



Australian Government

People living with psychotic illness 2010

Report on the second Australian national survey

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People living with psychotic illness 2010

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FOREWORD

Almost half of all Australians will experience mental illness at some point in their lives. For those that experience psychotic illnesses and their families and carers the impacts are often particularly severe.

These illnesses usually have their onset in late adolescence and early adulthood, during a period in which most young people are completing their education, first entering the workforce and establishing new social networks. The isolation experienced due to the symptoms of their illness is often compounded as they are more likely to experience financial hardship, unemployment, homelessness and periods of hospitalisation.

The results of the first national psychosis survey undertaken in 1997-98 painted a bleak picture of the lives of people living with psychotic illness. Since that time there have been major reforms in the way mental health services are run and increasing investment by all levels of government.

Spending on mental health services delivered by the states and territories (the main providers of care to people with psychotic illness) has increased by 90 per cent in real terms, and mental health related expenditure by the Australian Government has increased by 107 per cent over the same period.

Services have shifted from being provided in stand alone hospitals to being provided in the community. This has been supported by a 70 per cent increase in community based staffing compared to when the first survey was undertaken. Over this period we have also seen a sufficiently expanded role for non government organisations in service provision – with funding to the sector nearly doubling.

There have also been major changes in the way general practitioners are funded through Medicare to provide mental health services and the availability of psychological services with the introduction of the Better Access initiative in November 2006. At the same time there has been a shift in the medications used in the management of delusions and hallucinations. Three quarters of people with psychotic illness now take 'atypical antipsychotics', which have fewer neurological side effects.

The 2010 survey provides evidence of these reforms and the way in which they've markedly improved the lives of people experiencing psychotic illnesses. The survey shows decreases in hospital admissions for mental health reasons and marked increases in the use of community rehabilitation and day programs. Fewer people with psychotic illness are now experiencing homelessness, more are in supported accommodation and many more are being supported to live in their own homes or rented accommodation.

While the survey results are promising, they also point to the ongoing challenge we face to do better for Australians affected by mental illness.

Psychotic illness remains a debilitating illness. The survey shows that people with psychotic illness still have substantially poorer physical health than the general population, and remain at considerably greater risk of higher levels of obesity, smoking, alcohol and drug use.

The results reinforce the importance of the Australian Government's investments in early psychosis services, in partnership with the states and territories, and the new 'Partners in Recovery' initiative to coordinate and provide flexibly funded services and supports for people with severely debilitating, persistent mental illness and complex needs. The Government is investing \$549 million over 5 years in this Partners in Recovery initiative because we recognise that people living with a severe mental illness not only need more support but better coordination of existing support services.

The survey results highlight the reasons that all levels of government need to continue to invest in providing the range of services people need. The Government is committed to ongoing reform of the mental health system. The establishment of a National Mental Health Commission and development of the Ten Year Roadmap for Mental Health Reform will give mental health greater national prominence, set out what Australia's mental health system should look like in ten years and provide increased accountability to ensure we reach our goal.

I would like to thank the staff of the services that participated in the survey, the survey coordinators and particularly the team at The University of Western Australia who once again led this important work. More importantly, I would like to thank all the people who took the time to participate in the study and share the details of their lives with us. The information you have provided forms an important foundation that will guide how these new initiatives are implemented and the services that are provided into the future.

A handwritten signature in black ink, appearing to read 'Mark Butler', with a stylized, flowing script.

The Hon Mark Butler MP

Minister for Mental Health and Ageing

3 November 2011

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NATIONAL SURVEY OF PSYCHOTIC ILLNESS 2010 EXECUTIVE SUMMARY AND KEY FINDINGS

The second Australian national survey of psychotic illness was conducted in 2010. The aim was to provide updated information on the lives of people with psychotic illness who receive public specialised mental health services.

Psychotic disorders are a diverse group of illnesses that have their origins in abnormal brain function and are characterised by fundamental distortions of thinking, perception and emotional response. The most common of these disorders is schizophrenia.

- Two of the main symptoms are delusions and hallucinations.
- The onset for many psychotic disorders is in the late teens to early adulthood.
- Most people with psychotic illness will receive treatment, however, the stage and age at which this begins varies.

Psychotic illnesses are classified according to diagnostic criteria in the ICD-10 and include:

- Schizophrenia
- Schizoaffective disorders
- Mania with psychotic symptoms
- Bipolar affective disorder with psychotic symptoms
- Depression with psychotic symptoms
- Persistent delusional disorders
- Acute and transient psychotic disorders
- Other and unspecified non-organic psychotic disorder

The 2010 survey had four key aims to:

1. Estimate the prevalence of psychosis and age when symptoms were first experienced;
2. Describe the profile of people with psychotic illness, including their personal, social and living circumstances, and mental and physical health;
3. Determine the use of health and other services; and
4. Assess the impact of psychotic illnesses on the lives of people with these disorders and identify factors related to better outcomes.

The main focus of the 2010 survey was on consumers of public specialised mental health services administered by state/territory governments. It also included a sample of people who were only in contact with non-government organisations. It did not cover people with psychotic illness who were being treated only in the private sector or by their general practitioner.

This survey follows the first National Study of Psychotic Illness in 1997-98, which provided the first data on the prevalence of psychotic illness in the Australian population.

Public specialised mental health services and non-government organisations providing mental health services in seven catchment sites, participated in the survey. Together these sites cover 10% of the Australian population.

The sample for the survey was drawn from people receiving these services over the period from April 2009 to March 2010.

The survey methodology was based on a two-phase design:

1. All people seen by these services in the catchment sites over the period of the survey were screened, with 7,955 assessed as having psychosis and eligible for interview.
2. A random sample (1,825) of these people was interviewed over the period from April 2010 to March 2011.

The survey contained 32 modules and information was collected on over 1,500 items covering the following:

- socio-demographic characteristics, including income, education, housing, activities of daily life, employment, child and other caring responsibilities;
- family contact, social participation, crime, offending and personal safety;
- health and other services used for physical and mental health problems, covering hospital admissions, emergency department attendances, rehabilitation programs, contact with case managers, general practitioner visits and non-government organisation mental health services;
- medications used for mental health problems and their side effects; and
- physical conditions, smoking, alcohol and drug use, nutrition and exercise, as well as range of information collected through a physical examination and blood sample.

Scales were also included to determine the impact of psychotic illness on:

- overall functioning;
- quality of life;
- smoking, alcohol and drug use, and dependence;
- cognitive functioning; and
- perceived need for mental health and other support services.

ESTIMATING THE NUMBER OF PEOPLE WITH PSYCHOTIC ILLNESS TREATED BY PUBLIC SPECIALISED MENTAL HEALTH SERVICES

The 2010 national survey of psychotic illness provides information on the prevalence of psychotic disorders and the number of people receiving treatment. The prevalence is the proportion of people in the population who meet criteria for a diagnosis of these disorders at a given point in time.

Prevalence was determined for Australians with an ICD-10 psychotic illness in contact with public specialised mental health services in March 2010 and in the eleven months prior.

In March 2010, an estimated 3.1 cases per 1,000 population aged between 18 and 64 years had a psychotic illness and were in contact with public specialised mental health services.

The prevalence of psychotic disorders was higher in males than females (3.7 cases per 1,000 compared to 2.4 per 1,000) (Figure 1).

Males aged 25-34 years had the highest rates of psychotic illness (5.2 cases per 1,000).

- Almost 8,500 men in this age group were estimated to be in contact with publicly funded mental health services.
- The age groups with the next highest prevalence for males were those aged 35-44 and 45-54 years.

For females prevalence was more even across age groups at almost 3 cases per 1,000 population in those aged between 25 and 54 years.

- Young females aged 18-24 years had the lowest prevalence rates at 1.6 cases per 1,000 population.

Prevalence was also estimated for the 12-month period at 4.5 cases per 1,000 population. Scaled to the national level, this suggests that almost 64,000 people aged 18 to 64 years have a psychotic illness and are in contact with public specialised mental health services in a year.

Types of disorders

The most common psychotic disorder was schizophrenia (47.0%), accounting for the majority of males (56.3%) and one third (33.2%) of females (Figure 2).

Age of onset

Two thirds (64.8%) of people experienced their first episode before the age of 25 years.

For 32.3% of males and 38.2% of females, onset was on or after 25 years (Figure 3).

The mean age of onset was 23 years for men and 24 years for women.

For 29.1% of people the onset was gradual, taking between one and six months, and for 42.2% it took more than six months to develop.

Figure 1: One-month treated prevalence in specialised public mental health services by sex

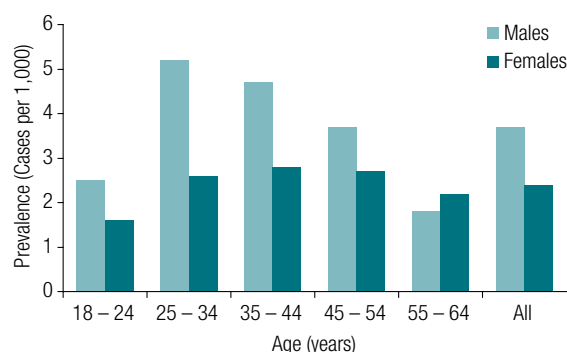


Figure 2: Diagnostic profile of ICD-10 psychotic disorders

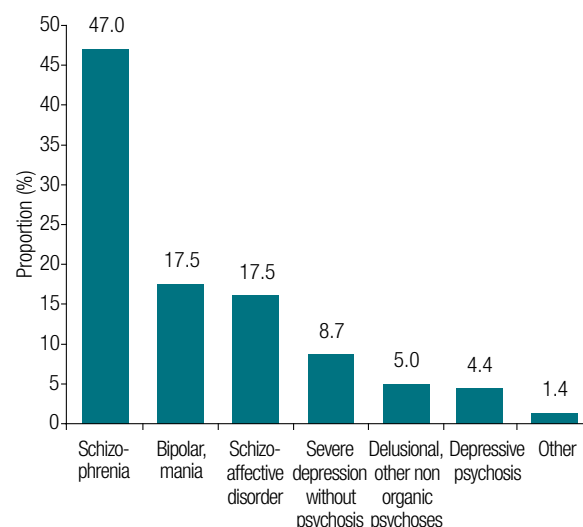
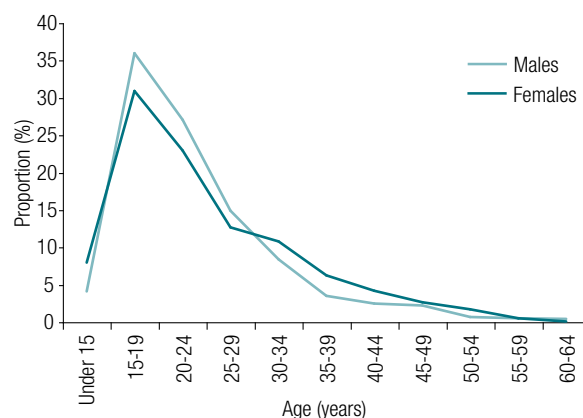


Figure 3: Age of onset by sex



DEMOGRAPHIC CHARACTERISTICS OF PEOPLE WITH PSYCHOTIC ILLNESS

Many people living with psychotic illness are in relationships, study and care for children and others just like the rest of the population. They also experience particular disadvantages that, largely due to onset of illness in late adolescence and early adulthood, impact upon their educational outcomes.

Three-fifths (59.6%) of people being treated for psychosis in the public system are male.

Almost three-fifths (57.6%) were aged 35-64 years. Just 10.6% were under 25 years (Figure 4).

Family relationships

One in ten males and one in four females with psychotic illness were currently married or in a de facto relationship.

Just over half (56.2%) of females had children of any age, with one quarter (23.6%) having dependent children living with them.

The proportion of males with children was significantly lower at 25.9% and only 5.5% had dependent children living with them.

In 14.7% of cases people were providing care to another person because of a disability, long term illness or due to old age (Table 1).

- This figure was higher for females than males, at 19.6% and 11.3% respectively.
- It was also higher for the older age group.

Education

One third (33.7%) of people with psychotic disorders had not attained a school certificate compared with 24.9% in the general population.

Almost one quarter (22.5%) had left school before Year 10.

Another third (31.5%) had completed their Year 12 qualification or leaving certificate.

About half (48.9%) of participants had completed a TAFE or trade certificate or higher post-school qualification (Figure 5).

Almost one in five (18.4%) people with a psychotic illness reported difficulty with reading and/or writing.

One-fifth (20.8%) were enrolled in formal studies in the previous year.

- Females were more likely to be studying (26.7% compared with 16.7% for males).
- The younger age group (aged 18-34 years) were twice as likely to be enrolled in formal studies (29.0% and 14.7%).

Figure 4: Age profile of people with psychotic illness treated in public specialised mental health services

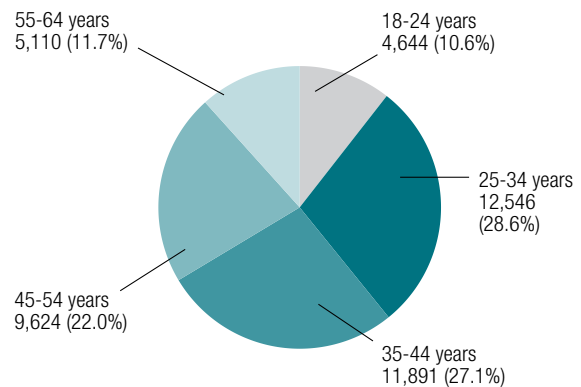
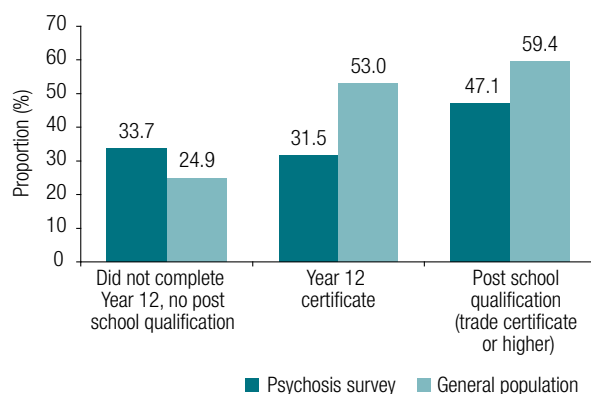


Table 1: Demographic characteristics of participants

	Proportion (%)
Males	59.6
Born in Australia	82.2
Currently married or in de facto relationship	17.1
Main source of income government pension	85.0
Dependent children living at home, including step children	12.8
Caring for another with disability, long term illness or aged	14.7

Figure 5: Educational qualification obtained



NATURE OF THE ILLNESS, SYMPTOMS AND FUNCTIONING

Psychotic illnesses can severely impact upon people's ability to function in their daily lives.

One in twelve people (8.1%) had experienced just one episode of psychotic illness, while the majority (61.5%) had experienced multiple episodes with periods of good or partial recovery in between (29.7% and 31.8% respectively) (Figure 6).

Many people (30.5%) receiving services through the public system have continual chronic illness and one third of these experience marked deterioration over time.

The most common symptoms of psychotic illness are delusions and hallucinations (Figure 7).

- 86.7% experienced delusions in their lifetime and 41.3% currently.
- 78.9% experienced hallucinations in their lifetime and 37.5% currently.

A range of other symptoms, some of which are associated with other mental disorders, such as depression and anxiety, are also commonly experienced by people with psychotic illness.

- Depressed mood, loss of pleasure and poor concentration are frequently associated with psychotic illness, with one quarter of people currently reporting each of these symptoms (26.4%, 24.5% and 23.4% respectively).
- Over the past year, 59.8% of participants reported symptoms of anxiety and just over half (54.5%) reported one or more symptoms of depression.

Functioning

One half (51.2%) of people with psychotic illness, were assessed at interview to have been functioning well in both occupational and social domains prior to the onset of their illness.

- 70.8% of the total had been in either paid or unpaid work or studying, 68.7% had good adjustment within these roles and 63.9% reported good social functioning before the onset of first symptoms.

Most people (90.4%) reported deterioration of functioning after illness onset (Table 2).

One third (32.3%) were assessed as having a significant level of impairment in their ability to care for themselves in the previous 4 weeks and almost one-fifth (18.4%) was unable to complete a simple chore such as cleaning their room.

Two thirds (63.2%) were assessed as having a significant level of dysfunction in their capacity to socialise over the past year.

Figure 6: Course of illness

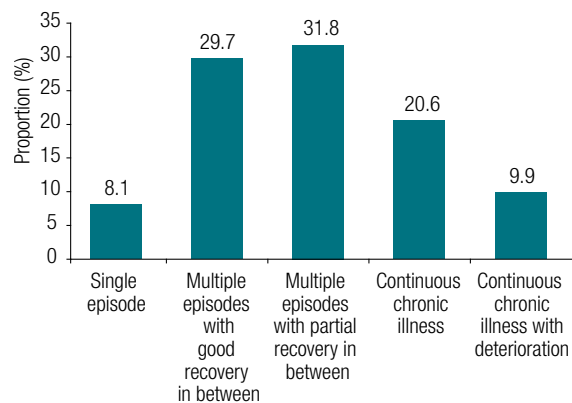


Figure 7: Current symptoms of psychotic disorders

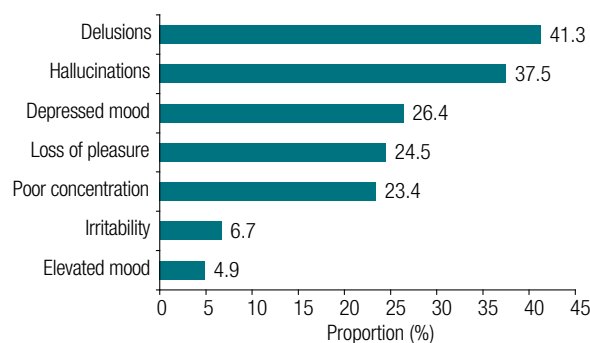


Table 2: Level of impairment

	Proportion (%)
Deterioration from pre-onset functioning	90.4
Obvious/Severe dysfunction in socialising, past year	63.2
Obvious/Severe dysfunction in self care, past 4 weeks	32.3

PHYSICAL HEALTH AND AT-RISK BEHAVIOURS

People with psychotic illness receiving public mental health services also have poorer physical health than the general population, more often experiencing chronic conditions and being more at-risk due to their high levels of obesity, smoking, and alcohol and drug use. They are far more likely to harm themselves. They also think about and attempt suicide at rates far higher than the general population.

Physical conditions

Chronic back, neck or other pain were common (31.8%) amongst people with psychotic illness, followed closely by above average asthma rates (30.1% compared to 20.2% for the general population) and heart or circulatory conditions (26.8% compared to 16.3% for the general population) (Figure 8).

One quarter (24.0%) of people with psychosis were at high risk of cardiovascular disease.

Almost half (45.1%) of people with psychotic illness were obese (Figure 9).

Physical activity levels were far lower in people with psychosis, with 96.4% classified as either sedentary or undertaking low levels of exercise in the previous week compared to 72.0% for the general population.

Smoking, alcohol and drug use

Two thirds (66.1%) of people with psychosis smoke, smoking on average 21 cigarettes per day (Figure 10).

- Almost one third (31.0%) of people had made an effort to quit in the last year, but just over one quarter (27.3%) had never tried.

Alcohol abuse was high, with 58.3% of males and 38.9% of females assessed by interviewers as consuming alcohol at levels that constitute abuse or dependence at some point in their lifetime (Figure 10).

- This compares to 35.3% of males and 14.1% of females in the general population.

Rates of lifetime use of cannabis or other illicit drugs were very high, with 63.2% of males and 41.7% of females assessed by interviewers as using at levels that constitute abuse or dependence (Figure 10).

- This compares to 12.0% of males and 5.8% of females in the general population.

Only 12.9% of people with psychotic illness were participating in drug and alcohol treatment programs.

Suicidality

Just over one-tenth (11.5%) of people reported that they were thinking about suicide at the time of interview and two thirds (67.0%) had done so in their lifetime.

Half (49.5%) reported they had attempted suicide at some point in their lifetime.

- This compares to only 3.7% in the general population.
- Females were more likely to have attempted suicide than males (57.5% and 44.2% respectively).

Figure 8: Chronic conditions

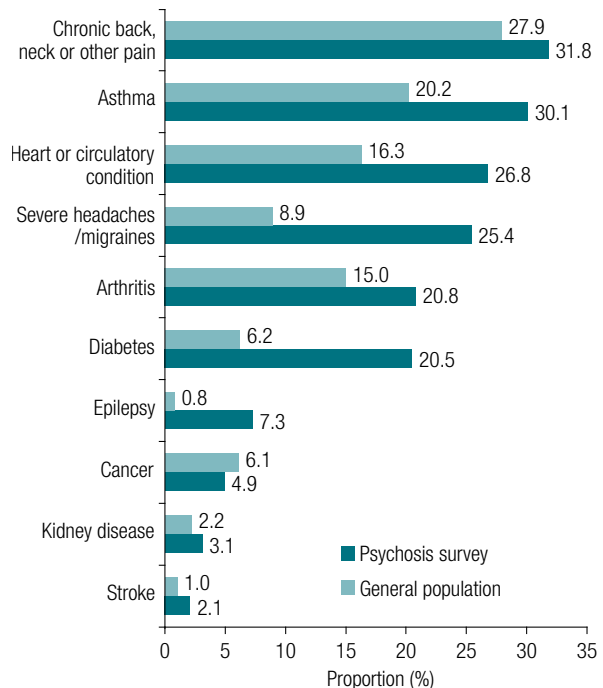


Figure 9: Overweight and obesity

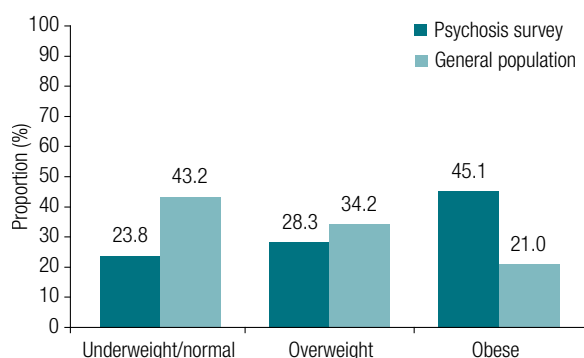
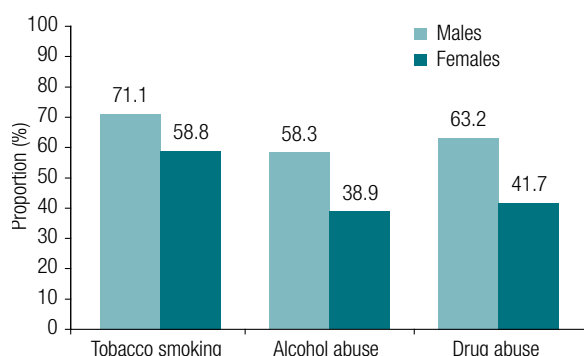


Figure 10: Smoking, and alcohol and drug abuse



SERVICE AND MEDICATION USE

Mental health care in Australia is provided through hospital-based and public specialised mental health services managed by states and territories, private sector services delivered by general practitioners, psychiatrists and psychologists and non-government organisations.

Service utilisation

The majority of people with psychotic illness used a wide variety of health services both for their mental and physical health problems (Figure 11). Almost all (95.3%) had used services for their mental health problems and 81.0% had used services for their physical health problems.

