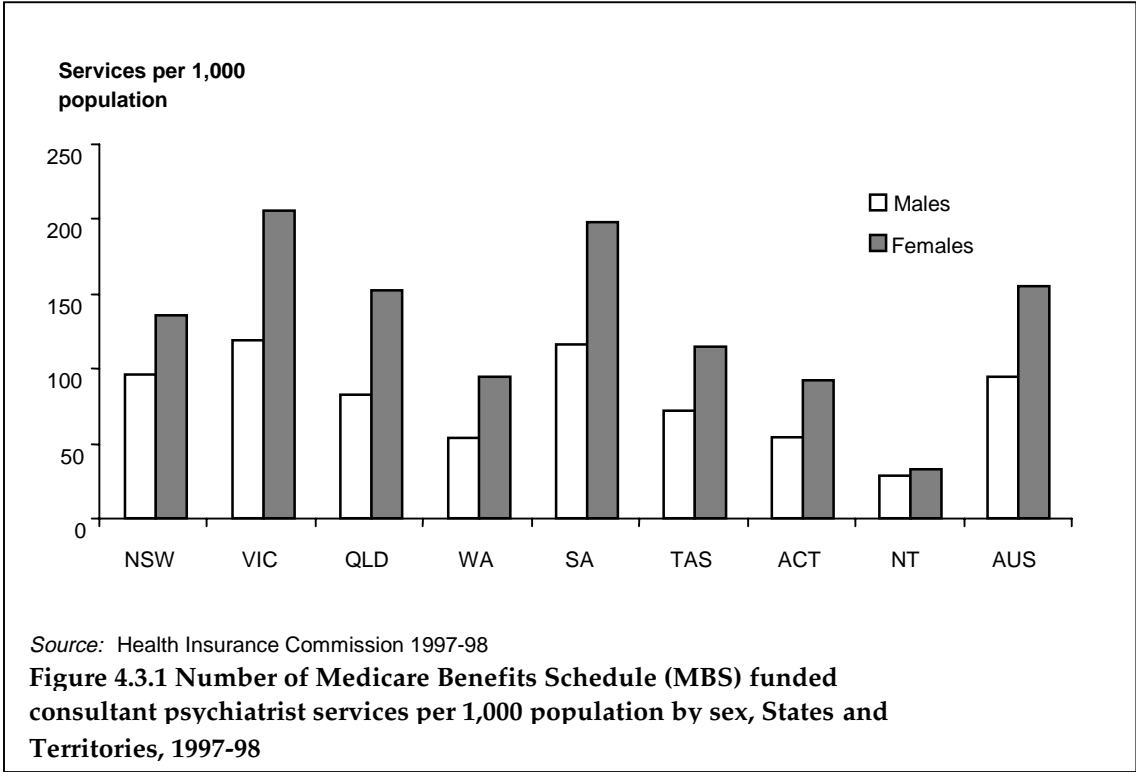
Source: Jablensky et al. 1999.

# 4.3 Medicare funded psychiatrist services

The focus of this chapter has been to present the data collected from mental health service delivery settings outside the admitted patient services. This section presents some aggregate figures on the mental health care service delivery by consultant psychiatrists drawn from the Health Insurance Commission (HIC) Medicare Benefits Schedule (MBS) records. The MBS funded activities of private consultant psychiatrists constitute an important component of mental health service delivery in Australia and considered as a part of the overall service material presented in this publication. The data from HIC records include only those activities where medical benefits apply and do not include activities undertaken by salaried or visiting medical officers.

It has been previously recognised that differences exist between jurisdictions in the number

of private psychiatrist services (CDHAC 1999). Figure 4.3.1 presents number of consultant psychiatrist services (items 300 to 352) per 1,000 population, age-standardised, for the States and Territories for 1987-98. The MBS items for consultant psychiatrists can vary in duration from around 15 minutes to over 75 minutes in length. Victoria and South Australia were the states with comparatively high numbers of consultant psychiatrist services per 1,000 population and Northern Territory was the lowest. This finding is consistent with the proportionally large per capita number of consultant psychiatrists billing MBS in Victoria and South Australia and the proportionally low per capita number for Northern Territory (CDHAC 1999). The figure also indicates that males utilised a lower number of MBS funded psychiatrist services than females during the twelve-month period.

Source: Health Insurance Commission 1997-98

Figure 4.3.1 Number of Medicare Benefits Schedule (MBS) funded consultant psychiatrist services per 1,000 population by sex, States and Territories, 1997-98

The difference between jurisdictions is also shown in the variation of electro-convulsive therapy (ECT) attendances. Figure 4.3.2 presents the number of ECT attendances (item 340) per 1,000 population, age-standardised, for States and Territories for 1997–98. In Queensland, Victoria and South Australia there were a comparatively high number of MBS funded ECT attendances per 1,000 population. The Australian Capital Territory was the jurisdiction with the lowest per capita number of MBS funded electro-convulsive therapy attendances. The figure also indicated that a higher number of electro-convulsive therapy items are claimed for females than for males across all jurisdictions.

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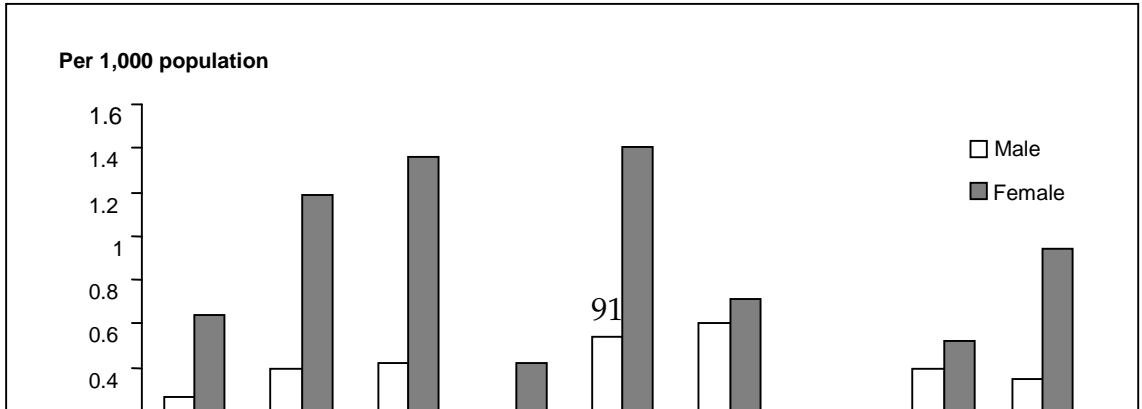
In summary, this chapter presented service data from settings with significant levels of mental health service delivery outside admitted patient services. Service data from general practice, outpatient services, community mental health services and consultant psychiatrist services were reviewed. The next chapter examines the future directions for developing mental health services data, including the further development of data elements for community-based care.