- Most people (88.2%) had visited a general practitioner in the past year.
- Most (86.3%) had used outpatient or community clinics and ambulatory health care services in the past year.
- Two-fifths (41.0%) presented to an emergency department and one quarter (26.4%) had done so for a psychiatric problem. In addition, 17.2% had telephone contact and 16.3% had face-to-face contact with a psychiatric emergency service.
- One in five people (20.7%) had at least one involuntary inpatient admission and one-fifth (19.2%) were under a community treatment order in the past year.

One third (34.8%) of people with psychotic illness had one or more psychiatric inpatient admissions in the past year, with an average of 40 days in hospital (Figure 12).

- Two-fifths (43.0%) spent from four to thirteen weeks in psychiatric inpatient treatment.

Medication use

Most (91.6%) people were taking prescribed medications in the previous four weeks, with four-fifths (81.6%) taking antipsychotics.

- The majority of people were on atypical psychotics (74.0%) (Figure 13).

Newer 'atypicals' better control delusions and hallucinations, however, they do not alleviate other symptoms for which people may receive a variety of medications.

- 37.4% were on antidepressants.
- 26.7% were on mood stabilisers.

Medication side effects were common, with 44.7% experiencing drowsiness, 39.5% dry or watery mouths and 37.5% weight gain.

- People reported that the impact of the side effects on their daily lives was moderate or severe for 29.9%.

Two-fifths (41.1%) were also using medications for physical health conditions. The most common medications were cardiovascular (18.2%), followed by endocrine (14.7%).

Figure 11: Service use in the past year

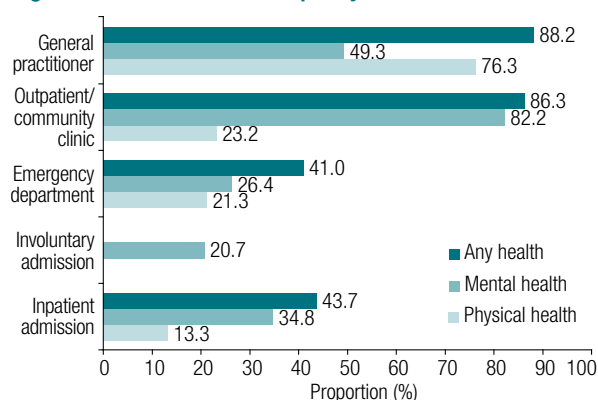


Figure 12: Psychiatric inpatient treatment in the past year

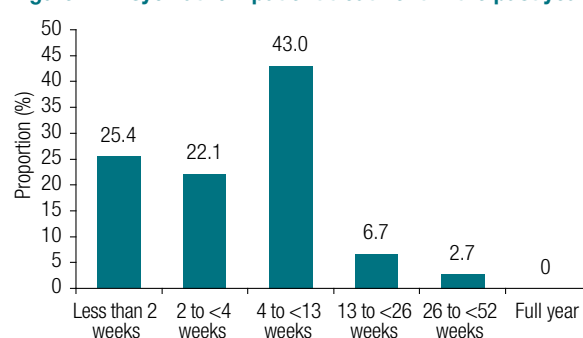
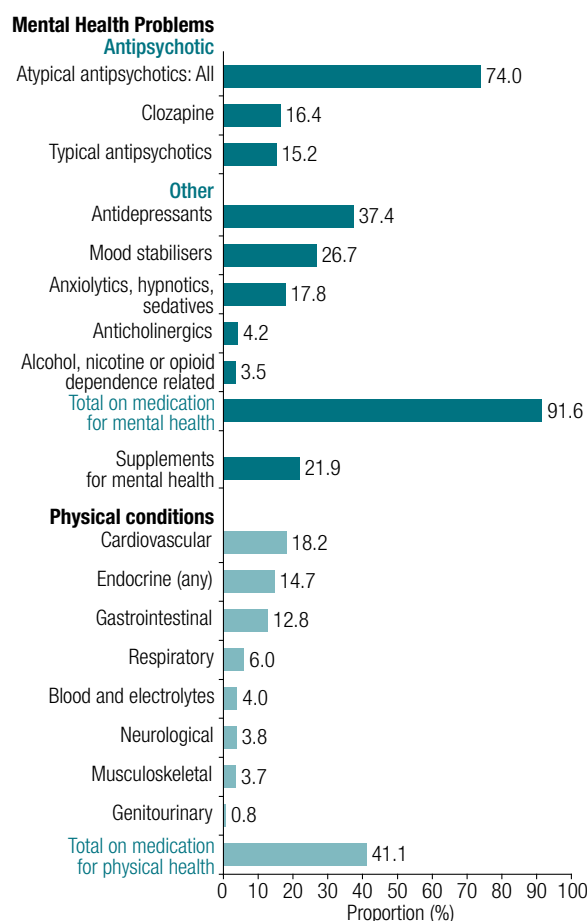


Figure 13: Medication use in the past year



NON-GOVERNMENT SERVICES AND CASE MANAGEMENT

Non-government organisations are a key component of the mental health care system, being publicly funded to provide a variety of mental health programs and support services to people with mental illness.

Non-government organisations

Three in ten (29.8%) people with psychotic illness received mental health services through non-government organisations in the past year.

Almost one quarter (22.4%) of people had attended a group rehabilitation program run by a non-government organisation and 90.0% found these programs somewhat or very helpful.

Non-government organisations also provide one-on-one support (Figure 14).

- Two thirds (68.6%) of people received counselling or emotional support.
- Information on recovery planning was provided to 41.4% of people.
- Many were helped to access other community services (45.4%) or link with other mental health services (36.6%).

An estimated 0.4 cases per 1,000 population aged 18-64 years or 6,200 people with psychotic illness were solely using mental health services provided by non-government organisations in March 2010. Many will have received mental health services in the preceding 11 months.

Three quarters (74.3%) were older, aged 35-64 years (Figure 15). At interview, they were found to be less likely than public specialised mental health service users to report inpatient (32.7% versus 45.6%) or involuntary admissions (7.8% versus 22.7%), or have attended an emergency department (31.7% versus 43.0%) or outpatient clinic (65.9% versus 92.8%) in the past year.

Case managers

More than two thirds (69.2%) of people with psychotic illness had a case manager in the past year, with 61.6% provided by public services and 20.2% through non-government organisations.

Around two thirds of people were very satisfied with their case manager (Table 3).

Three quarters were satisfied with the frequency of contact (76.5% for public service and 77.8% for non-government provided case managers).

Personal Helpers and Mentors Services

Personal helpers supported 12.3% of people, assisting 64.0% to manage daily activities and almost half (49.3%) of their clients with referrals to services, and by accompanying them to appointments and by acting as an advocate (both 45.3%).

Figure 14: Use of non-government organisation one-on-one support programs in past year

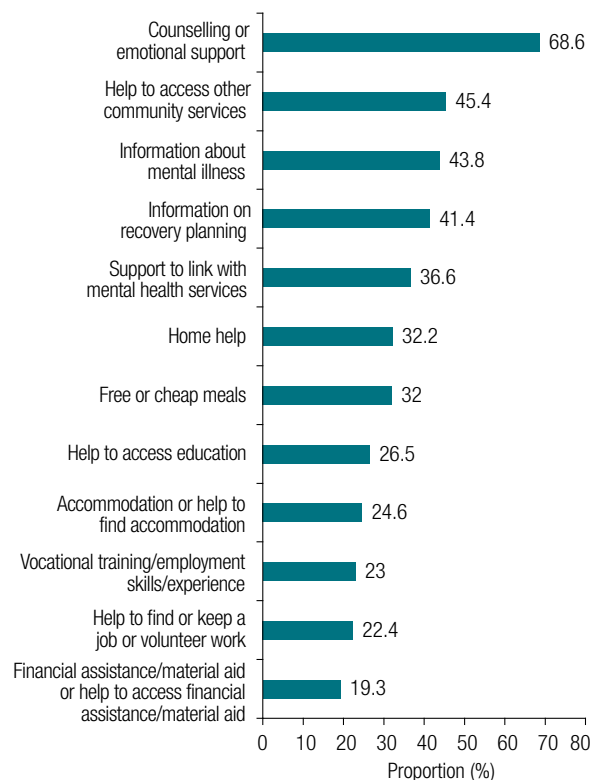


Figure 15: One-month treated prevalence for people solely in contact with non-government organisations

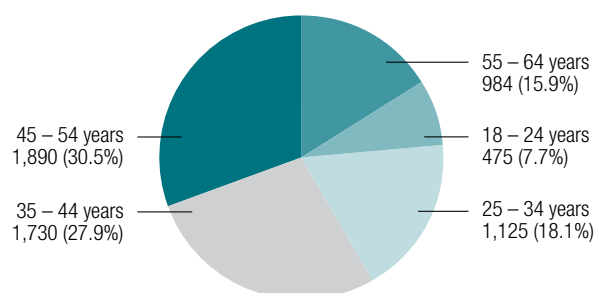


Table 3: Case manager contact and satisfaction by sector

Proportion of people (%)	Public services	Non-government services
Contact as often as preferred	76.5	77.8
Frequency of contact		
Once every 1-4 weeks	54.4	30.4
Once a week or more	28.1	64.0
Satisfaction with case manager		
Very satisfied	62.2	69.6
Somewhat satisfied	22.8	19.8

GENERAL PRACTITIONER SERVICES

General practitioners play a key role in providing health care to people living with psychotic illness, not only treating their physical conditions, but also in providing mental health services.

The majority of people with psychotic illness (88.2%) visited a general practitioner in the past year, which is slightly higher than access by the general population (79.3%).

Half (49.3%) saw their general practitioner for a mental health related visit, whilst 76.3% had a general physical health visit.

- One in ten (9.4%) had a general practitioner mental health care plan.
- People with psychotic illness visited a general practitioner on average 9 times in the past year and one quarter (28.8%) averaged over 12 visits in the past year. This compares to a general population average of 5 visits a year.

Further information was obtained from the general practitioner of survey participants.

- The majority (83.2%) saw the same general practitioner at each visit.
- Two thirds of people (65.4%) averaged 10-19 minute consultations (Figure 16).
- Only 1.2% had longer consultations of 40 minutes or more.
- The most common reason for a general practitioner visit was for a new prescription (68.8%) or a blood test (52.8%) (Figure 17).
- In terms of mental health related visits, 42.0% had attended to have psychotic symptoms reviewed, almost one third (31.3%) had attended for depression and one third (30.3%) for anxiety.
- Most (86.5%) treated their patient in collaboration with a mental health team.
- In the past 12 months, general practitioners had treated one third of participants (32.2%) for metabolic, cardiovascular or kidney disorders and had referred 11.4% for further specialist treatment.

When asked the top three difficulties in treatment of people with psychotic illness, general practitioners noted treatment non-adherence (22.1%) at the top of their difficulties, however, 44.3% noted no difficulties in treating people with psychotic illness.

When asked to name the top three challenges faced by people living with psychotic illness, 41.3% of general practitioners listed social isolation, 37.7% lack of employment and 37.5% financial problems (Figure 18).

Figure 16: Consultation length in minutes

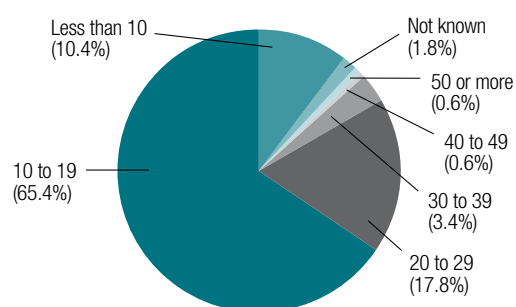


Figure 17: Reason for consultation with general practitioner

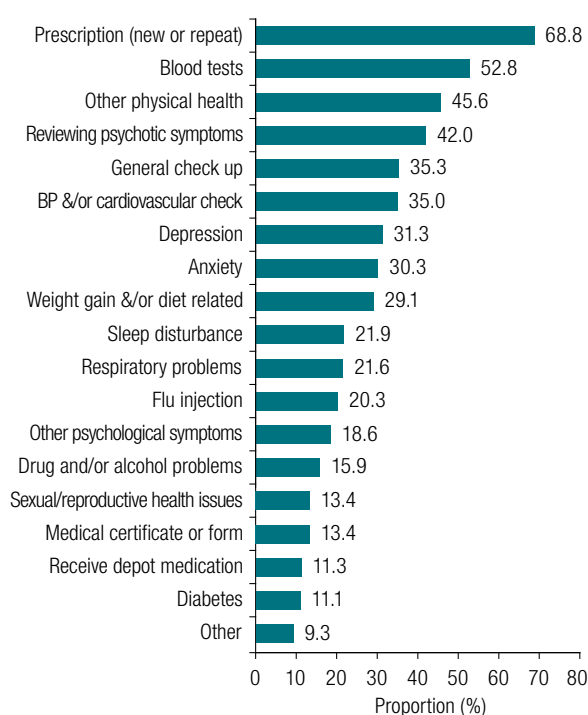
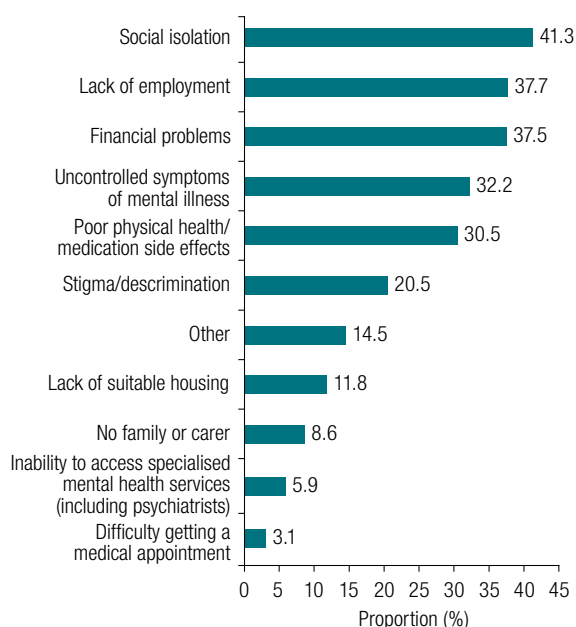


Figure 18: Top three challenges for people with psychotic illness identified by their general practitioner



EMPLOYMENT AND HOUSING

People with psychotic illness experience very high rates of unemployment and low rates of labour force participation. They are also at greater risk of homelessness. Factors contributing to these high rates include social isolation, family breakdown, stigma, discrimination and the need for acute care, including hospital admissions.

Income and employment

Government pensions were the main source of income for 85.0% of people.

One third (32.7%) were in paid employment and 30.5% were employed on a full-time basis (Figure 19).

- 74.8% were in open, competitive employment;
- 7.6% were self-employed; and
- 17.1% were in sheltered, non-competitive employment.

Hours worked varied by sex and age:

- Males worked more hours per week in paid employment than females (26 compared to 20 hours respectively).
- Younger people (18-34 years) worked 25 hours on average compared with 22 hours per week for those aged 35-64 years.

Half (48.5%) of males were employed as labourers, a further 14.2% as technicians/trade workers and 12.1% as community/personal service workers.

For females, the most common occupations were labouring (26.5%) and community/personal service work (26.4%).

Just over half (56.2%) of those in paid work had disclosed their mental health status to their employer.

Housing and homelessness

Half (48.6%) of people were renting, with 26.8% in public rentals and 21.8% in private rentals (Figure 21).

Whilst half (51.5%) were satisfied with their current living situation, 12.5% were somewhat or very dissatisfied.

Two-fifths (39.8%) would prefer to live in their own home or unit.

One-tenth (10.4%) of people had changed accommodation more than once in the previous year (Figure 22).

Some 5.2% of people were homeless at the time of the study and 12.8% had experienced periods of homelessness over the previous year.

Half (52.8%) had discussed accommodation needs prior to hospital discharge, but 6.9% reported they had not been given any assistance and were homeless on discharge.

Figure 19: Source of income

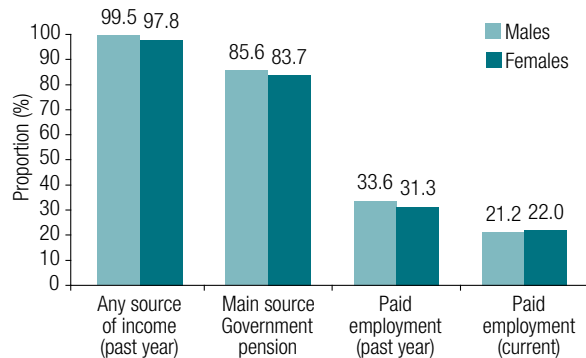


Figure 20: Employment type for those employed in past year

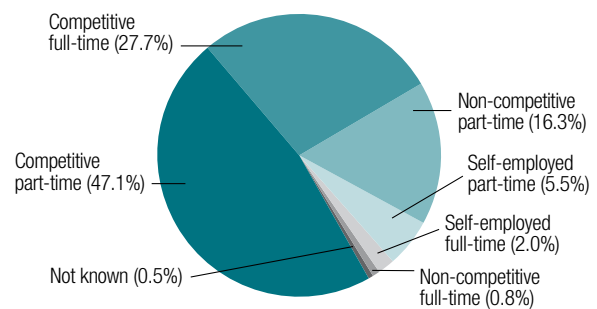


Figure 21: Current and preferred accommodation

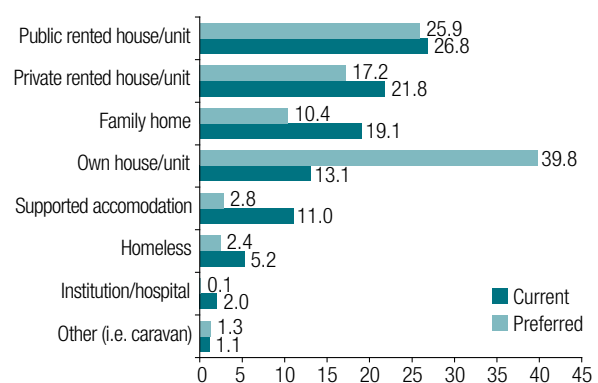
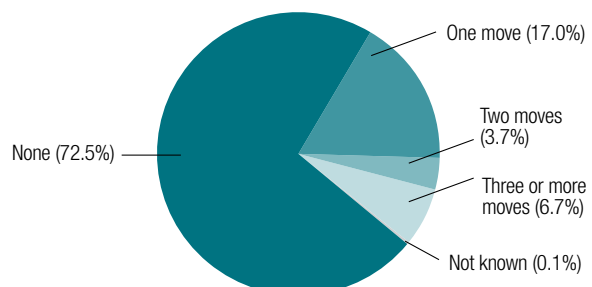


Figure 22: Housing changes in past year



ISOLATION, SOCIAL SUPPORT AND SATISFACTION WITH LIFE

People with psychotic illness are often isolated by the symptoms of their illness and this isolation can be exacerbated by multiple episodes of illness, periods of hospitalisation and stigma and discrimination that make maintenance of family and social contacts more difficult.

Over half (57.2%) of people with a psychotic illness reported experiencing a distressing or traumatic event in childhood, with 16.1% reporting being sexually abused.

Nearly one quarter (22.4%) of people reported feeling socially isolated and lonely.

- Two thirds (69.3%) said their illness made it difficult to maintain close relationships.

Almost one third (31.0%) of people reported they lived alone, however, 40.6% of reported they would prefer to be living with someone else.

Most people (96.1%) had some contact with a family member over the last year. For many (65.4%) this was daily and another 18.2% had weekly contact (Figure 23).

The majority of people had at least one friend (86.5%), however, 13.3% had no friends at all, 14.1% had no one they could rely on and 15.4% had never had a confiding relationship.

Two thirds (68.6%) had not attended any social programs and a similar proportion (69.4%) had not attended any recreational activities.

Support, needs and satisfaction

Just over half (56.4%) of people with psychotic illness reported receiving no or minimal support from any source.

One quarter (24.5%) of people had a carer. For 40.8% of these people, this was their mother, for 25.7% it was a partner and for 5.4% it was their child.

Half (50.6%) received some help with domestic responsibilities. Almost all (94.5%) who received this assistance found it to be very or somewhat helpful, with 35.1% noting it would be difficult to maintain their responsibilities without this help.

About half (55.5%) identified unmet needs in relation to their treatment. Almost one third (30.5%) reported the need for assistance in other areas of their lives including, but not limited to, housing, finances, employment, legal assistance and practical assistance.

Seven out of ten (71.9%) people were satisfied with their independence in the past four weeks.

Financial matters, social isolation and lack of employment were noted as the biggest challenges over the next 12 months (Figure 24). These were the same top three challenges noted by general practitioners they visited.

In spite of the difficulties facing them, 77.4% of people believed their circumstances would improve over the coming year.

Figure 23: Contact with others and formal social events

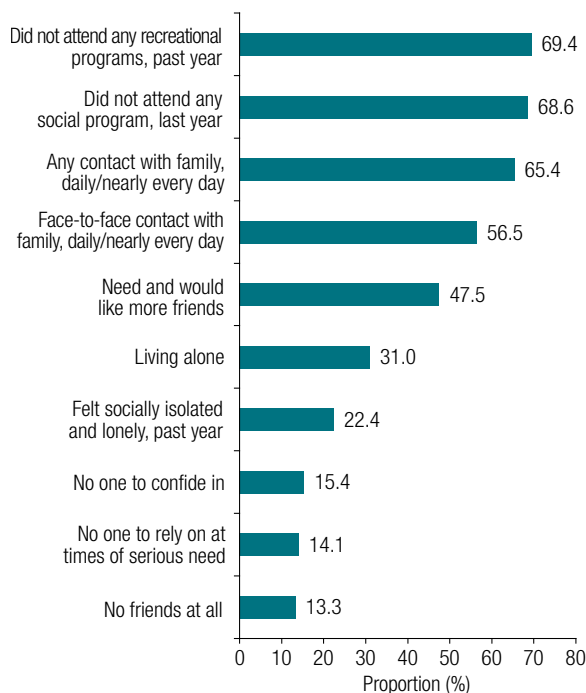
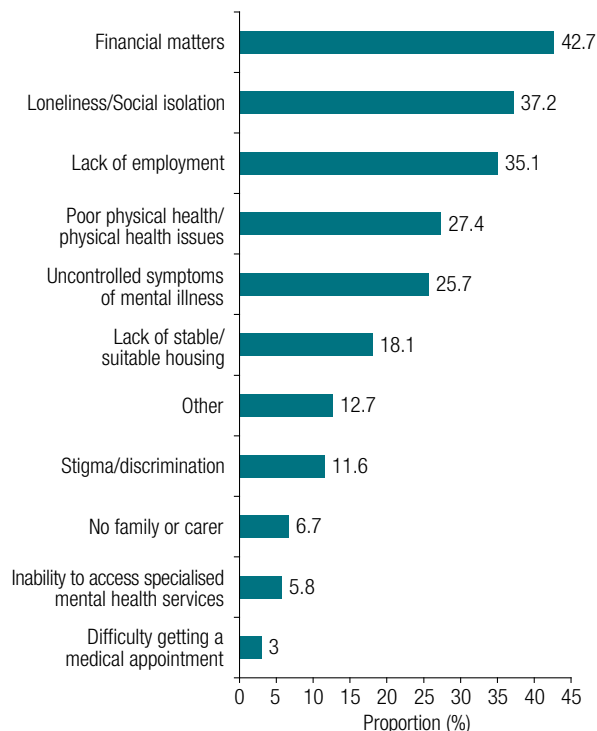


Figure 24: Challenges over the next year



HOW THINGS HAVE CHANGED SINCE 1997-98

Since 1997-98 when the first national survey of psychotic illness was conducted, there have been major changes in mental health service delivery particularly affecting public specialised mental health services, which are key providers of services to people with psychotic illnesses. Both the 2010 and 1997-98 surveys collected information from people receiving these services in a census month and comparison of these data provides insights into the impact of these changes.

The one-month prevalence of psychotic illness in people receiving public mental health services in 2010 was 3.1 cases per 1,000 population. This is consistent with that found in 1997-98, which was estimated as 3.6 cases per 1,000 population.

There appear to be some changes in the course of disorder people experience (Figure 25).

- The majority of people had multiple episodes of psychotic illness, but more people experienced periods of good recovery in between these (29.3% compared with 21.3% in 1997-98).
- The proportion of people experiencing deterioration due to chronic psychotic illness had halved since 1997-98 (11.3% compared to 23.6%).

Changes in service use are consistent with changes in mental health service delivery.

- Hospital admissions for mental health reasons decreased by 35.9%.
- Involuntary admissions decreased by a third from 31.4% to 22.7%.
- There was a 60.7% increase in the use of community rehabilitation or day programs.
- One quarter (26.5%) of people received mental health services from non-government organisations compared with 18.9% in 1997-98.
- The proportion of people with a psychotic illness who had a case manager increased from 71.9% to 78.1%.
- General practitioners continue to be major providers of services, with the proportion visiting general practitioners increasing from 76.7% to 87.8%.

By 2010, 78.4% of people were taking atypical antipsychotics compared with 37.1% in 1997-98.

More people were in their own home or rented accommodation (68.4% compared with 49.0% in 1997-98) and the proportion in supported accommodation had doubled to 10.9%.

The proportion of people who had been homeless at some time in the previous 12 months more than halved (5.0% compared with 13.0% in 1997-98).

Smoking rates remained very high and lifetime alcohol and drug abuse or dependence increased markedly, both rising from around 30% to just over half having these disorders (Figure 27).

Figure 25: Course of disorder, 1997-98 and 2010

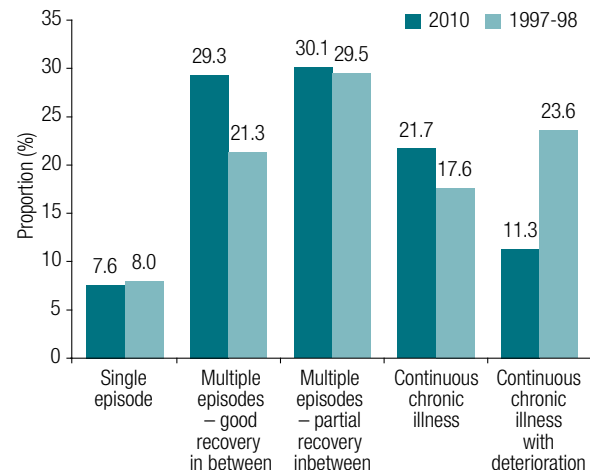


Figure 26: Health service use, 1997-98 and 2010

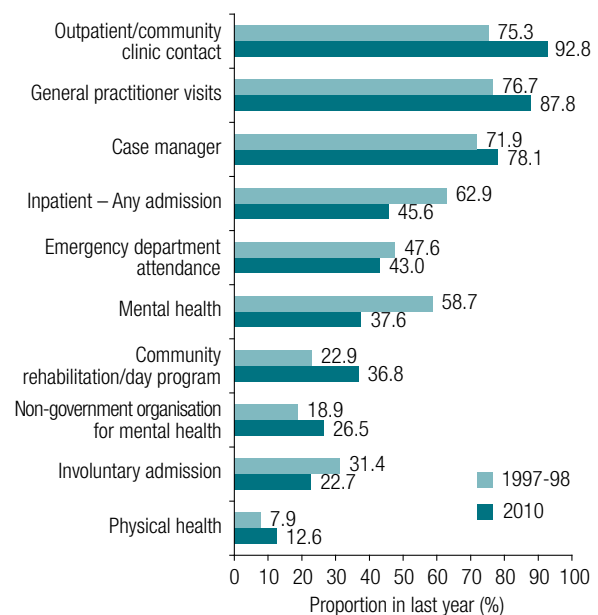
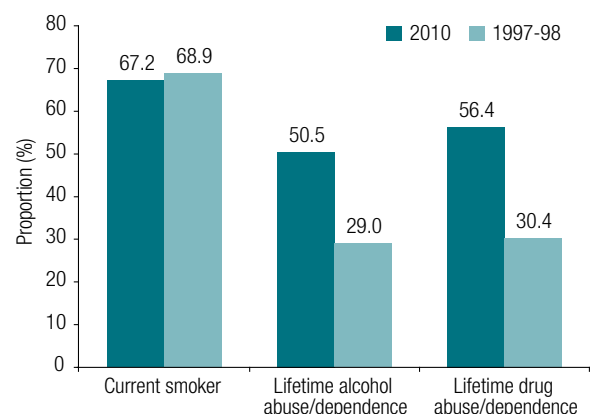


Figure 27: Smoking, and alcohol and drug abuse or dependence, 1997-98 and 2010



1 OVERVIEW, BACKGROUND, AIMS AND METHODOLOGY

1.1 Setting the scene

The first survey of people living with psychotic illness was conducted in 1997-98 and provided a picture, for the first time, of the severe impact of these illnesses in Australia. In 2010 a second national survey of people with psychotic illness was undertaken to provide updated estimates of the number of people being treated for psychosis, and to determine who these people are, the health services they receive and the impact of these illnesses.

The second survey also allows us to examine how changes to public sector mental health services administered by state and territory governments in the intervening 12 years have impacted on people's lives. These are services that are the principal providers of care to people with psychotic illnesses. The reforms have been substantial, achieving a restructured service system characterised by substantial resource growth and a reorientation of the mix of services with a more community orientated focus.

1.2 Scope of the survey

The selected sample of the 2010 national survey comprised of 1,825 adults with psychotic illnesses aged 18-64 years in contact with public specialised mental health services between April 2009 and March 2010 inclusive, as well those receiving mental health services from government funded non-government organisations in March 2010. Two thirds of those in the sample were current clients of the public specialised mental health services, that is in March 2010.

The survey did not cover those people with psychotic illness who are treated only in the private sector by a private psychiatrist, psychologist or general practitioner. It also did not cover people who are currently experiencing a psychotic illness, but were not receiving any mental health services through either the public or private health systems.

The impact of these exclusions is twofold. Firstly, prevalence rates based on the survey sample are likely to underestimate the true prevalence of psychotic illness in the Australian population. The 1997-98 survey suggests that the inclusion of those being treated privately could increase estimates of the prevalence by an additional 25%-50%. Secondly, it did not capture those who have experienced an illness, received treatment previously and have recovered to the extent that they are not currently receiving treatment.

Given this, conclusions drawn from this survey on the clinical, social and economic outcomes are based on the group of people with psychotic illness who generally experience the most severe and persistent disorders.

1.3 Comparability with the first national survey of psychotic illness

The bulk of this report is focussed upon presenting the new evidence from the 2010 survey. For many, however, there is the question of how the lives of people with psychosis in 2010 compares with those prior to the significant changes in mental health service delivery. Comparisons with 1997-98 must be undertaken with caution. Nonetheless, in Chapter 19 there is an examination of the findings from each survey, comparing the data that can be compared on those who received public specialised mental health services. Prevalence estimates are also examined.

1.4 Report structure

The report presents summary data from the second national survey of psychotic illness. Data is descriptive in nature. Future publications will provide additional information on key elements of the results and analyse these in more detail.

Prevalence

Chapter 2 explores the one-month and twelve-month treated prevalence rates.

Further information is provided in Appendix 2.

Profiling psychotic illness

Chapters 3 to 18 present the initial results of the second national survey of psychotic illness. Information is provided on a broad range of topics, with more detailed data available in the correspondingly numbered appendices.

Chapter 19 compares the results of the first survey undertaken in 1997-98 with the 2010 findings.

Chapter 20 provides a summary of the key findings from the survey.

Appendices

Appendices 1-18 provide more detailed data on the results presented within the report. There is a corresponding appendix for each chapter.

Appendix 19 provides a description and technical information on the 1997-98 survey.

Appendix 20 contains detailed information on the oversight of the 2010 survey and contributors in development of the survey protocol and assessment instruments.

A glossary is provided at Appendix 21.

Appendix 22 contains references.

1.5 What is a psychotic illness?

Psychotic disorders are a diverse group of illnesses that have their origins in abnormal brain function and are characterised by fundamental distortions of thinking, perception and emotional response. These disorders include, among others, schizophrenia, schizoaffective disorder, bipolar disorder and delusional disorder. The most common of these is schizophrenia.

The typical age of onset for many psychotic disorders, but especially schizophrenia, is in the late teens and early adulthood. Onset at this age has particularly detrimental consequences for affected people, disrupting a critical period for consolidation of life skills in terms of education, employment, adult relationships and community engagement.

The community cost of psychosis is also high. This cost is borne by all involved, not only in terms of the effects on the individual, their family, friends and carers, but also in terms of lost productivity and the cost of providing medical, mental health and other support services.

Among the psychoses, worldwide, schizophrenia and bipolar disorder rank in the top ten causes of disability. Together, these two disorders account for more than 5% of the total burden of disease-related disability. A little over a decade ago, the costs of psychosis in Australia were estimated to be an average of \$46,200 per patient per year, of which 40% was for mental health care and 60% was due to lost productivity. Schizophrenia accounted for the highest costs, amounting to at least \$1.44 billion of the total \$2.25 billion per year for psychosis in the Australian population.¹

1.6 Aims

The 2010 national survey of psychosis, the “Survey of High Impact Psychosis (SHIP)”, was designed to collect data capturing the impact of psychosis across different age groups, with the capacity to examine outcomes by sex and diagnostic category. It is Australia’s second national psychosis survey. In 1997-98, the Low Prevalence (Psychotic) Disorders Study produced the first Australian epidemiological data on people with psychosis in contact with public sector mental health services, as well as data on those in treatment in the private sector and those not in contact with services, living in marginalised circumstances reliant on welfare agencies, soup kitchens and refuges.^{2,3} The main aims of the 2010 survey were similar to those in 1997-98, that is to:

- **Estimate the treated prevalence of psychosis for people seen by public sector mental health services**

The survey has produced not only one-month prevalence estimates for those in contact with public specialised mental health services (inpatient, outpatient, ambulatory and community clinics), but also, for the first time, prevalence estimates for people with psychosis who had only been in contact with non-government organisations funded to support people with mental illnesses.

Estimates have also been made of the prevalence of psychotic illness and the numbers of Australians experiencing these disorders who are receiving publicly funded mental health services in a 12-month period.

- **Describe the profile of people with a psychotic illness including personal, social and living circumstances, their mental and physical health and cognition**

The survey provides basic demographics on users of publicly funded mental health services who have psychotic illness and the age at which they first experienced symptoms. It collected data on the degree to which participants’ basic requirements for adequate housing, food, employment and money were met and provides information on their family structure, and children and others for whom they care. It also collected information on smoking, alcohol and drug use, levels of exercise, physical health, metabolic measures including blood glucose and lipid profiles, and cognitive and other functioning.

- **Determine the use of services by people with psychotic illness**

Data were collected on participants’ use of mental health services, emergency attendance and hospital admissions, the extent to which they were supported by case workers, their involvement with non-government organisations and services provided by general practitioners. It also documented the quality of their contact with service providers.

Information on medications for both mental and physical conditions was collected.

- **Assess the impact of psychotic illness and identify factors related to better outcomes**

Information on the lives of public sector mental health consumers with psychosis, their social isolation, functioning, support received and daily circumstances were collected to enable a comprehensive analysis of factors associated with both poorer and better outcomes.

1.7 Who the survey covered

The survey covered adults with psychotic illnesses aged 18-64 years in contact with public specialised mental health services in seven selected catchment sites around Australia.

The survey sample comprised:

- people in contact with public specialised mental health services in March 2010;
- people who used public specialised mental health services in 11 months prior to March 2010, that is from April 2009 to February 2010; and
- people in contact with non-government organisations funded to support people with mental illnesses in the March 2010 census month.

The survey did not enumerate certain groups of people:

- those under the age of 18 years or those over the age of 64 years;
- those who did not make contact with public specialised mental health services within the selected 12-month period or non-government organisations funded to support people with mental illnesses in the census month;
- those who, in the census month, were solely in contact with general practitioners or private psychiatrists and psychologists; and
- those who were homeless and not in contact with any services.

From this population an interview sample was selected on the basis of a number of factors. These included the following:

- Participants required positive ratings for at least two of the items on the screening instrument. These items covered hallucinations and delusions (six items), and being on antipsychotic medication (key worker form) or told by a doctor that they had a psychotic disorder (participant form).
- Alternatively, they were eligible if they had a recorded diagnosis of psychosis in the 11 months prior to census. Transient psychotic disorders related to acute substance intoxication or withdrawal are not the focus of the current survey. However, a case of psychosis may be missed if the primary diagnosis at the time of an inpatient admission is a substance-induced psychosis masking an underlying psychotic disorder. For this reason, administrative registers for the 11 months prior to the census month were scanned for people with at least two inpatient admissions with a diagnosis of substance-induced psychosis.

All cases were assessed against diagnostic criteria at interview and allocated an ICD-10 diagnosis.

1.8 Methodology

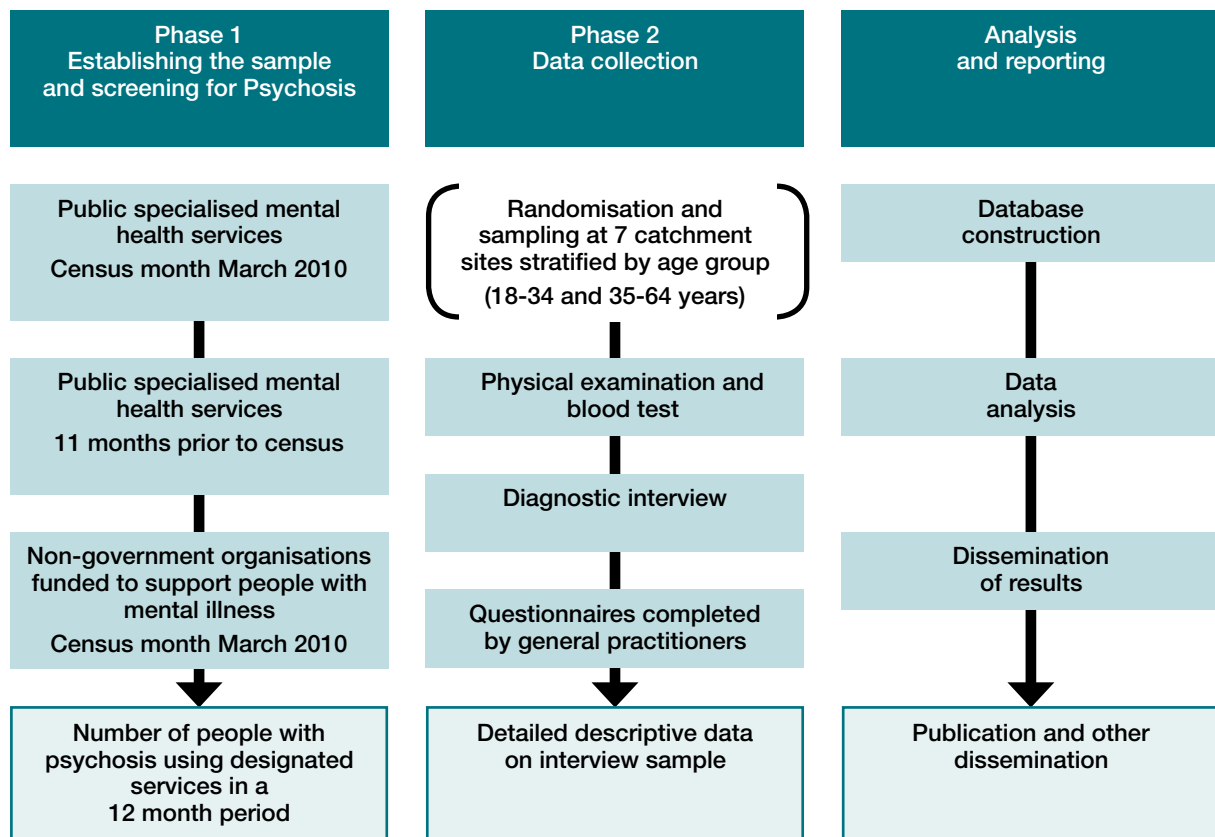
The survey samples were drawn from seven catchment sites across five states of Australia: New South Wales (Hunter, New England; Orange), Queensland (West Moreton), South Australia (Northern), Victoria (North West; St Vincent's) and Western Australia (Fremantle, Peel and Rockingham Kwinana). The sites were selected to be broadly representative of public specialised mental health services administered by states and territories.

In total, site catchments covered 61,682 square kilometres and an estimated resident population aged 18-64 years of 1,464,923 people, or approximately 10% of the Australian population aged 18-64 years.

Further information on the catchments is provided in Appendix 20.

1.8.1 Two-phase design

A two-phase design, especially suited for uncommon disorders, was employed. Firstly the sample is established, followed by the second phase of data collection (Figure 1-1).

Figure 1-1. Conduct of the survey and reporting**Australian National Survey of Psychosis 2010**

Phase 1 screening in a selected census month, March 2010, identified all people resident in the survey catchment sites and in contact with public specialised mental health services.

Screening also took place in government funded non-government organisations that provided mental health services in each of the catchment sites. This provided additional information on people only receiving services from these agencies in the census month.

A psychosis screener was used to identify individuals likely to meet criteria for formal diagnosis. This brief assessment tool was developed for use in the first survey and further refined for this survey.

In addition, administrative records were scanned to identify people with a recorded diagnosis of psychosis and in contact with public specialised mental health services in the 11 months prior to, but not in, the census month.

In Phase 2, information was collected on those who screened positive for psychosis and a smaller number of those who screened negative.

Separate recruitment targets were set for each catchment site and for the younger (18 to 34 years) and older (35 to 64 years) age groups. Age stratification was a key element in the survey design, as it ensured better coverage of both age groups, which are very differently affected by psychotic illness.

Interviewing took place between April and December 2010, except in Orange where interviewing continued through to the end of March 2011.

At interview, participants were asked to provide consent for their general practitioner to be contacted. These general practitioners were then asked to complete a questionnaire providing information on the participant, as well as a second questionnaire on their perspectives on the treatment and management of psychosis in general medical practices.

1.9 Instruments and assessments

In the development of the survey interview and assessment modules, particular importance was placed on the use of measures that were reliable, available, and cost and time effective. Minor enhancements only were made to the survey used in 1997-98 to ensure comparability with this survey and to enable an assessment of change over time. Additional material was included to allow comparison with other Australian data collections. These included the 2007 National Survey of Mental Health and Wellbeing and Australian Bureau of Statistics national surveys. This facilitated comparison with population norms.

The 32 modules of the survey covered:

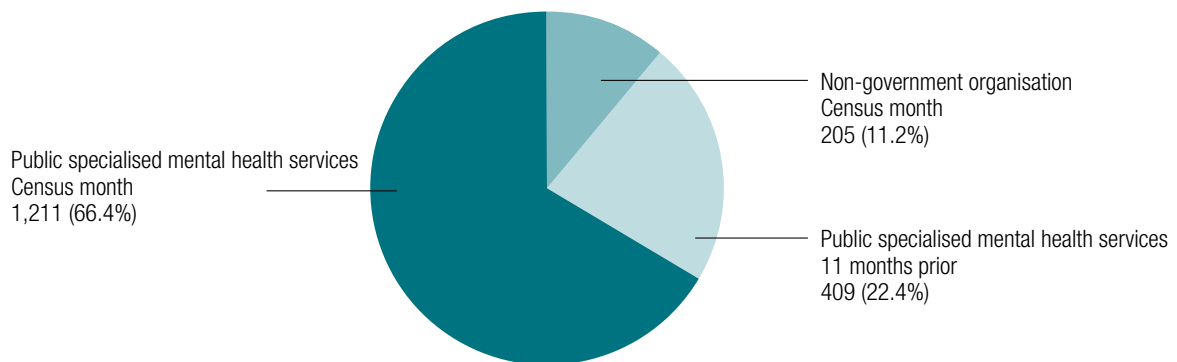
- **Demographics:** age and sex; education; housing and homelessness; employment; finances; children and other caring responsibilities; childhood experiences; victimisation and offending; and personal safety
- **Physical health:** nutrition; physical activity; physical health and metabolic measures; smoking and alcohol and drug use
- **Social participation and functioning:** satisfaction with life, ability to perform activities of daily living; and global functioning ratings
- **Quality of life**
- **Clinical diagnosis and symptoms:** ICD-10 diagnosis, symptoms associated with psychosis, anxiety, obsessions and depression
- **Course of illness and age of onset**
- **General cognitive ability**
- **Service use and treatment:** use of inpatient, emergency, outpatient, public community mental health, community rehabilitation and day therapy, general practice and non-government organisation services; case worker contact; use of employment, housing, family and other human service providers; medication use and its side effects; and use of psychosocial therapies
- **Perceived need for services:** met and unmet need for mental health and other services

Participants were asked to undertake a physical examination in which their blood pressure, height, weight and waist circumference were measured. Participants were also asked to provide a fasting blood sample so that their high density lipoproteins, triglycerides and plasma glucose levels could be determined.

1.10 Interview sample selection

A total of 7,955 people were screened positive for psychosis across the seven catchment sites. Of these, a sample of 1,825 participants were randomly selected for interview in two age groups (18-34 and 35-64 years).

Two thirds of the interviewed participants (66.4%) had been in contact with public specialised mental health treatment services in the census month. In the same month, a further 11.2% had only been in contact with non-government organisations funded to support people with mental illnesses. An additional 22.4% had not been in contact with designated services in the census month, but had been in contact with public specialised mental health services in the 11 months prior to census (Figure 1-2).

Figure 1-2. Sector in which interviewed participants were identified

An additional 164 people were randomly selected for interview from the pool of people who were screened negative for psychosis. This group completed the diagnostic module only. Their data enabled estimation of prevalence in the census groups without assuming that the psychosis screen had perfect sensitivity.

Comparison of participant screening data with data for those selected for interview, but not participating, indicates no systematic selection biases. Accordingly, the selected sample is broadly representative of adults with psychosis aged 18-64 years and in contact with public specialised mental health services and non-government organisations supporting people with mental illnesses.

2 ESTIMATES OF THE PREVALENCE OF PSYCHOTIC DISORDERS

The prevalence of a disorder is the proportion of people who meet diagnostic criteria for that disorder in a defined population over a particular period. Rates of incidence, remission, relapse and premature mortality influence prevalence estimates. However, from a policy perspective, prevalence is a key index as it indicates the number of people in the population who are in need of facilities, treatment and support.

Specification of a particular population and period are critical to the measurement and interpretation of any estimate of prevalence. The population is a defined group of people at risk for the disorder of interest. In the case of the second national psychosis survey, it is defined by geographic and age criteria, referring to people between the ages of 18 and 64 years who were resident in Australia during the survey period.

It is also confined to those people who received services from publicly funded services, both specialised mental health services and non-government organisations. The survey did not cover private service providers, that is private psychiatrists, psychologists and private hospitals and, as such, the prevalence does not cover those individuals who only received services through these providers.

The method used to calculate prevalence estimates is described fully in Appendix 2. Briefly, the proportion of people attending public specialised mental health treatment services in the survey census month who met criteria for a diagnosis of interest was estimated using appropriately weighted screen positive and screen negative subsamples in whom diagnostic status was ascertained using the diagnostic module of the Diagnostic Interview for Psychosis.⁴ This determines whether an individual meets the criteria of the standard diagnostic classification system used by clinicians, which is the International Classification of Diseases 10th Revision (ICD-10).

From this proportion, the number of people meeting diagnostic criteria in the census month was calculated for each site. Prevalence at each site was this number as a fraction of the estimated population of the catchment in each age and sex stratum. Aggregate estimates were obtained by combining prevalence estimates at each site weighted by the proportion of the total population represented by each site. For estimates combining strata, adjustments were made to reflect the age and sex distributions of the Australian population aged 18-64 years.

Two forms of contact with services were estimated, contact with public specialised mental health services and contact with non-government organisations funded to support people with psychotic illnesses.

2.1 One-month treated prevalence of persons with psychotic disorders in contact with public specialised mental health services

Table 2.1 shows the estimated one-month prevalence of people with an ICD-10 psychotic illness in contact with public specialised mental health services in Australia by age and sex.

Weighted to reflect the sex and age distribution of the Australian population aged 18 to 64 years, the overall prevalence of people meeting criteria for diagnosis of an ICD-10 psychotic disorder is 3.1 cases per 1,000 population. The corresponding prevalences for males and females, each weighted to reflect population age distributions, are 3.7 and 2.4 cases per 1,000 population respectively.

Table 2-1. Estimated national one-month treated prevalence of ICD-10 psychotic disorders in public specialised mental health services and number of people in contact with services

Age (years)	Catchment ERP*	Australian ERP	Prevalence (Cases per 1,000)	Estimated persons†
Males				
18 – 24‡	117,596	1,167,678	2.5	2,929
25 – 34	161,314	1,613,064	5.2	8,406
35 – 44	156,498	1,574,669	4.7	7,453
45 – 54	147,866	1,508,028	3.7	5,525
55 – 64	120,137	1,260,193	1.8	2,287
18 – 64	703,411	7,123,632	3.7	26,600
Females				
18 – 24‡	111,731	1,100,550	1.6	1,714
25 – 34	158,354	1,586,242	2.6	4,140
35 – 44	158,092	1,594,048	2.8	4,438
45 – 54	149,953	1,537,401	2.7	4,099
55 – 64	124,102	1,278,357	2.2	2,823
18 – 64	702,232	7,096,598	2.4	17,215
Persons				
18 – 24‡	229,327	2,268,228	2.0	4,644
25 – 34	319,668	3,199,306	3.9	12,546
35 – 44	314,590	3,168,717	3.8	11,891
45 – 54	297,819	3,045,429	3.2	9,624
55 – 64	244,239	2,538,550	2.0	5,110
All persons	1,405,643	14,220,230	3.1	43,815

* ERP Estimated resident population for 2010 extrapolated from 2009 data provided by the Australian Bureau of Statistics

† Estimated totals for ages 18-64 may not equal the sum of the individual age groups due to rounding

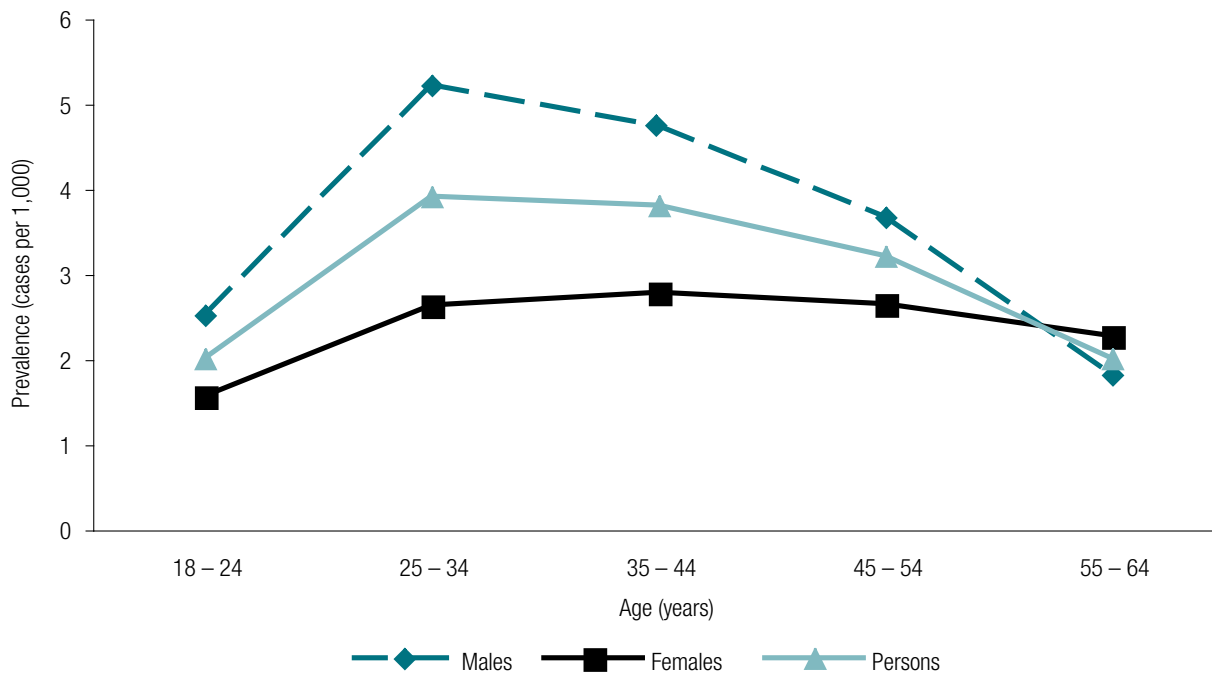
‡ The 18-24 year age group covers seven years only in contrast to the 10 years in each of the older groups.

Prevalence is higher for males than females in every age group except the oldest group of those aged 55-64 years, in which it was 1.8 and 2.2 cases per 1,000 population respectively.

As can be seen in Figure 2-1, prevalence in males rises sharply from 2.5 cases per 1,000 population in 18-24 year olds to 5.2 cases per 1,000 population in 25-34 year olds and 4.7 cases per 1,000 population in 35-44 year olds.

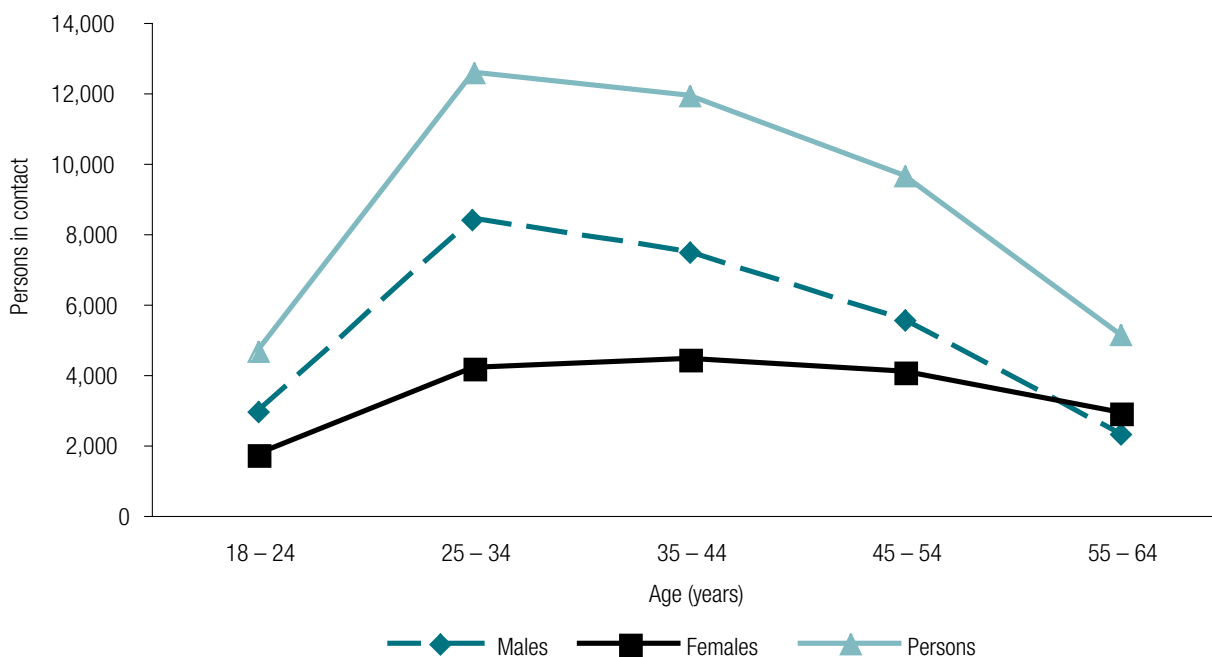
Prevalence in females climbs less markedly, rising from 1.6 cases per 1,000 population in 18-24 year olds to 2.6 cases per 1,000 population in 25-34 year olds. It is then relatively stable across the lifespan covered by the survey.

Figure 2-1. Estimated national one-month treated prevalence of ICD-10 psychotic disorders in public specialised mental health services by sex



Based on the survey catchments it was estimated that nationally, almost 44,000 people with psychotic disorders receive services from public specialised mental health services in a one-month period. Three-fifths (60.7%) of these people are male and a similar proportion (60.8% or 26,625 persons) are in the older age group (35-64 years of age).

Figure 2-2. Estimated number of people with ICD-10 psychotic disorders in contact with public specialised mental health services in one month by sex



2.2 12-month treated prevalence of persons with psychotic disorders in contact with public specialised mental health services

Table 2-2 shows the estimated 12-month prevalence of people with an ICD-10 psychotic disorder in contact with public specialised mental health services in Australia by age and sex. The overall prevalence is 4.5 cases per 1,000 population. The corresponding prevalences for males and females are 5.4 and 3.5 cases per 1,000 population, respectively.

Table 2-2. Estimated national 12 month treated prevalence of ICD-10 psychotic disorders in public specialised mental health services and number of people in contact with services

Age (years)	Catchment ERP*	Australian ERP	Prevalence (Cases per 1,000)	Estimated persons†
Males				
18 – 24‡	117,596	1,167,678	4.0	4,644
25 – 34	161,314	1,613,064	7.4	11,975
35 – 44	156,498	1,574,669	7.1	11,175
45 – 54	147,866	1,508,028	5.2	7,794
55 – 64	120,137	1,260,193	2.6	3,273
18 – 64	703,411	7,123,632	5.4	38,859
Females				
18 – 24‡	111,731	1,100,550	2.3	2,499
25 – 34	158,354	1,586,242	3.8	6,051
35 – 44	158,092	1,594,048	3.9	6,268
45 – 54	149,953	1,537,401	3.8	5,785
55 – 64	124,102	1,278,357	3.2	4,069
18 – 64	702,232	7,096,598	3.5	24,674
Persons				
18 – 24‡	229,327	2,268,228	3.1	7,144
25 – 34	319,668	3,199,306	5.6	18,026
35 – 44	314,590	3,168,717	5.6	17,443
45 – 54	297,819	3,045,429	4.5	13,579
55 – 64	244,239	2,538,550	2.9	7,341
All persons	1,405,643	14,220,230	4.5	63,533

* ERP Estimated resident population for 2010 extrapolated from 2009 data provided by the Australian Bureau of Statistics

† Estimated totals for ages 18-64 may not equal the sum of the individual age groups due to rounding

‡ The 18-24 year age group covers seven years only in contrast to the 10 years in each of the older groups.

As with the one-month prevalence estimates, 12-month prevalence is higher for males than females in every age group except the oldest group (55-64 years), with prevalence in males rising sharply from 4.0 cases per 1,000 population in 18-24 year olds to 7.4 cases per 1,000 population in 25-34 year olds and 7.1 cases per 1,000 population in 35-44 year olds.

Prevalence in females rises from 2.3 cases per 1,000 population in 18-24 year olds to 3.8 cases per 1,000 population in 25-34 year olds. It is then relatively stable across the lifespan covered by the survey.

Nationally, it was estimated 63,533 people with psychotic disorders received services from public specialised mental health services in a 12-month period. Three-fifths (61.2%) of these people were male and a similar proportion (60.4% or 38,363 persons) were in the older age group (35-64 years of age).

3 KEY SOCIOECONOMIC AND DEMOGRAPHIC CHARACTERISTICS

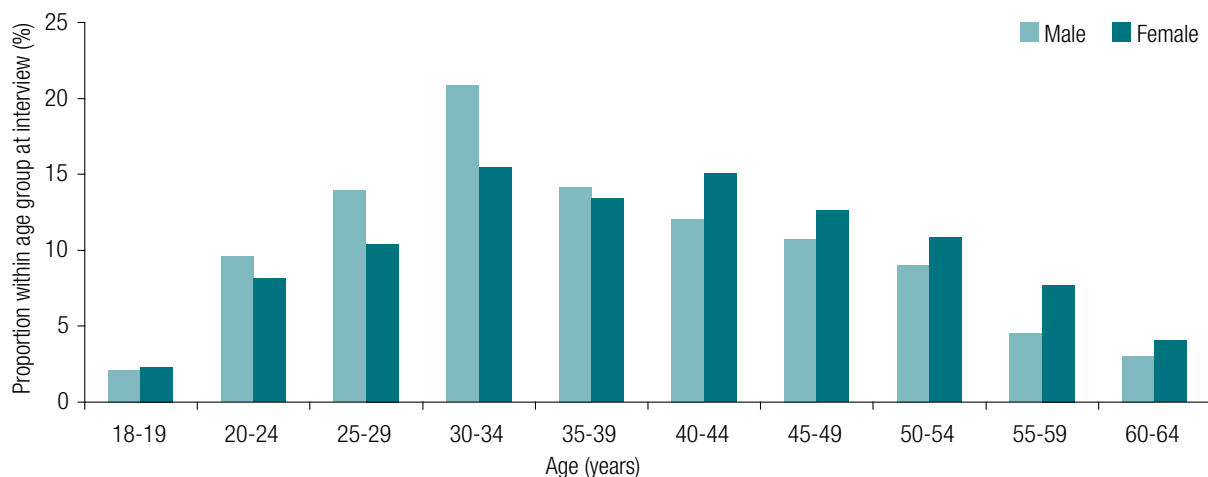
3.1 Age and sex

Of the 1,825 participants who screened positive for psychosis and were interviewed in the second phase of the survey, 1,087 or 59.6% were male and 738 were female.

Age stratification at the time of randomisation for interview was employed to ensure a good spread of survey participants across the two broad age groups, resulting in 42.4% of the total sample falling into the younger age group (18-34 years) and 57.6% falling into the older age group (35-64 years).

Figure 3-1 shows that there was a fairly even spread of people across all ages, with somewhat lower numbers of the very youngest and oldest age groups in the sample.

Figure 3-1. Age at interview



3.2 Country of birth and language spoken

Most participants (82.2%) had been born in Australia.

One in ten (9.2%) spoke a language other than English at home.

3.3 Educational profile

One third (33.7%) of participants had no school or post-school qualification. This compares to 24.9% of those in the general population as found in the 2007 National Survey of Mental Health and Wellbeing.⁸

Almost one third (31.5%) had completed the equivalent of year 12 schooling. Just under a half (47.1%) had a post-school qualification, including TAFE qualifications, trade certificates or higher education qualification (Table 3-1). These figures are markedly lower than percentages for the general population, at 53.0% and 59.4% respectively.⁸

One in five (18.4%) reported difficulty with reading and/or writing.

The proportion enrolled in formal studies in the past year was 20.8%. This included 10.3% of the total enrolled in vocational training programs: 8.7% in mainstream courses and 1.6% in non mainstream programs (for example, programs provided by sheltered workshops). Females were more likely than males (26.7% compared with 16.7%), and the younger age group was more likely than the older age group, to be enrolled in further studies.

Table 3-1. Key socioeconomic and demographic characteristics

	Proportion (%)		
	Males	Females	Persons
Older age group (35-64 years)	55.3	63.7	57.6
Sex	59.6	40.4	–
Born in Australia	83.3	80.6	82.2
Currently married or in de facto relationship	12.1	24.5	17.1
Own children (any age)	25.9	56.2	38.1
Dependent children living at home, including step children	5.5	23.6	12.8
Education			
Left school with no qualifications	36.1	30.2	33.7
Completed Year 12 education	31.0	32.1	31.5
Post-school qualification	43.3	52.6	47.1
Enrolled in formal studies (past year)	16.7	26.7	20.8
Income and employment			
Main source of income: government payment	85.6	83.7	85.0
In paid employment (past year)	33.6	31.3	32.7
In paid employment (past 7 days)	21.2	22.0	21.5
Homelessness and housing			
Living in supported accommodation (currently)	14.4	6.0	11.0
Homeless (currently)	7.3	2.0	5.2
Homeless (past year)	15.4	8.9	12.8

3.4 Income and employment

The main source of income for 85.0% of people was a government payment.

One third (32.7%) of people had been in paid employment in the past year, with one in five (21.5%) employed at the time of interview.

Income and employment are described in greater detail in Chapter 10.

3.5 Housing and homelessness

The majority of people were living in public or private rental accommodation (48.6%), a family home (19.1%) or their own home (13.1%) at the time of interview. One in ten (11.0%) were in supported accommodation.

One in twenty (5.2%) were homeless at the time of interview. This proportion rose to 12.8% for any period of homelessness over the past year.

Chapter 12 provides additional information on housing and homelessness.

3.6 Marital status and parenting

One in four women (24.5%) and one in ten men (12.1%) were currently in a married or de facto relationship.

Over half the women (56.2%) had children of any age, and one quarter (23.6%) had dependent children living at home with them. The proportion of men with children was substantially lower at 25.9% and 5.5% had dependent children living with them.

Chapter 11 provides additional information on these issues.

3.7 Health insurance

The majority of participants (85.8%) had a health care card at the time of interview.

A minority (15.1%) had some form of private health insurance. For 2.5% this was hospital cover only, 4.2% had ancillary cover only and 8.4% had both hospital and ancillary cover.

4 MENTAL HEALTH PROFILE

4.1 Diagnostic profile

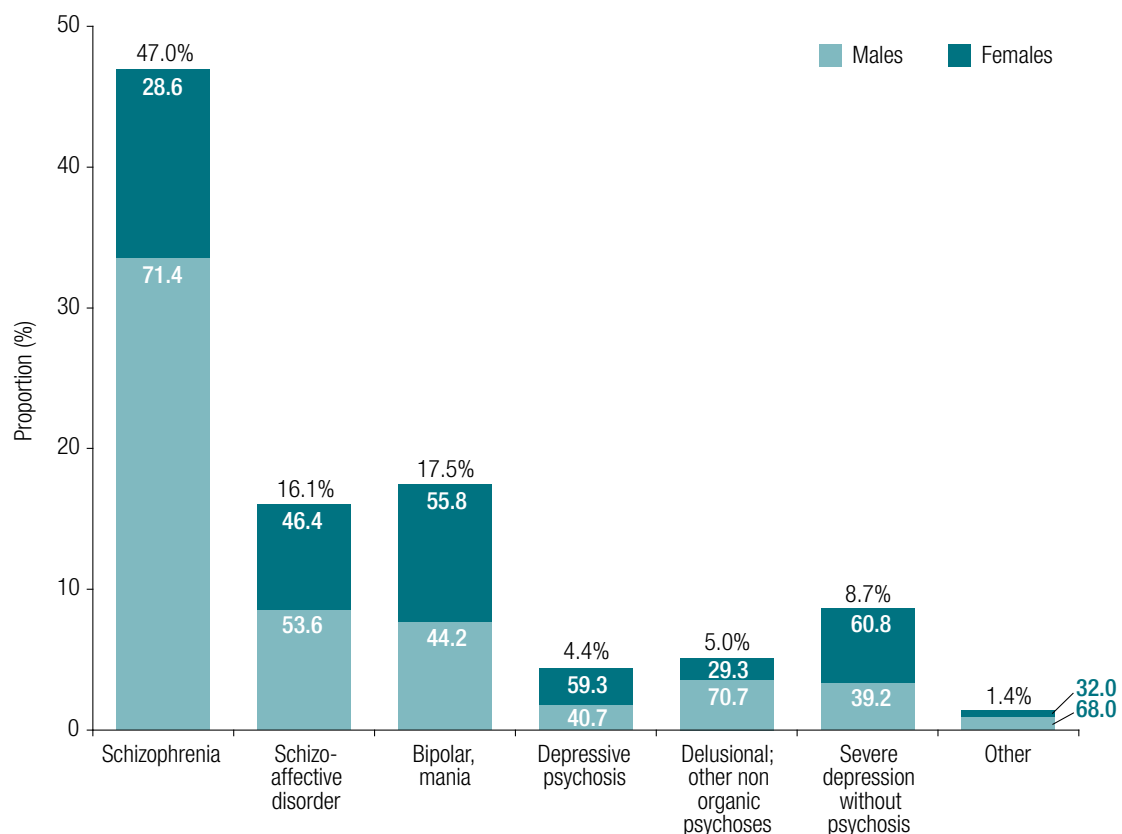
Psychotic illness covers a range of disorders of which schizophrenia is the most prevalent. At interview, 90.0% of the 1,825 screen positive participants randomly selected for interview and assessment were confirmed as meeting full ICD-10 criteria for a psychotic disorder. Almost half of the sample had a diagnosis of schizophrenia (47.0%) and 16.1% had a schizoaffective disorder.

In addition, 17.5% were diagnosed with a bipolar disorder or mania and 4.4% had a depressive psychosis.

A further 8.7% met diagnostic criteria for a severe depression without psychosis. Despite not meeting full criteria for psychosis, two-thirds of these had a lifetime history of psychotic symptoms of hallucinations, delusions or subjective thought disorder (the belief that another's thoughts have been inserted into one's own mind or that one's own thoughts have been inserted into another's mind).

A small proportion, 1.4%, did not meet full diagnostic criteria for diagnoses within the range of interest, despite meeting sufficient criteria before the interview to be rated as screen positive for psychosis (Figure 4-1).

Figure 4-1. ICD-10 lifetime diagnosis by sex



4.2 Age at onset of psychotic illness

The data from the survey provide further evidence that for the majority of people the onset of psychotic disorders is in late teens or early adulthood. The onset of illness has been determined in the survey as the point at which people first experience symptoms that cause distress, impair function or result in medical attention being sought. For many, these will be the more common symptoms of delusions and hallucinations.

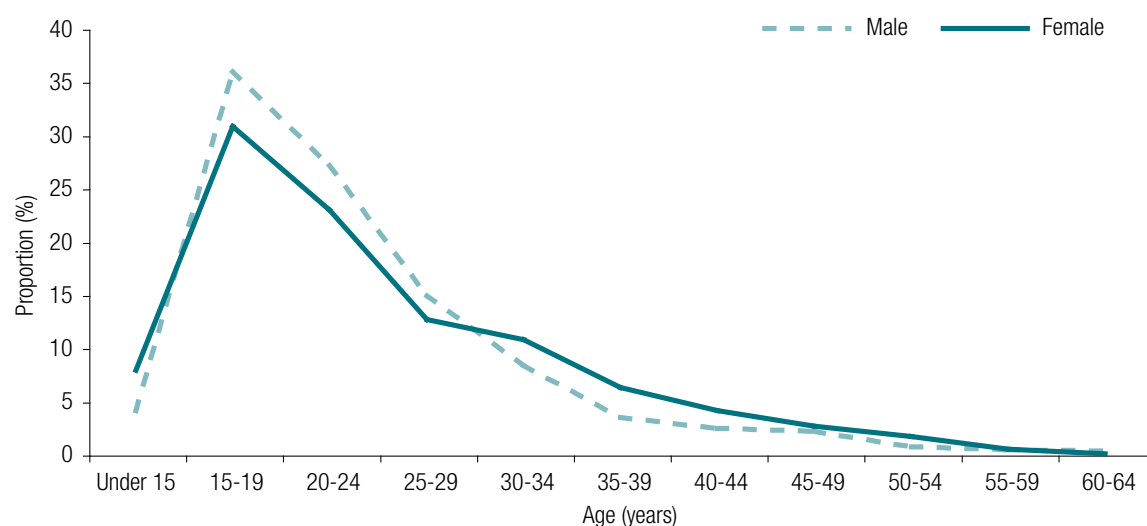
In two thirds of cases (64.8%), onset of illness was before the age of 25 years, with two-fifths (39.4%) first showing psychotic symptoms in their teenage years, that is under the age of 20 years. However, for one third of people (32.3% of males and 38.2% of females), onset was on or after the age of 25 years (Table 4-1 and Figure 4-2).

Table 4-1. Age at onset

Age (years)	Proportion (%)		
	Males	Females	Persons
Under 25 years	67.0	61.5	64.8
25-34	23.1	23.3	23.2
35-64	9.2	14.9	11.5
Not available	0.7	0.3	0.5
Total respondents	1,087	738	1,825

Age of onset was on average 23 years for males and 24 years for females.

Figure 4-2. Age at onset by sex



4.3 Type of onset

For most people (71.3%), onset was considered either gradual, between one and six months in duration (29.1%), or insidious, that is, over a period of more than six months (42.2%). For a smaller proportion, onset was moderately acute, extending between a week to a month (12.6%), acute, taking place over a week (7.2%), or abrupt, within hours or days (8.3%).

Table 4-2. Type of onset

Type	Proportion (%)
Insidious (over six months)	42.2
Gradual (one to six months)	29.1
Moderately acute (one week to one month)	12.6
Acute (within one week)	7.2
Abrupt (within hours or days)	8.3
Missing	0.6
Total respondents	1,825

Two thirds (62.8%) of people said that they had experienced a specific life stressor, such as death of a family member or being a victim of crime, in the year prior to the onset of their first episode of illness.

4.4 Family background and developmental history

Over half the participants (58.1%) had a first or second degree relative, that is, an immediate family member or an aunt, uncle, niece, nephew or grandparent, with a history of mental illness. Just over one quarter (27.1%) reported a family history of schizophrenia.

One in ten (11.5%) people reported delayed developmental milestones, that is, delays in starting to walk or talk.

Almost three out of five (57.2%) said they had experienced distressing or traumatic events in childhood, with 16.1% of the total sample reporting that they had been sexually abused in childhood.

4.5 Course of illness

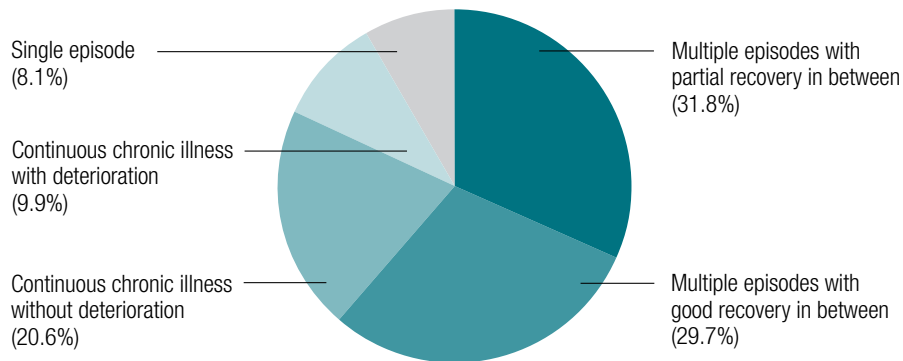
Course of illness was assessed and rated by the interviewers who had professional mental health backgrounds and who based their judgements on participant responses throughout the course of the semi-structured diagnostic interview. It refers to the number of episodes of mental illness that a person experiences and the degree of recovery after each episode.

At the time of interview, 8.1% of people had experienced just a single episode of psychosis with good recovery. While a proportion of these may remain symptom free with treatment, for others this episode will be the start of a more enduring illness.

Three-fifths (61.5%) had multiple episodes of psychotic symptoms, with full or partial remission of symptoms in between. Roughly half of this group (29.7%) experienced virtually no impairment in between the episodes, while the other half (31.8%) reported ongoing symptoms and impairment in between episodes.

One in three (30.5%) had a continuous chronic course of illness with persistent symptoms. For some (9.9%) there was no remission and increasing levels of impairment in their course of illness (Figure 4-3).

Figure 4-3. Course of illness



4.6 Symptom profile

Psychotic disorders are a diverse group of illnesses that impact on aspects of brain functioning involved in thinking, perception, emotion and communication. Two prominent symptoms are:

- Delusions (incorrect beliefs out of keeping with shared beliefs and values in the culture); and
- Hallucinations (perceptions without stimuli, for example, hearing voices).

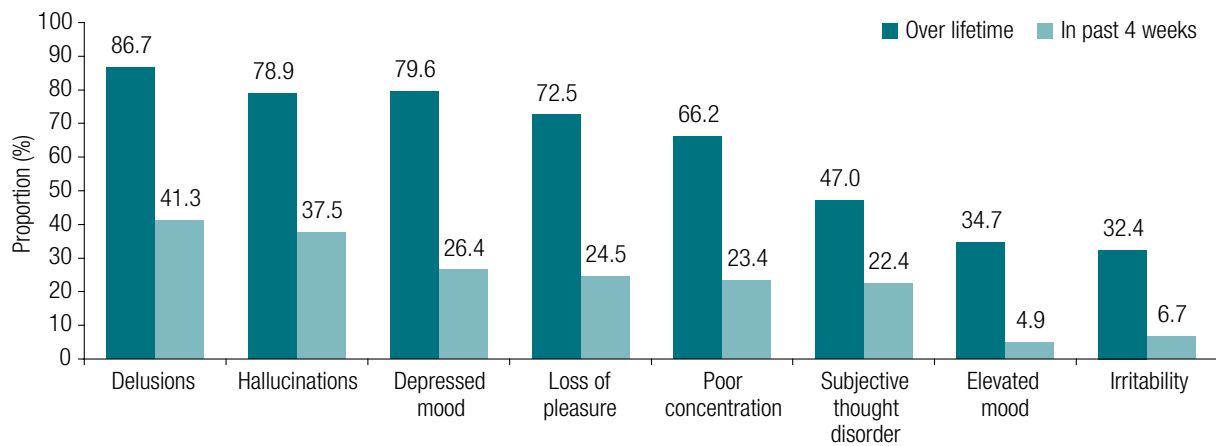
People with psychotic illness also experience a range of other symptoms including:

- Depression and elevated mood
- Lack of motivation and planning ability
- Subjective thought disorder – the abnormal experience of having thoughts that are not their own, of thoughts being inserted into their mind by some external agency, their own thoughts being directly accessible to others or thoughts being extracted from their mind.
- Disorganised communication – difficulty in understanding other people, in pursuing a logical train of thought and in expressing thoughts and feelings in speech and ‘body language’.

The current and lifetime profiles of some of the key symptoms of psychotic illness are provided in Figure 4-4.

The majority of people had experienced at some time delusions (86.7%) and hallucinations (78.9%), as well as key symptoms of depression including depressed mood (79.6%) and loss of pleasure (72.5%). Two thirds (66.2%) reported poor concentration, one half had experienced subjective thought disorder (47.0%) while one third of people reported they had experienced elevated mood (34.7%) and one third pervasive irritability (32.4%).

The current symptom profile was also dominated by delusions (41.3%) and hallucinations (37.5%). In addition, depressed mood, loss of pleasure, poor concentration and subjective thought disorder were each reported as being experienced in the past four weeks by one quarter of participants (26.4%, 24.5%, 23.4% and 22.4% respectively). Smaller proportions were currently experiencing elevated mood (4.9%) and pervasive irritability (6.7%).

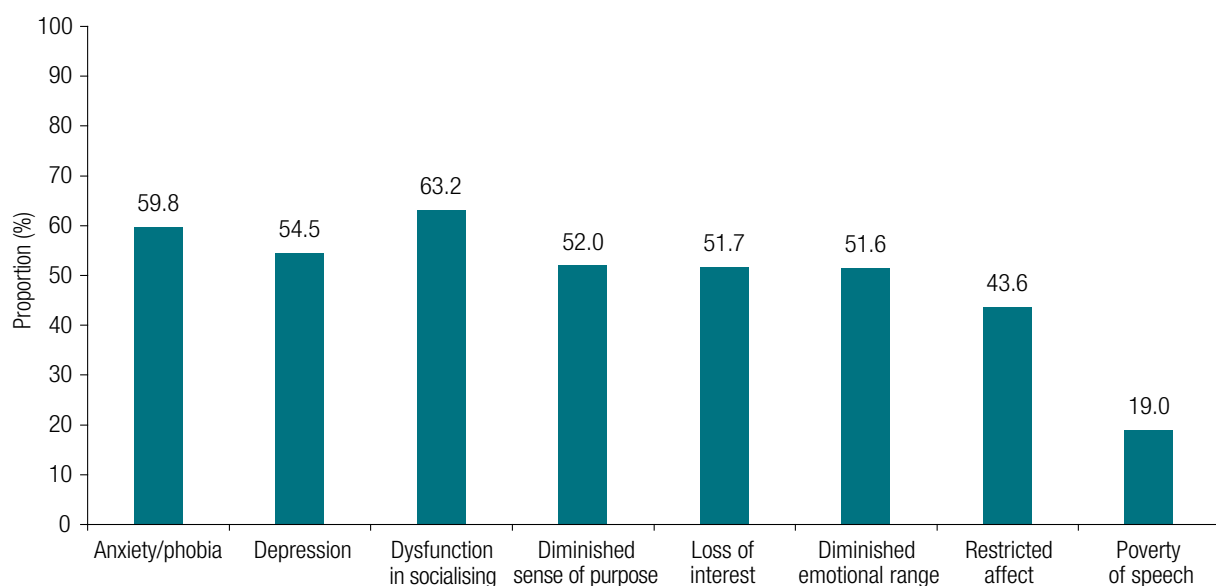
Figure 4-4. Key symptoms of psychotic disorders over lifetime and in past four weeks

For one quarter (23.9%) the experience of psychotic symptoms was accompanied by a sense of reality so compelling that it resulted in poor insight into the abnormal nature of what they were experiencing.

4.7 Other psychiatric comorbidity

Symptoms of depression and anxiety, which are commonly experienced by the general population, are also common among people with psychosis. Overall, 59.8% of participants reported symptoms of anxiety in the past year and just over half (54.5%) reported one or more symptoms of depression (Figure 4-5).

So-called negative (or deficit) symptoms are also common in psychotic illness. These include a diminished sense of purpose, loss of motivation and interest in the things around them, diminished emotional range or a reduction in the variety or intensity of emotions expressed, restricted affect indicated by reduced facial and vocal expression, poverty of speech, and impairment in socialising. Four-fifths (85.2%) of participants reported at least one negative symptom over the past year, or were observed to have restricted affect or poverty of speech at the time of interview. Two thirds (63.2%) reported dysfunction in socialising. Almost one-quarter (22.0%) of people were experiencing five to six different types of negative symptoms.

Figure 4-5. Other symptoms in the past year

5 SUICIDALITY

5.1 Suicidality

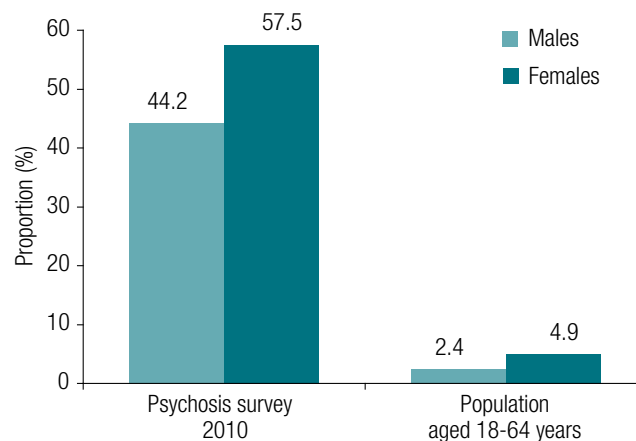
Suicidality includes having serious thoughts about taking one's own life (suicidal ideation), making a suicide plan and attempting suicide. Suicidality is a major health issue, creating a significant burden for individuals and their families, services and society. Rates of attempted and completed suicide among people with psychosis are extremely high. There are no national data. However, suicide rate ratios in people with schizophrenia receiving public specialised mental health services in Western Australia between 1980 and 1998 were 16.4 higher for males and 22.1 higher for females than the general population.¹¹

The survey collected data on a range of variables related to suicidality, including suicidal ideation and suicide attempts. The data reported here, however, underestimate the burden of suicidality in this population as they do not take into account an unknown number of individuals who died from suicide. Overall, 65 of those who were selected for interview had died between screening and the request to participate. Their cause of death is unknown, but would include death due to physical conditions and accidental death, as well as unconfirmed suicides. The total number of the original screened sample who died in this period is undetermined, as death has only been recorded for those selected for interview.

The proportion of participants who currently had serious thoughts about taking their own life was 11.5%, while two thirds (67.0%) of people had thought about suicide at some time in their lifetime.

Over their lifetimes, half the participants (49.5%) reported that they had attempted suicide. Attempts were higher for females than males (57.5% compared with 44.2%). By contrast, 3.7% of the general population aged 18-64 years (4.9% of females and 2.4% of males) reported that they had attempted suicide at some point in their lifetime⁸ (Figure 5-1).

Figure 5-1. Lifetime history of suicide attempt by sex and population comparison⁸



6 FUNCTIONING AND IMPAIRMENT

6.1 Deterioration from premorbid functioning

One half (51.2%) of participants were assessed by interviewers to have been functioning well in both occupational and social domains prior to the onset of their illness. In all, 70.8% were either in paid or unpaid work or studying. Two thirds (68.7%) appeared to be functioning normally in their work or study roles and two thirds (63.9%) appeared to have normal social functioning.

Almost all participants (90.4%) reported deterioration in functioning after the onset of the first diagnostic symptoms of their illness. The level of impairment was rated by the interviewers, who were mental health professionals trained to use specified probe questions and to elicit examples of actual behaviour before using their clinical judgement to make a rating based on all available information. Deficits in performance were rated only if they were judged by the interviewer to be attributable to the effects of illness.

For many, their level of impairment compared to normal functioning was assessed as marked. Two thirds (63.2%) had obvious or severe dysfunction in their capacity to socialise over the past year. One third (32.3%) had severe impairment in their ability to care for themselves in the past four weeks.

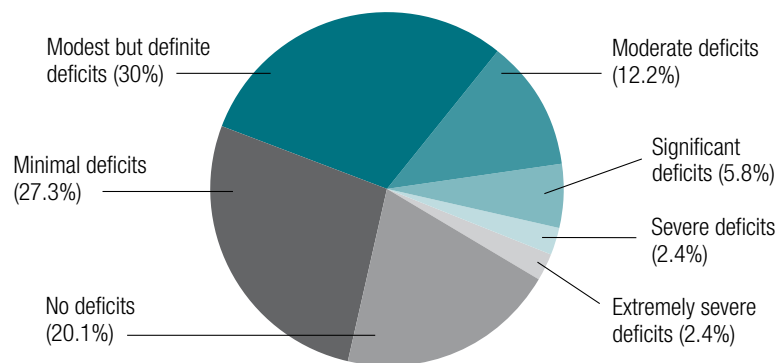
6.2 Overall functioning

Interviewers made global ratings of participants' level of functioning over the past four weeks using the Multidimensional Scale of Independent Functioning⁹. This focuses on role performance at work (broadly defined to include paid and unpaid work, childcare and caring), in study and in the activities of daily living. The Multidimensional Scale is made up of a number of subscales. Data is reported on two of these.

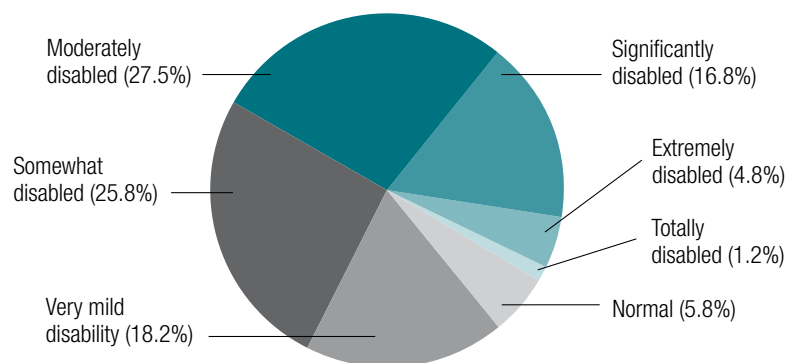
The global supported performance scale rates participants' performance given the responsibilities dictated by their specific role and their level of disability irrespective of the level of support that they receive. Two people in the same role with the same level of disability may score differently if one is supported to better performance than the other.

The global independent functioning scale rates functioning, corrected for the level of support used and performance, relative to the community norm. It reflects an overall level of disability. Two people with the same level of disability but different levels of functioning may score the same if one is provided with more support. For example, adequate functioning with regular support is equivalent to functioning with some difficulty with no support.

For supported performance, just under half of the participants (47.3%) were rated as having no or minimal deficits over the previous four weeks. Two-fifths (42.2%) had modest or moderate deficits and 5.8% had significant deficits. The remaining 4.8% were assessed as having severe and extremely severe deficits where they were assessed as completely neglecting their responsibilities. (Figure 6-1).

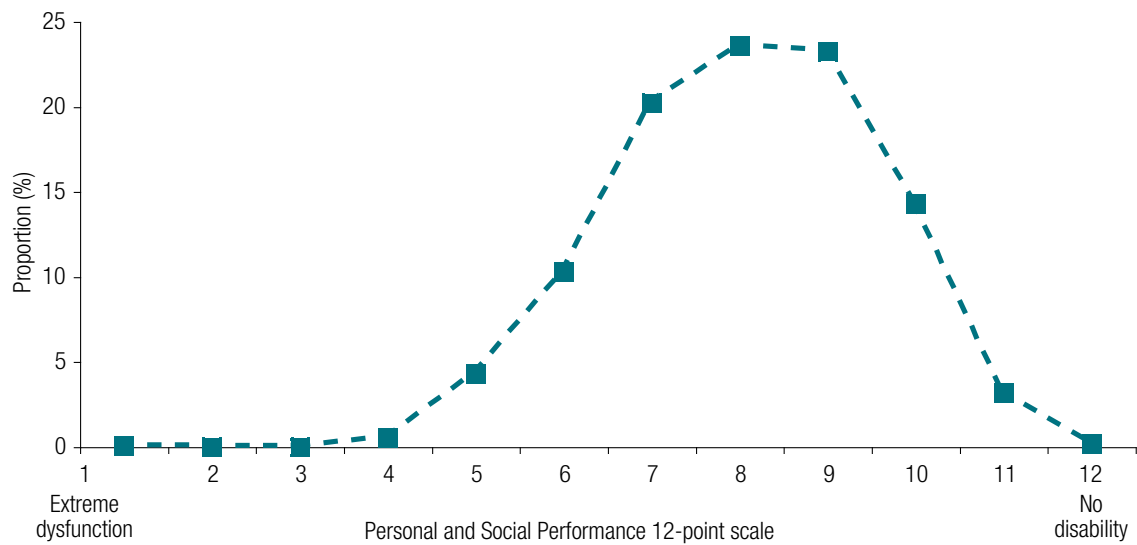
Figure 6-1. Global supported performance for level of disability⁹ in past 4 weeks

With respect to independent functioning, one quarter (24.0%) were rated as normal or very mildly disabled if unsupported relative to community norms. Just over half (53.3%) were somewhat or moderately disabled, and 16.8% were assessed as 'significantly disabled'. The remaining 6.0% were assessed as extremely or totally disabled where they are unable to function independently (Figure 6-2).

Figure 6-2. Global independent functioning⁹ in past 4 weeks

Participants were also assessed on another measure of functioning, the Personal and Social Performance Scale¹⁰, which rates performance over the course of a year and also covers behavioural and social aspects of people's functioning as well as their role performance. It uses a 100-point scale, which can be aggregated into 12-point and 3-point scales.

The distribution of scores for the 12-point scale is shown in Figure 6-3. In essence 17.7% of people were rated as having no disability or only mild difficulties with scores of 10-12 on the 12-point scale. At the other end of the scale 4.9% scored between 1 and 5, which meant their functioning was rated sufficiently poorly that they were assessed as requiring intensive support and supervision.

Figure 6-3. Personal and Social Performance Scale¹⁰ in past year

6.3 Activities of daily living

Routine activities of daily living include tasks such as shopping, cooking, doing laundry, cleaning and paying bills. Participants were asked about the routine chores that they undertook on their own behalf and not on behalf of others for whom they might be caring.

While around two thirds of participants were able to complete routine activities, between 1% and 3% could not carry out the various simple, daily chores (Table 6-1).

Table 6-1 also highlights that many people with psychosis were not responsible for even these basic chores, with one-fifth (21.4%) not doing their food shopping and one-fifth (20.5%) not cooking meals. Some (8.8%) were not responsible for cleaning their own room.

Table 6-1. Completion of routine chores in past 4 weeks

	Proportion (%)				
	Food shopping	Cooking meals	Doing laundry	Cleaning room	Paying bills
Completed	64.8	62.1	71.6	72.8	61.9
Partially completed	12.8	15.7	10.6	15.5	6.9
Unable to carry out	1.0	1.6	1.3	2.9	2.2
Not their responsibility	21.4	20.5	16.5	8.8	28.9
Total respondents	1,825	1,825	1,825	1,825	1,825

6.4 Days out of role

Days out of role assesses the impact of health problems on people's ability to function in particular areas of their lives, namely domestic, work and study. Specifically, it represents the number of days over the four weeks prior to interview that participants were unable to fulfil their usual role due to physical or mental health problems.

Days out of role were calculated for each domain using different questions and subgroups as follows:

- Domestic role for all participants;
- Work role for those in paid employment in the four weeks prior to interview; and
- Study role for those studying in the four weeks prior to interview.

On average, participants had 3.2 days in the last 28 days in which they could not perform their domestic roles and, for 79.0%, the reasons were partially or wholly mental health related (Table 6-2).

The average days lost from the work role for those employed at the time was 5.3 days in the last 28 days. Of these, 3.7 days were lost due to mental health reasons.

Those studying lost on average 2.8 days in the last 28 days. For two thirds (68.1%) of participants this loss was partially or wholly mental health related.

Table 6-2. Days out of role and reasons in past 4 weeks

	Days out of role
Domestic responsibilities	
For any health reason (mean number of days)	3.2
Partially or wholly mental health related (% of those with days out of role)	79.0%
Work responsibilities	
For any health reason (mean number of days)	5.3
For physical health reason (mean number of days)	1.6
For mental health reason (mean number of days)	3.7
Study responsibilities	
For any health reason (mean number of days)	2.8
Partially or wholly mental health related (% of those with days out of role)	68.1%

7 PHYSICAL HEALTH PROFILE

7.1 Physical morbidity

The poor physical health of people with psychosis has been well-documented in Australia and elsewhere^{11, 12}. In particular, elevated levels of metabolic and cardiovascular risk factors have been observed in this population, resulting in increased physical health morbidity and mortality. Contributing factors to these risks include medication side effects, lifestyle and genetic predisposition. For people with psychosis, poor physical health compounds the heavy burden already associated with their mental illness.

Participants underwent a comprehensive physical health examination with measurement of blood pressure, height, weight and waist circumference. During the interview, they were also asked about conditions diagnosed by their general practitioner and medical assessments that they had undergone, as well as questions about their diet and level of physical activity. Participants were also asked to provide a fasting blood sample for analysis of high density lipoprotein, triglyceride and plasma glucose levels. Cardiometabolic risk factors and the presence of metabolic syndrome were assessed using International Diabetes Federation criteria. The Framingham risk equation was used to calculate the absolute risk of cardiovascular disease within five years of interview.

Participant reports of physical health morbidity, as diagnosed or assessed by their doctors at any time in the past, covered a wide range of conditions. Rates for all conditions except cancer were higher in people with psychosis compared to the general population (Figure 7-1).

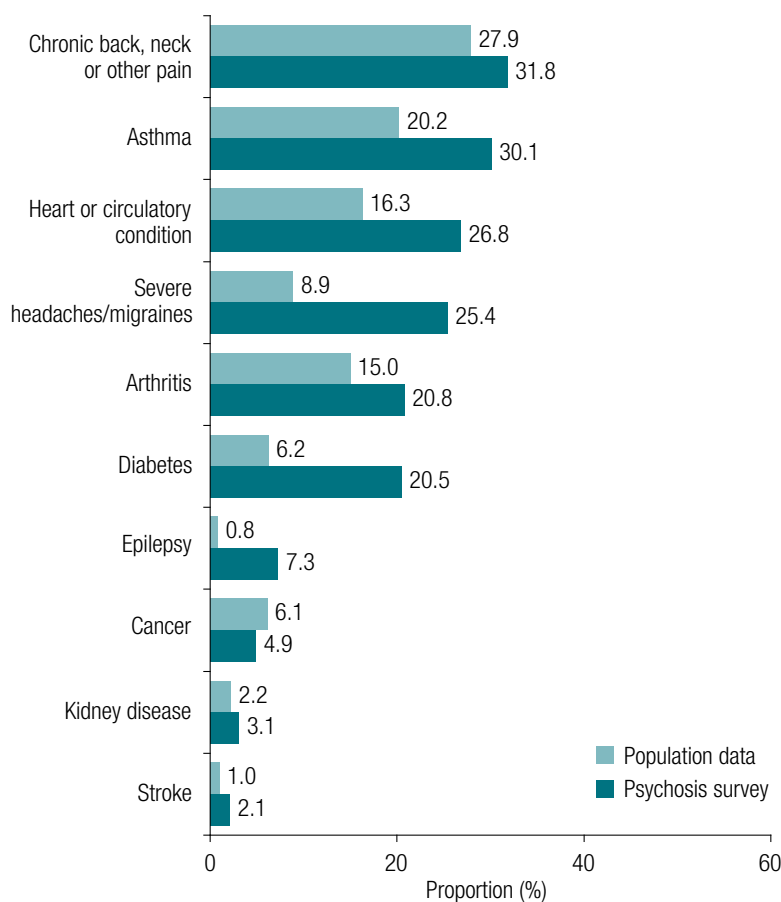
One third of participants (31.8%) experienced chronic back, neck or other pain and one quarter (25.4%) experienced frequent and/or severe headaches and migraines.

Just over one quarter (26.8%) had heart or circulatory conditions.

One-fifth (20.5%) of people had diabetes. This is over three times the rate in the general population.

Other physical health issues included asthma (30.1%), allergies (26.0%), arthritis (20.8%) and respiratory problems (18.0%). Notable, although less common, were hepatitis (11.2%), eating disorders (8.0%) and epilepsy (7.3%).

In addition, 31.7% reported memory problems and 22.0% reported a past head injury leading to loss of consciousness. A small number (2.7%) said they had a congenital disorder.

Figure 7-1. Lifetime physical morbidity, and population comparison⁸

7.2 Cardiometabolic risk factors

Three quarters (76.2%) of participants gave blood for metabolic analysis. These participants were assessed for key cardiometabolic risk factors: abdominal obesity, high blood pressure, fasting high density lipoproteins, fasting triglycerides and fasting plasma glucose.

People were determined to be at risk where they were found to have readings at or above widely used International Diabetes Federation at risk levels (see Appendix 7 for risk criteria). The proportion meeting criteria for being at risk within the individual cardiometabolic measures are given in Table 7-1.

Four out of five (82.1%) participants met at-risk criteria for abdominal obesity. Half had at risk levels of high density lipoproteins, blood pressure or triglycerides (49.7%, 48.8% and 48.0% respectively), and approximately one quarter (28.6%) had elevated plasma glucose, which is commonly associated with diabetes.

Metabolic syndrome is a cluster of the most dangerous risk factors for cardiovascular disease. It is defined as at-risk abdominal obesity plus at-risk status in at least two other cardiometabolic measures.¹³ Half the participants (49.9%) met the criteria for metabolic syndrome.

Table 7-1. Metabolic syndrome and cardiometabolic measures

	Proportion (%)
Met criteria for metabolic syndrome*	49.9
Met 'at-risk' criteria for individual cardiometabolic measures:	
Abdominal obesity	82.1
High density lipoproteins†	49.7
Blood pressure	48.8
Triglycerides†	48.0
Plasma glucose†	28.6

* International Diabetes Federation metabolic syndrome consensus criteria¹³ applied to those with no missing data

† Fasting

7.3 Risk of cardiovascular disease

Absolute risk calculations use multiple risk factors rather than relying on single risk factors to determine the likelihood of a cardiovascular event within a specified period. The Framingham risk equation, widely used in Australia and elsewhere,^{15, 16} was used to calculate absolute risk of cardiovascular disease within the next five years among participants. In keeping with guidelines, high risk was assumed automatically for those with any of the following:

- pre-existing cardiovascular disease;
- aged over 60 years and a diagnosis of diabetes;
- systolic blood pressure of 180 mmHg or more;
- diastolic blood pressure of 110 mmHg or more; or
- total serum cholesterol higher than 7.5 mmol/L.

Almost one third (31.2%) of participants who were assessed met criteria for absolute risk of a cardiovascular event within five years, with 7.2% of the total at medium risk and 24.0% at high risk (Table 7-2).

The one quarter of participants at high risk can be disaggregated into 2.4% at high risk but without pre-existing conditions that automatically place them in the high risk category and 21.6% in the high risk category due to pre-existing cardiovascular disease or high risk medical conditions.

Altogether, 43.7% of the older age group (35-64 years) met medium or high risk criteria for a cardiovascular event within five years.

Table 7-2. Absolute 5-year risk of cardiovascular disease

	Proportion (%)		
	18-34 years	35-64 years	Persons
Low risk	87.2	56.3	68.8
Medium risk	0.0	12.0	7.2
High risk	12.8	31.7	24.0

* Framingham risk equation¹⁵⁻¹⁶ applied to those with no missing data

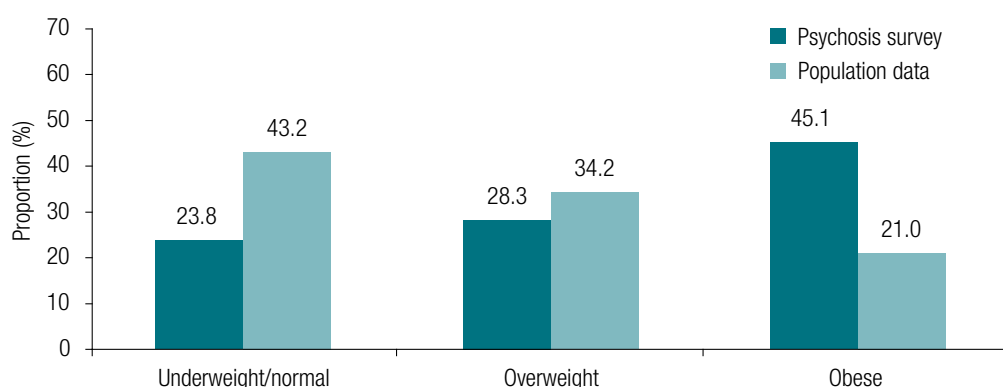
The Framingham risk equation is not normally used with people under 35 years of age. However, there were 12.8% in the younger age group who met risk criteria. In all cases, this was due to pre-existing cardiovascular disease or other high risk medical conditions.

7.4 Body weight and physical activity

Medications used to treat psychotic illness, in particular, atypical antipsychotics, have been associated with weight gain and consequent risk of poor physical health outcomes, especially metabolic disorders and cardiovascular disease. Their impact is exacerbated by limited physical exercise, poor diet and family history of diabetes and cardiovascular disease.

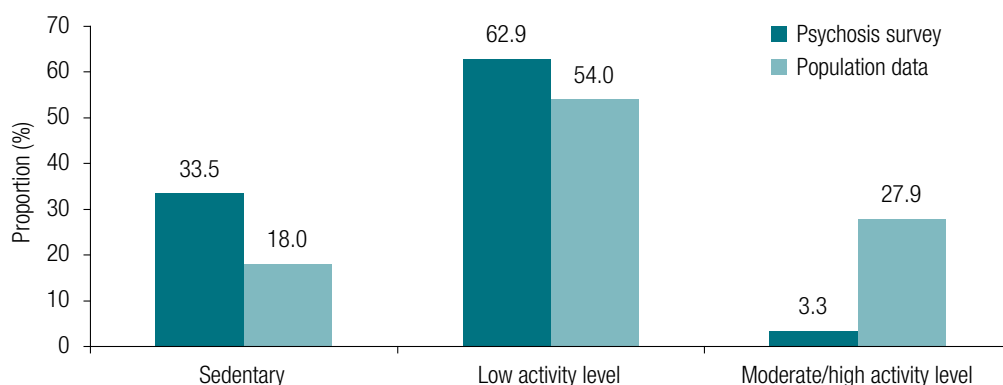
Three quarters of participants (73.4%) had a body mass index¹⁷ in the overweight or obese range, with almost half (45.1%) assessed in the obese range. By comparison, data from the 2007 National Survey of Mental Health and Wellbeing showed that 34.2% of the general population were overweight and 21.0% were obese (Figure 7-2).

Figure 7-2. Body mass index and population comparison¹⁹



The level of physical activity that participants had undertaken in the seven days prior to interview was measured using the International Physical Activity Questionnaire.¹⁸ One third of participants (33.5%) were classified as sedentary, that is inactive or with very low levels of activity, while the other two-thirds were classified as having a low level of activity (Figure 7-3).

Figure 7-3. Level of physical activity in past week and population comparison¹⁹



Levels of physical activity were similar for males and females. Those in the older group aged 35-64 years were more likely to be in the sedentary category compared to the younger age group (18-34 years).

The most commonly reported barriers to being physically active were lack of motivation (36.4%), tiredness (19.2%) and pain or discomfort (15.8%).

7.5 Nutrition

Data were collected on nutrition in the four weeks prior to interview. One third of participants (33.4%) did not have breakfast on any day of the week. Almost half (48.3%) had only one serve or less of fruit a day and another quarter (22.8%) did not eat fruit at all. Two-fifths (41.5%) had only one serve or less of vegetables a day and 7.1% did not eat vegetables at all.

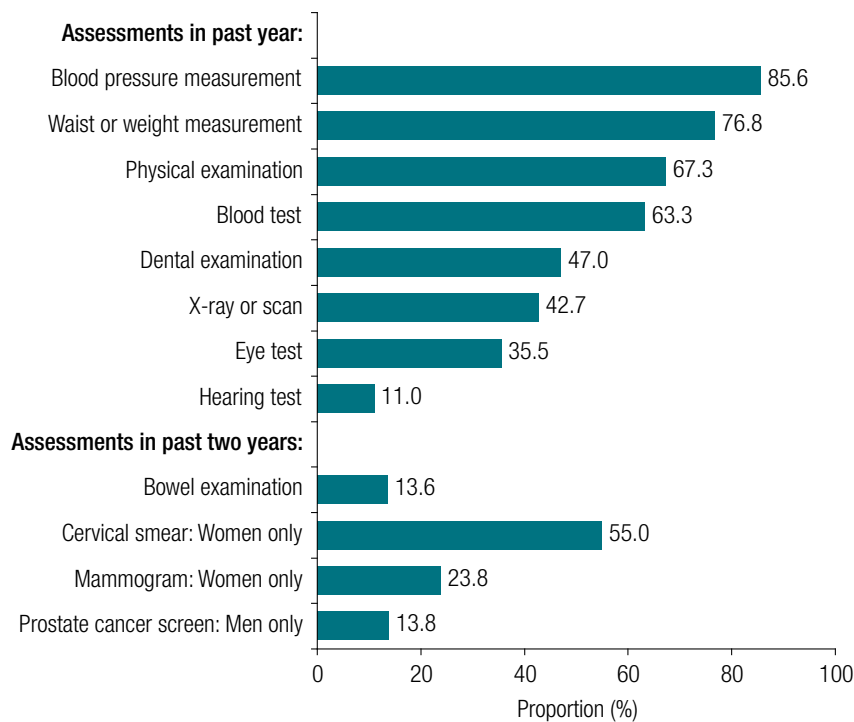
Reflecting on the past year, over a quarter (28.4%) of participants said that they had run out of food one or more times.

7.6 Monitoring physical health

In the course of the year, almost all participants (97.4%) had undergone one or more of eight different types of assessments to monitor the status of their physical health. The majority had had at least four physical assessments of some kind.

For most people (85.6%) this was a more simple blood pressure measurement and three quarters (76.8%) had waist or weight measurements taken. However, two thirds (67.3%) had had a physical examination in the past year and 63.3% had had a blood test (Figure 7-4).

Figure 7-4. Physical health assessments



Participants were also asked about routine screening. Given that the sample covered those aged 18-64 years, the proportions having bowel examinations, mammograms and prostate cancer screening, which are routinely recommended only for older persons, would not be expected to be particularly high.

8 SUBSTANCE USE

The 2010 survey used the same key variables as the 1997-98 national psychosis survey to measure substance use to ensure comparability with the 1997-98 survey, allowing an assessment of change over time.

For tobacco use, the key measure was the proportion currently smoking.

For alcohol abuse or dependence and drug abuse or dependence, the key measure was the proportion of participants with a lifetime history of abuse or dependence. These data were assessed and coded by interviewers with a mental health background on the basis of a detailed semi-structured interview on current and lifetime use, including frequency of use, quantity and impact.

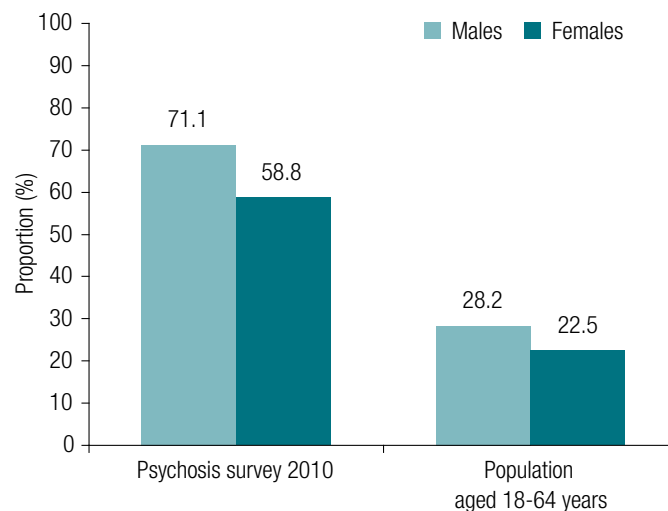
8.1 Tobacco use

Despite concerted public anti-smoking campaigns, including within public specialised mental health services, levels of tobacco smoking were very high among people with psychosis. The proportion smoking had not changed since the 1997-98 survey, with two thirds (66.1%) of participants reporting they were currently smoking in both surveys.

The proportion smoking was higher in males, with 71.1% reporting they were current smokers when interviewed compared to 58.8% of females. Participants smoked on average 21 cigarettes per day.

These figures are well above current national levels. The 2007 National Survey of Mental Health and Wellbeing found, using a slightly different methodology, that one quarter or 25.3% of the general population aged 18-64 years smoked (Figure 8-1). The rates were marginally higher in males, with 28.2% currently smoking compared with 22.5% of females.⁸

Figure 8-1. Current tobacco smoking, and population comparison⁸



Across age groups, 69.9% of 18-34 years were smoking compared to 63.4% of 35-64 year olds.

Forty percent (40.0%) of the total sample were ranked high or very high on the Fagerstrom Test for Nicotine Dependence, a test commonly used by health professionals to measure the intensity of nicotine dependence.

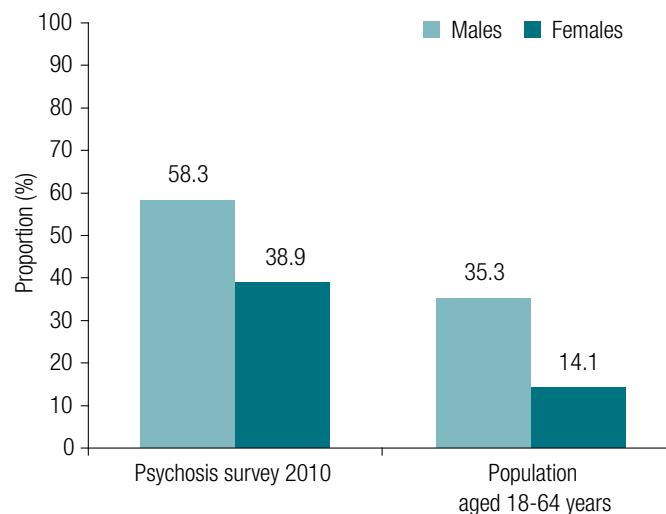
Just over one quarter (27.3%) of people currently smoking had never tried to stop, however, 31.0% had made an effort to stop smoking within the past year.

8.2 Alcohol use

The proportion of participants who were assessed at interview as having a lifetime history of alcohol abuse or dependence was very high. The proportion is substantially higher than was found in the first psychosis survey in 1997-98 and markedly higher than current population levels.

In the 2010 survey, 58.3% of males and 38.9% of females had a lifetime history of alcohol abuse or dependence (Figure 8-2). This compares to 35.3% for males and 14.1% for females in the general population as assessed in the 2007 National Survey of Mental Health and Wellbeing as drinking at levels constituting harmful use or dependence.⁸

Figure 8-2. Lifetime alcohol abuse or dependence and population comparison⁸



These general population rates are more similar to rates in the 1997-98 psychosis survey than the current psychosis survey. In 1997-98 it was found that 37.9% of males and 17.7% females met criteria for lifetime alcohol abuse or dependence. The rates in 2010 are one and a half times higher (an increase of 53.8%) in males and twice as high (an increase of 119.8%) in females.

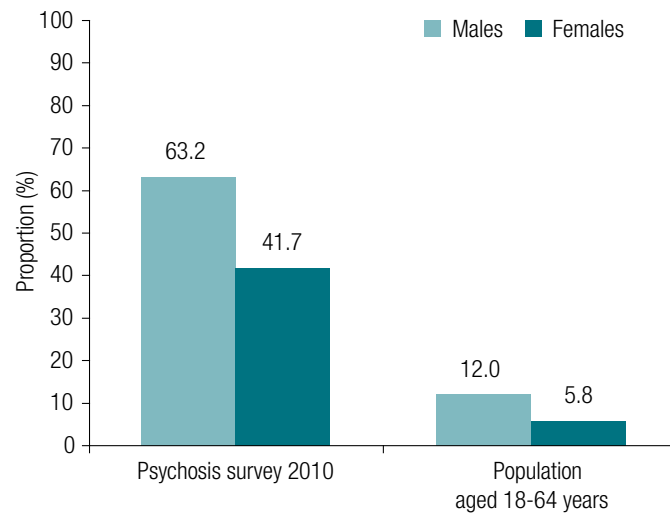
8.3 Use of cannabis and other illicit drugs

The proportion with a lifetime history of cannabis or other illicit drug abuse or dependence was very high at 63.2% of males and 41.7% of females (Figure 8-3).

Comparison with population data was even more striking, with only 12.0% of males and 5.8% of females in the general population, as assessed in the 2007 National Survey of Mental Health and Wellbeing meeting criteria for lifetime cannabis or other illicit substance harmful use or dependence.⁸

The increases in proportions were similar to, but somewhat higher, than those found for alcohol abuse or dependence. In 1997-98, 35.6% of males and 15.9% of females were reported as abusing or being dependent on cannabis and other illicit drugs. This is a 77% increase in the proportion of males in 2010 and a 136.5% increase for females.

Figure 8-3. Lifetime cannabis and other drug abuse or dependence and population comparison⁸



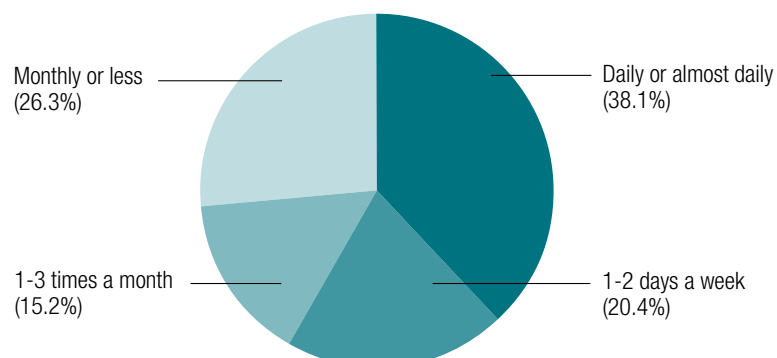
Cannabis was the most commonly used illicit drug, with one third (32.8%) of participants having used it in the previous year and two thirds (66.4%) over their lifetime (Table 8-1).

Table 8-1. Type of illicit drug used in past year and over lifetime

	Proportion (%)	
	Past year	Lifetime
Cannabis	32.8	66.4
Amphetamines	12.5	40.1
Tranquillisers	4.1	11.9
Ecstasy	4.0	23.1
Heroin	3.7	15.7
Hallucinogens	2.7	25.4
Cocaine	2.0	13.3
Solvents/inhalants	0.4	10.3

Almost three-fifths (58.5%) of people using cannabis in the past year were using it at least once a week, with 38.1% using it daily or almost daily (Figure 8-4).

Figure 8-4. Frequency of cannabis use in the past year



8.4 Consequences of substance use

One in ten (10.6%) of all participants reported failure to fulfil their normal role over the past year as a result of their alcohol use. The same proportion (10.1%) reported social or legal problems related to alcohol use. An even higher proportion, one quarter (26.6%) reported engaging in risk-taking behaviour over the past year as a result of their alcohol use.

The data on negative consequences of cannabis or other illicit drug use were similar to those for alcohol use. One in ten (11.1%) reported failure to fulfil their normal role. One in ten (11.1%) reported social or legal problems, and one quarter (26.5%) reported engaging in risk-taking behaviour as a result of their illicit drug use.

9 GENERAL COGNITIVE ABILITY

9.1 Introduction

General cognitive ability, or reasoning, has an important impact on everyday functioning. Reasoning skills can be impaired to a variable degree in psychotic illness. This impairment, further exacerbated by the symptoms of illness and medication side effects, may influence considerably a person's capacity to undertake normal activities.

9.2 Assessment of general cognitive ability

General cognitive ability was assessed in the course of the survey in two ways.

To assess *current* general cognitive ability, a test of the speed at which individuals process information was used, namely the Digit Symbol Coding test from the Repeatable Battery for the Assessment of Neuropsychological Status.²⁰ In this test, individuals fill in digits corresponding to shapes, as quickly as they can, on the basis of a coding key. The lower the test score, the poorer a person's speed-based performance.

To estimate general cognitive ability *prior* to the onset of illness, the National Adult Reading Test-Revised was used.¹⁴ This is a test in which individuals are asked to pronounce irregularly spelt words (for example, palm). The test is based on the assumption that verbal ability remains relatively unaffected despite the decline in cognitive ability that may follow illness onset. This test is used internationally as a reliable and widely accepted measure for estimating retrospectively IQ levels in people with psychotic disorders before they became ill.

9.3 General cognitive ability in people with psychosis

Current cognitive ability was markedly impaired in people with psychosis compared to the general population. On average, people with psychosis scored 38.6, 1.6 standard deviations below the general population score of 54.2.²¹

People with psychosis had a moderately lower score compared to the general population on the test measuring IQ prior to illness onset. Their average estimated premorbid IQ score was lower but still within the normal range compared to the population norm (98.1 and 107.4 respectively).¹⁴

These data suggest that there is some cognitive impairment in people with psychosis prior to illness onset and that this is amplified in the years following diagnosis.

10 INCOME AND EMPLOYMENT

10.1 Income

Almost all participants were in receipt of some form of income. For 85.0%, their main source of income was a government payment (see Table 10-1). The main form of government support was the Disability Support Pension, with almost three quarters (72.7%) of the total sample receiving this form of income support.

Table 10-1. Sources of income

	Proportion (%)
Any source of income (past year)	98.8
Main source of income is government pension (past year)	85.0
Disability Support Pension (past year)	72.7
Paid employment (past year)	32.7
Paid employment (current)	21.5

Three out of five (59.2%) participants had a net fortnightly income from all sources of between \$500 and \$799, with roughly equal proportions in lower and higher income bands than this (see Table 10-2). This equates with the standard Disability Support Pension allocation for single people of \$644.20 per fortnight (as at 1 July 2010), which is the main source of income for many people with psychotic illness.

Table 10-2. Current net fortnightly income from all sources

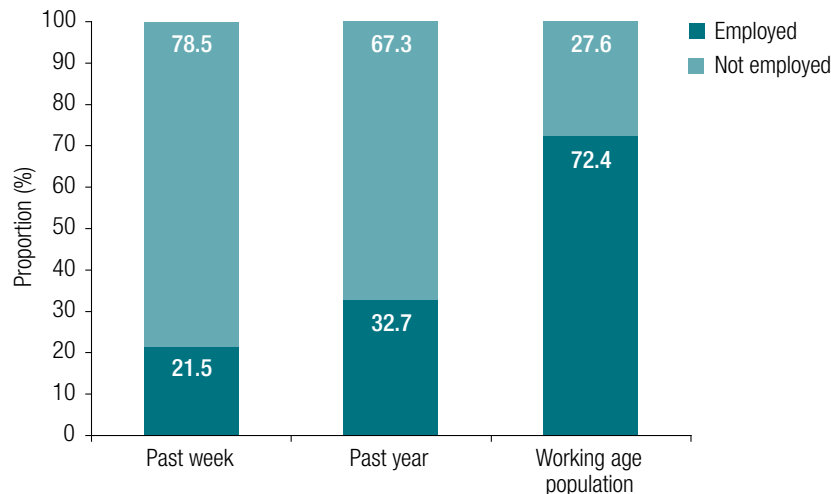
	Proportion (%)
Less than \$300 per fortnight or missing	9.0
Between \$300 – \$499 per fortnight	11.5
Between \$500 – \$799 per fortnight	59.2
Between \$800 – \$1,000 per fortnight	12.7
More than \$1,000 per fortnight	7.6
Total respondents	1,825

There were no marked differences in income between males and females and the younger and older age groups.

10.2 Employment

One third of participants (32.7%) had been in paid employment over the past year, and one fifth (21.5%) in the week prior to interview (Figure 10-1). By comparison, 72.4% of the general working age population (15-64 years) were employed in July 2010.²²

Figure 10-1. Employment status in past week and past year



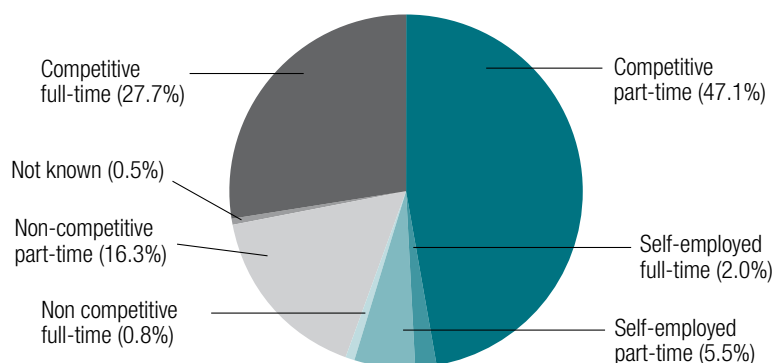
Just over one quarter of participants (26.9%) had actively sought employment over the past year and 8.4% in the week prior to interview. In the week prior to interview, the labour force participation rate was estimated at 30.5%, under half that of the general population participation rate (65.3%), and the unemployment rate was estimated at 27.4%, five times that of the general population (5.0%).²²

Three quarters (74.8%) of those participants who were employed were in the competitive job market, with 27.7% of all participants working full-time and 47.1% working part-time. Another 7.6% were self-employed.

Less than one in five (17.1%) were in sheltered, non-competitive employment, that is, in jobs in modified settings for people with a disability that were not fully competitive (Figure 10-2).

Overall 69.0% were working part-time.

Figure 10-2. Type of employment, for those employed in past year



On average people worked 23 hours per week. Males were working more hours than females (26 compared to 20 hours per week), as were those in the younger age group compared to the older age group (25 compared to 22 hours per week). One quarter (27.5%) of participants would have preferred to work more hours.

The most common occupation for males was labourer (48.5%), followed by technician/trades worker (14.2%) and community/personal service worker (12.1%). For females, the two most common occupations were labourer and community/personal service worker (26.5% and 26.4%, respectively), followed by clerical/administrative worker (14.7%) and sales worker (14.3%).

The proportion of active job seekers was similar for males and females, with one quarter (27.5% and 26.0% respectively) seeking work. The proportion was, however, higher in the younger age group compared to the older age group (36.1% of 18-34 year olds and 20.2% of 35-64 year olds).

Just over half (56.2%) of those who were employed had told their employer about their mental illness. Females were less likely to disclose than males (48.1% compared to 61.4%, respectively) and younger people were less likely to disclose than older people (51.9% compared to 60.9% respectively).

11 SOCIAL ROLES

11.1 Marital status

There were pronounced differences between males and females with respect to their marital status. Almost three quarters (72.6%) of males were currently single or never married compared with just under half (44.4%) of females (Table 11-1). Moreover, 59.4% of males and 33.2% of females had never had a relationship where they had lived with a partner for six months or more.

Table 11-1. Marital status by sex

	Proportion (%)		
	Males	Females	Persons
Currently single, never married	72.6	44.4	61.2
Currently married or de facto	12.1	24.5	17.1
Currently separated, divorced or widowed	15.4	31.0	21.7
Never married or in a de facto relationship (6 months or more)	59.4	33.2	48.8

Unsurprisingly marital status also varied considerably by age group, with 80.3% of the younger group aged 18-34 years being single or never married and 65.7% never having been in a long term, cohabiting relationship. This compared to 47.1% and 36.4% respectively of the older group aged 35-64 years.

11.2 Parenting

Just over half the females (56.2%) and one quarter of the males (25.9%) were parents with children of their own.

One in eight (12.8%) people had dependent children under the age of 18 years living at home with them. The proportion was far higher for females with one quarter (23.6%) of females caring for dependent children living at home with them compared with 5.5% of males (Table 11-2).

Table 11-2. Parental status by sex

	Proportion (%)		
	Males	Females	Persons
Own children (any age)	25.9	56.2	38.1
Dependent children living at home (including step children)	5.5	23.6	12.8

Seven out of ten (69.5%) of these mothers were the primary care givers to their children. One-fifth (21.7%) of the fathers with dependent children living at home with them were the primary care givers.

Just less than half of the mothers (44.8%) were currently married or in a de facto relationship compared to 71.7% of fathers.

For the 42.7% of parents who were not the primary carers for their children, the supporting carer was either the other partner (in 90.0% of cases) or a grandparent (10.0%). Three quarters (75.0%) of these parents were very satisfied and another 14.0% somewhat satisfied (14.0%) with the help they were receiving from the supporting carer, and half (49.0%) believed they would have a lot of difficulty maintaining a parenting role without that assistance.

When their capacity to provide care to their dependent children was rated by the interviewers, three quarter (75.6%) of these parents were assessed as functioning very well. However, 21.3% of mothers and 28.3% of fathers were rated by interviewers as having obvious or severe impairment in their ability to care for their child or children. One quarter of parents with dependent children (25.9% of mothers and 23.3% of fathers) had had contact with their state department of family/community services in the past year.

11.3 Care of others

A number of participants (14.7%) were providing care to others because of a disability, long term illness or old age. This figure was 19.6% for females and 11.3% for males. It was higher in the older (35-64 year old) compared to the younger (18-34 years) age group, at 17.5% and 10.9% respectively.

11.4 Contact with family and friends

Nearly a quarter of the participants (22.4%) felt socially isolated and lonely. Just over two thirds (69.3%) said that their illness made it hard to maintain a close relationship.

When rating their interpersonal relationships over the past year relative to previous years, 22.1% said these had deteriorated. While 38.1% noted no change in the quality of their interpersonal relationships, 38.7% said they had improved.

Almost one third (31.0%) of participants lived alone. Of these, 40.6% said that they would prefer to be living with someone else.

Almost all participants (96.1%) had had some form of contact with a family member over the past year. For two thirds (65.4%), this contact was almost every day, while for a further 18.2% it was at least weekly. Face-to-face contact with family members in the past year was almost as high, at 93.2% for at least one contact, with 56.5% of participants in contact with a family member almost daily and 17.1% at least once a week.

The majority (86.5%) of participants had at least one friend or more, although almost half (47.5%) said they needed and would like to have more friends. The majority (85.3%) also had someone to rely on at times of serious need. For two thirds (67.0%) of participants this was a family member, while for 18.3% it was a friend. Many also had at least one person they could confide in over the past year, with 40.9% mainly confiding in family and 29.6% mainly in friends.

There were, however, 13.3% of participants who had no friends at all, 14.1% who had no-one to rely on and 15.4% who had never had a confiding relationship. Males were less likely to have contact with family and friends and to have no one to rely on in times of serious need, as were those in the older age group (35-64 years) compared to the younger age group (18-34 years).

When participants were asked to describe their involvement in organised activities over the past year, just over two thirds (68.6%) said they had not attended any social programs and a similar proportion (69.4%) had not attended any recreational programs.

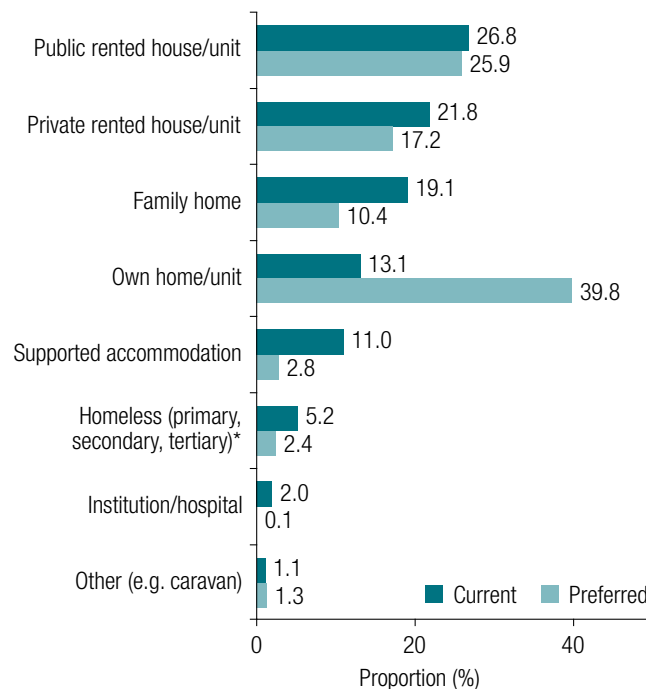
12 HOUSING AND HOMELESSNESS

12.1 Type of accommodation

The most common current accommodation type reported by participants was public or private rented housing (48.6%), with 26.8% in publically rented houses or units and 21.8% in privately rented houses or units at the time of interview. One-fifth (19.1%) were living in a family residence that was not their own and a further 13.1% were in their own home or unit (Figure 12-1). One in ten (11.0%) were in supported accommodation and 2.0% in an institution or hospital.

Almost one quarter (22.7%) of participants was on a public housing waiting list.

Figure 12-1. Current and preferred accommodation



* Homelessness. Primary: living on the streets, in parks or in deserted buildings; secondary: living in temporary shelters such as refuge, emergency accommodation or sleeping on friend's couch; tertiary: private boarding room²³.

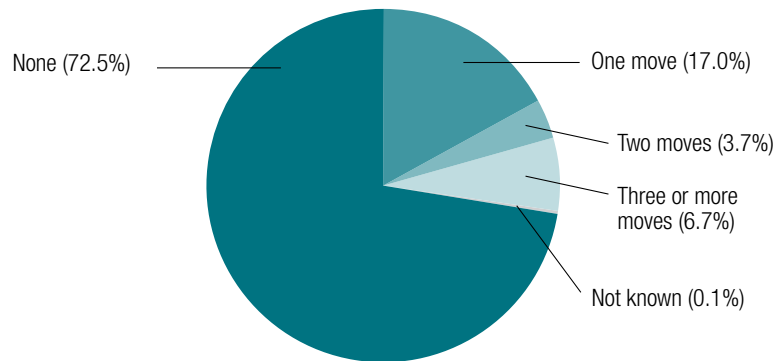
Half (51.5%) said they were very satisfied with their current living situation, a further quarter (27.8%) were somewhat satisfied and 12.5% were somewhat or very dissatisfied.

Participants were also asked about their preferred accommodation types (Figure 12-1). There were a number of key differences in their preferred option compared with their current housing. Two-fifths (39.8%) would prefer to live in their own home or unit, however, only 13.1% were currently doing so. Almost one in five were living in a family residence, but this was the preferred option for only 10.4%, and 11.0% were living in supported accommodation, while only 2.8% would prefer to be doing so.

12.2 Housing stability

Just over one quarter of participants (27.4%) had changed accommodation at least once in the past year, not including admissions in and out of hospital, with 3.7% of all participants moving twice and 6.7% moving three or more times (Figure 12-2).

Figure 12-2. Changes in housing in past year



12.3 Homelessness

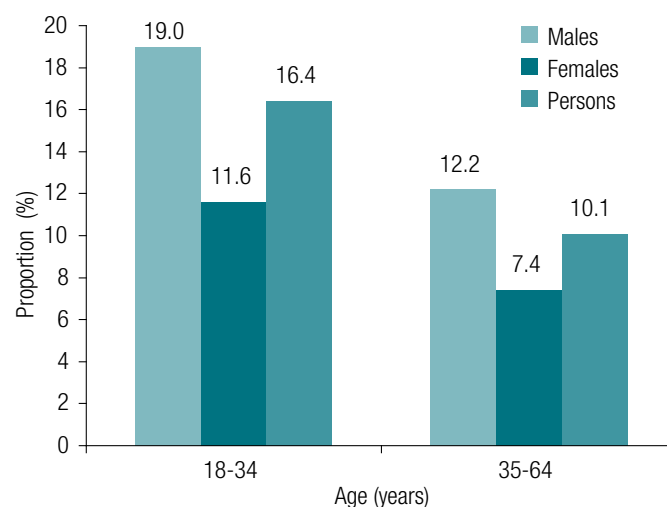
At the time of interview, 5.2% of participants (7.3% of males and 2.0% of females) reported being homeless (Figure 12-1). In comparison, in the 2006 census, the prevalence of current homelessness was estimated as 53 per 10,000 population or 0.5% of the Australian population.²³

As people with psychosis are known to move in and out of homelessness, the survey collected information on the periods of homelessness in the 12 months prior to interview. Over the past year, 12.8% of participants had experienced at least one period of homelessness.

The proportion of those who were homeless in the past year was higher for males than females (15.4% for males compared with 8.9%). It was also higher in the younger age group (16.4% for 18-34 years compared with 10.1% for 35-64 year olds), with one in five younger males having been homeless at some time in the past year (Figure 12-3).

Twice as many, that is one quarter (25.0%) of participants, expressed a fear of homelessness.

Figure 12-3. Homelessness in past year by sex and age group



Homelessness can be disaggregated into three levels:

- primary homelessness – living on the streets, in parks, in deserted buildings;
- secondary homelessness – living in temporary shelters such as refuges, emergency accommodation or sleeping on a friend's couch; and
- tertiary homelessness – living in a boarding room.

Marginal accommodation describes living in a caravan park due to financial necessity, not lifestyle choice.²³

Over the past year, 5.1% of participants reported primary homelessness (Table 12-1). A further 6.8% reported secondary homelessness and 5.1% reported tertiary homelessness, while 0.9% had lived in marginal accommodation.

Table 12-1. Homelessness types currently and in past year

	Proportion (%)
Homelessness, current	
Any	5.2
Homelessness, past year*	
Any	12.8
Primary (on the streets, in parks, in deserted buildings)	5.1
Secondary (temporary shelters such as refuges, emergency accommodation, a friend's couch)	6.8
Tertiary (boarding room)	5.1
Marginal accommodation, past year	
Living in a caravan park due to financial necessity, not lifestyle choice	0.9

* Total for any homelessness is less than sum of primary, secondary and tertiary as some people experienced more than one form of homelessness over the past year.

The average number of days of homelessness, for those reporting any over the past year, was 155 days. The average was higher for males than females, at 170 days and 117 days respectively.

Although younger participants aged 18-34 years were more likely to be homeless than those aged 35-64 years, the average number of days of homelessness was higher in the older age group (146 days compared with 167 days).

Almost one in five (18.5%) of those reporting homelessness had been homeless for the full year.

12.4 Accommodation on discharge from hospital

Participants who had had a psychiatric inpatient hospital admission in the year prior to interview were asked if their accommodation needs had been discussed with them prior to discharge. Half (52.8%) recollected discussing accommodation options with staff at the time. Two thirds (64.2%) reported not needing further help as they already had somewhere to live and one-fifth (21.4%) needed and received help finding accommodation. However, 6.9% reported that they had not been given any help and had nowhere to live on discharge.

13 STIGMA, VICTIMISATION AND COMMUNITY SAFETY

13.1 Stigma and discrimination

Almost two-fifths (37.9%) of participants said they had experienced stigma or discrimination in the past year as a result of their mental illness. The proportion was higher in females with almost one half (46.9%) reporting experiencing stigma or discrimination in the past year compared with 31.8% of males.

Nearly one quarter (22.7%) said that the fear of stigma or discrimination had stopped them doing some of the things they had wanted to do, while almost as many (20.3%) said that it was the actual experience of stigma or discrimination that had stopped them.

Almost two-fifths (38.8%) of those in employment had not told their employer about their mental illness.

One in ten (11.6%) participants said facing stigma and discrimination was one of their top three challenges for the coming year.

13.2 Personal safety and victimisation

Participants expressed concerned about their personal safety both inside and outside the home and for many this concern was well founded.

One in five (20.7%) said they felt unsafe or very unsafe when home alone at night, while one in ten (10.0%) said they felt unsafe or very unsafe when home alone during the day. Just over one quarter (27.5%) felt unsafe or very unsafe walking in their local area at night, which is similar to findings for general population as reported in the 2004-2005 International Crime Victims Survey.²⁴

Victimisation rates were high among people with psychosis, with 38.6% reporting any victimisation over the past year including break-ins, robberies and assaults. One quarter (24.8%) reported being a victim of an assault. By comparison, current levels of victimisation in the general population are much lower, with the most recent comparable survey data revealing an assault prevalence of 4.8%.²⁵

Females were just a little more likely to be victimised than males (40.5% compared with 37.4%), and younger people a little more so than older people (40.4% for 18-34 year olds compared with 37.4% for 35-64 year olds).

One in three (29.2%) of those who had been assaulted reported the most recent incident to police.

13.3 Community safety and time in prison

The proportion of participants charged with an offence over the past year was 10.6%, with 1.9% charged with traffic and vehicle offences, 1.6% with common assault, 1.5% with theft and 1.3% public order offences.

A small number, 59 participants or 3.2% of the total sample, had spent time in a prison or lock up over the past year. Two thirds of those incarcerated had spent only one day in a prison or lock-up.

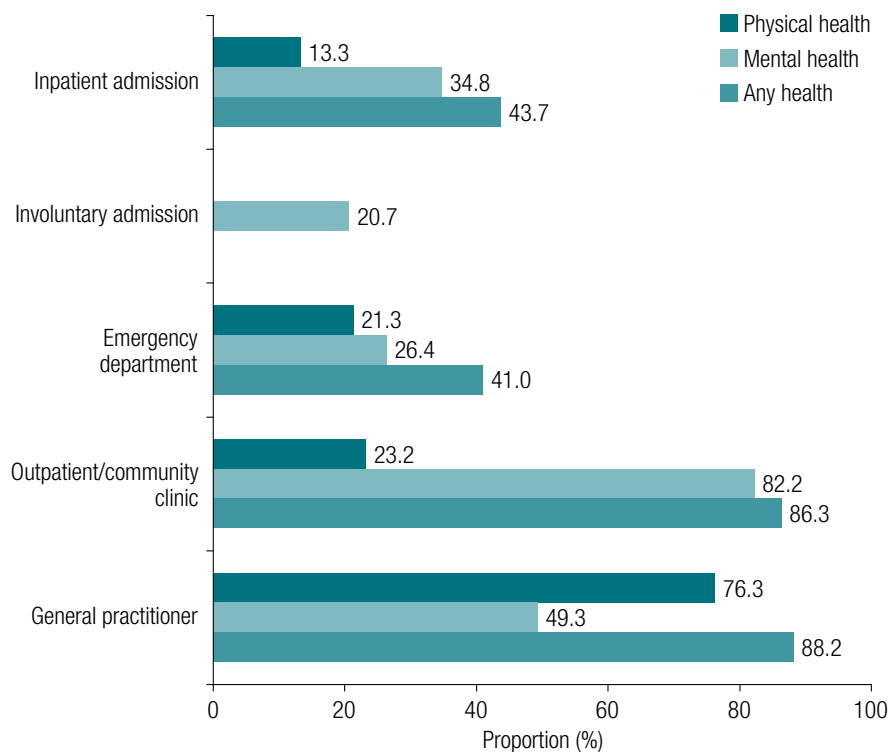
14 HEALTH SERVICE UTILISATION

14.1 Health service use in past year

Overall, health service use by participants for any reason was high, with 98.9% using public inpatient, emergency, or outpatient/ambulatory health services or visiting a general practitioner for any health reason in the past year. For 81.0% of participants, this was for physical health reasons and for 95.3% it was for mental health reasons (Figure 14-1):

- 43.7% reported at least one inpatient admission;
- 41.0% had been seen in an emergency department;
- 86.3% had used outpatient/community clinics and ambulatory health care services; and
- 88.2% had visited a general practitioner.

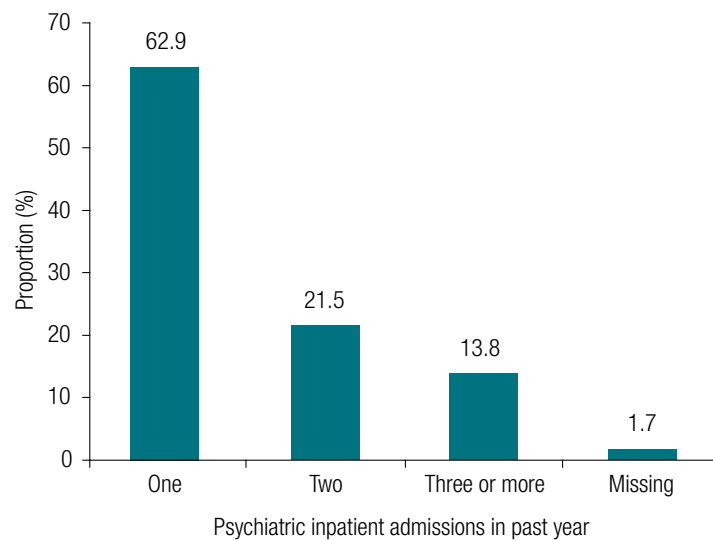
Figure 14-1. Service utilisation for mental health problems and physical conditions in past year



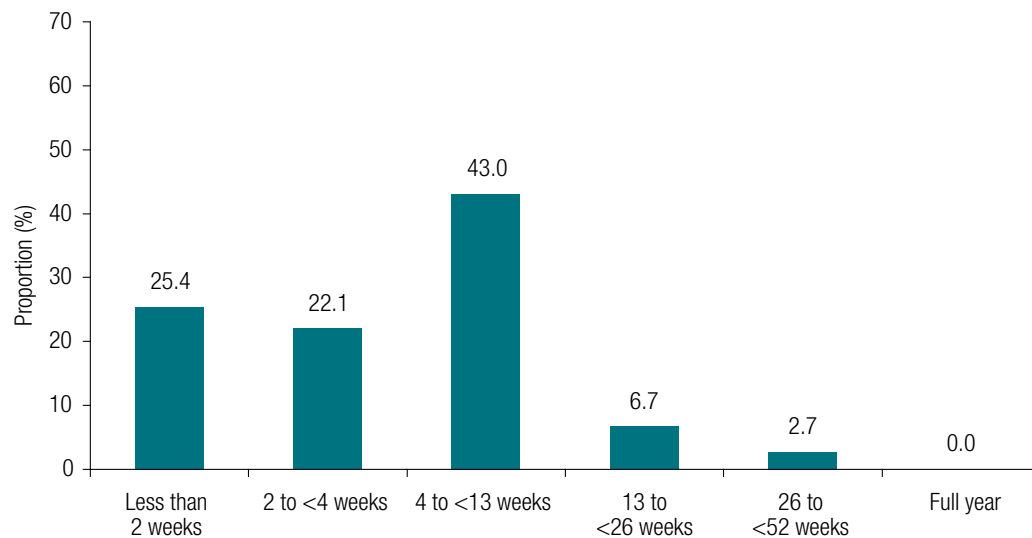
14.2 Psychiatric hospital admissions

One third (34.8%) of all participants had had one or more psychiatric inpatient admissions in the previous year. In contrast, 0.9% of the general population had had a psychiatric inpatient admission over the same period.⁸

Almost two thirds (62.9%) of these participants with any psychiatric admissions in the past year had had only one mental health-related admission, while 13.8% or 4.8% of all participants had had three or more psychiatric inpatient admissions (Figure 14-2).

Figure 14-2. Psychiatric inpatient admissions in past year

Almost half (47.5%) of participants who had had a psychiatric inpatient admission had spent less than four weeks in hospital. Another 43.0% had spent a total of 4-13 weeks in psychiatric inpatient care. On average they spent 40 days in inpatient care. No-one had been hospitalised for a full year (Figure 14-3).

Figure 14-3. Total weeks of psychiatric inpatient treatment, if any in past year

14.3 Involuntary admissions and community treatment orders

One in five (20.7%) participants reported at least one involuntary admission over the past year.

A total of 19.2% had been under a community treatment order at some stage over the past year.

14.4 Psychiatric emergency presentations

A quarter of the sample (26.4%) had presented to an emergency department with a psychiatric problem in the previous year.

A number had also used a psychiatric emergency service, with 17.2% having had telephone contact with the service and 16.3% having had face-to-face contact.

14.5 Mental health outpatient clinics and community services

Four out of five (82.2%) participants had used outpatient clinics and community services for mental health problems. Three quarters (76.4%) had used outpatient clinics run by public specialised mental health services and community services.

Participants most often saw psychiatrists and other medical officers (74.0%), followed by nurses (31.8%), social workers (12.7%) and psychologists (11.3%) when attending these services.

14.6 Early intervention psychosis programs

Just 3.7% of participants had used early intervention psychosis programs in the past year and 8.4% reported ever having used them. The percentage of those who had ever accessed these programs was higher in the younger age group (16.8% of 18-34 year olds and 2.3% of 35-64 year olds) reflecting the relatively recent introduction of these intervention programs focused on young people. The proportion accessing these services is likely to be an underestimate as participants may not always be aware that the service they had received was part of an early intervention psychosis program, with a number of services running such programs under a variety of other names.

14.7 Rehabilitation programs

Rehabilitation programs for people with a mental illness are designed to promote recovery, improve independent functioning and reduce disability through education, support and individual recovery plans.

Just over one third (36.5%) of people had participated in community rehabilitation or day programs within public mental health services and/or non-government organisations in the past year (Table 14-1). More participants were involved in rehabilitation programs in the non-government sector (22.4%) than in the public mental health sector (14.5%).

The majority of participants using these programs found the program useful, with 87.5% of those using public specialised mental health services and 90.0% using non-government community rehabilitation programs reporting that they were somewhat or very satisfied.

The percentage with an individual rehabilitation or recovery plan was 28.9%.

Table 14-1. Community rehabilitation programs in past year by sector

	Proportion (%)	
	Public specialised mental health services	Non-government organisations
Attended community rehabilitation program*	14.5	22.4
<i>For those accessing a community rehabilitation program</i>		
Type of program		
Group	13.6	46.5
Individual	72.0	29.1
Combination of both	13.3	24.4
Not known	1.1	–
Total	100.0	100.0
Usefulness of program		
Very helpful	54.9	62.6
Somewhat helpful	32.6	27.4

* Some participants used rehabilitation programs in both sectors

14.8 Case management by mental health services and non-government organisations

Seven out of ten (69.2%) participants reported having a case manager in the past year: 61.6% of the total sample had a case manager provided by public specialised mental health services and 20.2% had one provided by a non-government organisation, with 12.7% having one provided by each sector at some stage over the past year (Table 14-2).

Satisfaction with case management from both sectors was high, with 85.0% of participants with public specialised mental health service case managers and 89.4% of those with non-government case manager being very or somewhat satisfied with their case managers.

Three quarters of participants reported being happy with the frequency of contact with their case manager. Most of the remainder would have preferred more contact: 13.5% of people with a case manager provided by public specialised mental health services and 16.3% of people with one provided by a non-government organisation.

Table 14-2. Case management by sector if case managed in past year

	Proportion (%)	
	Public mental health services	Non-government organisation
Case manager*	61.6	20.2
<i>For those with a case manager</i>		
Contact with case manager is as often as preferred	76.5	77.8
Frequency of contact		
Once a week or more	28.1	64.0
Less than once a week, but at least once every 4 weeks	54.4	30.4
Satisfaction with case manager		
Very satisfied	62.2	69.6
Somewhat satisfied	22.8	19.8

* Some participants had case managers in both sectors over the past year

14.9 Home visits by mental health service providers

Half (52.4%) of participants said they had had at least one home visit in the past year, with 45.4% of participants reporting this was someone from public specialised mental health services and 15.9% of participants reporting this was someone from a non-government organisation.

The main reason for visits by public specialised mental health services was routine care, with 40.3% of participants reporting one or more visits for routine care. However, 15.1% of participants had had one or more visits from these services for crisis care.

Very few (8.8%) had assertive community treatment, where their main mental health care was provided in their home.

14.10 Physical health services

Over the past year 13.3% of participants had been admitted to hospital for a physical condition in comparisons with 8.4% of the general population.⁸

One in five (21.3%) had attended an emergency department and almost one quarter (23.2%) had used outpatient or community health clinics for a physical rather than mental health reasons.

14.11 Other services

14.11.1 Non-government organisations funded to provide mental health services

One in three (29.8%) participants had used services provided by non-government organisations funded to support people with a mental illness in the past year.

More detailed information on who and what services were used is provided in Chapter 16.

14.11.2 Drug and alcohol services and programs

Just over one in eight (12.9%) participants had used drug and alcohol services and programs in the past year.

14.11.3 Complementary/Alternative therapist services

A small proportion of participants (3.2%) had seen a complementary/alternative therapist for their mental health.

14.11.4 Other community organisations

Participants had also used a variety of other community services in the past year. These included:

- community organisations providing material or financial aid (for example Salvation Army and St Vincent de Paul), which were used by 21.7%;
- religious or spiritual groups used by 14.7%;
- legal aid services used by 8.4%;
- community telephone services for mental health (for example SANE Australia and Lifeline) used by 8.2%; and
- community counselling services (for example Relationships Australia) used by 4.7%.

14.11.5 Internet

The proportion using the internet to access information about mental health was 17.3%.

15 MEDICATION USE AND PSYCHOSOCIAL THERAPIES

15.1 Medications for mental health problems

Most participants (91.6%) reported they were currently (that is in the four weeks prior to interview) taking prescribed medication for their mental health problems, with 94.4% taking medication for these in the past year.

There was little difference in current use between males and females (91.4% and 91.9% respectively), however, use was slightly lower in the younger age group (88.6% of 18-34 year olds compared with 93.8% of 35-64 year olds).

Four out of five (81.6%) participants were taking antipsychotic medications in the four weeks prior to interview. Three quarters (74.0%) were taking atypical antipsychotics, with 16.4% taking clozapine, which is prescribed most commonly in cases of schizophrenia that do not respond to other antipsychotic medications. Just 15.2% were taking first generation, typical antipsychotics.

Treatment compliance was high at 88.1% for antipsychotic medication use.

These antipsychotics do not control a number of other mental health problems, which are commonly experienced by people with psychotic disorders. Just over one third (37.4%) of participants were taking antidepressants and one quarter (26.7%) were on mood stabilisers. The proportion on anxiolytics, hypnotics and sedatives was 17.8%.

Given the relatively high levels of smoking, alcohol and drug use, a relatively small proportion of participants (3.5%) were taking medications to assist with the alcohol, nicotine or opioid dependence.

15.2 Supplements for mental health problems

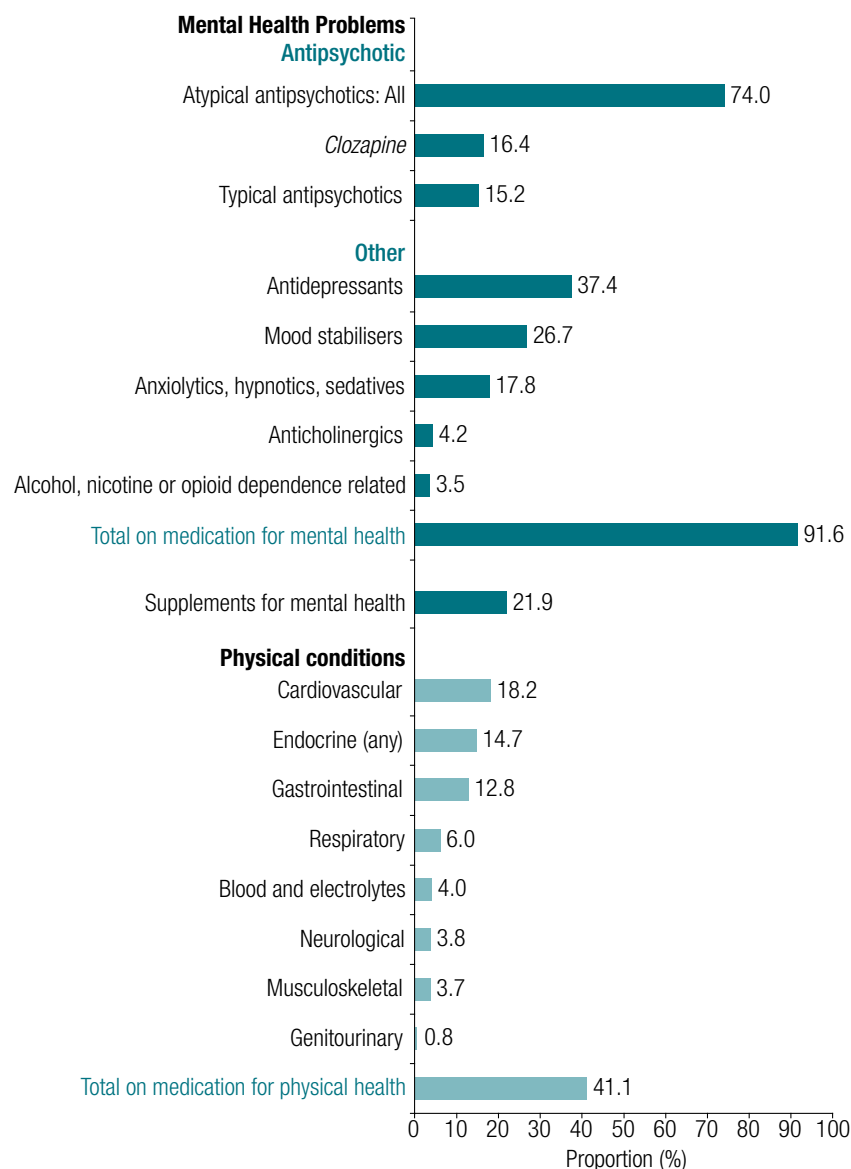
Just over one-fifth (21.9%) of participants were using non-prescribed supplements for mental health, such as fish oil or St John's Wort. Half (53.8%) of these people had discussed supplement use with their doctor.

15.3 Medications for physical conditions

The survey also collected data on medications prescribed for physical conditions. Two-fifths (41.1%) of participants were taking medications for these reasons.

Almost one-fifth (18.2%) of participants were on medications for cardiovascular disorders, 14.7% were taking medications for endocrine disorders and 8.2% taking medications specifically for diabetes. One in eight people (12.8%) were taking medications for gastrointestinal disorders and 6.0% for respiratory conditions (Figure 15-1).

Figure 15-1. Current medication use



15.4 Medication benefits

Participants were asked to assess the benefit of the medications they were taking for their mental health problems. The majority of participants said that psychotropic medications gave them relief from the symptoms of their disorder, with 57.2% of those currently using medications reporting a lot of relief and 28.2% reporting some relief. Almost one in ten (9.6%) reported that the medication gave them no relief from their psychotic symptoms (Table 15-1).

Table 15-1. Relief from symptoms for those currently taking medications for mental health problems

Level of relief from symptoms	Proportion (%)
A lot	57.2
A little	28.2
Not at all	9.6
Not known	5.0
Total respondents	1,672

15.5 Medication side effects attributed to medication for mental health

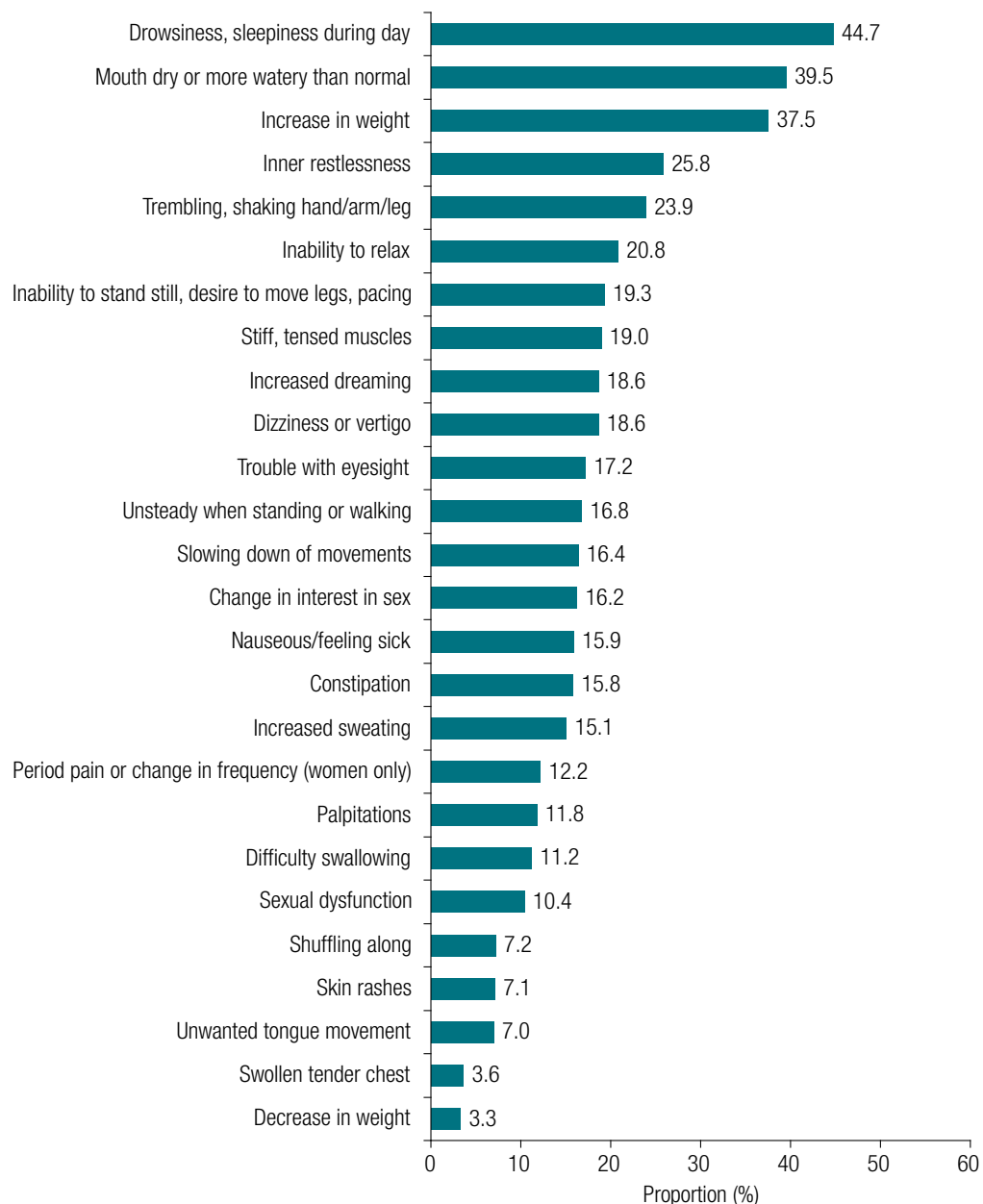
While participants affirmed the benefits of the medications they were using for their mental health, many reported side effects and a consequent deterioration in quality of life, a decline experienced in addition to the primary effects of their illness.

Three quarters of participants (77.4%) complained of medication side effects. The average number of side effects reported by those on medication for their mental health was five. Three-fifths (61.0%) suffered impairment in their daily life as a result of these medication side effects and for 29.9% the impact of these impairments was moderate or severe (Figure 15-2).

The side effects most frequently reported were drowsiness or sleepiness during the day (44.7%), mouth drier or more watery than usual (39.5%), weight increase (37.5%), inner restlessness (25.8%), trembling or shaking of limbs (23.9%) and inability to relax (20.8%).

Just over one third (37.5%) reported gaining weight as a medication side effect. These people reported weight gains of nine kilograms on average over the past six months. The amount reported gained was a little higher for males (10 kilograms) than females (nine kilograms) and for the younger age group (10 kilograms) compared to the older age group (nine kilograms).

Figure 15-2. Side effects in past 4 weeks attributed to medication for mental health problems

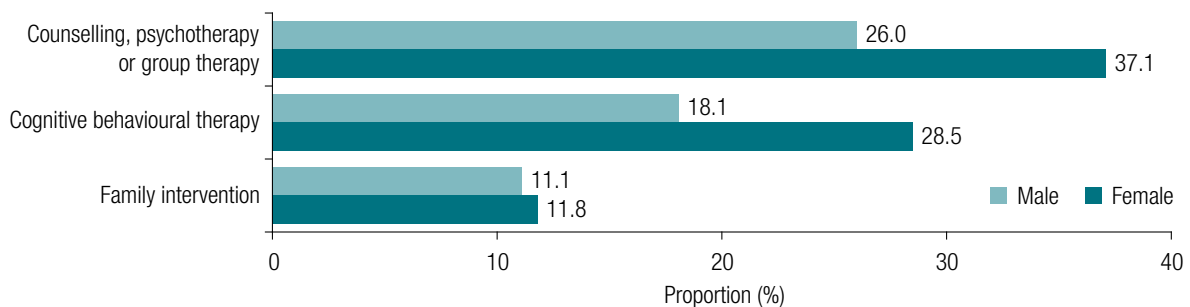


15.6 Psychosocial therapies

Psychosocial interventions are playing an increasingly important role in the treatment of psychosis. However, the proportion of participants accessing psychosocial therapies was relatively small. The most common of the interventions participants had used were talking therapies, such as counselling, psychotherapy and group therapy (30.5%), cognitive behavioural therapy (22.3%) and family therapy (11.4%).

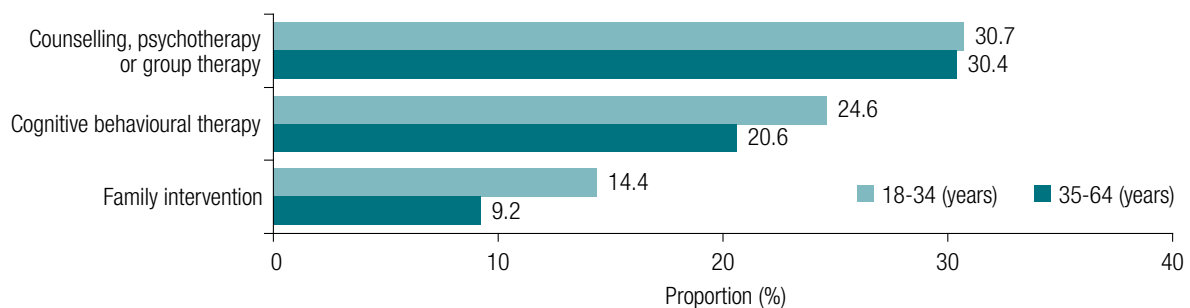
Figure 15-3 shows that females received more of these services than males, with just over one third (37.1%) receiving counselling, psychotherapy or group therapy compared with 26.0% of males, and 28.5% receiving cognitive behavioural therapy compared with 18.1% of males.

Figure 15-3. Use of psychosocial therapies in past year by sex



There was little difference in the use of psychotherapies between the younger and older age groups (Figure 15-4).

Figure 15-4. Use of psychosocial therapies in past year by age group



16 MENTAL HEALTH SERVICE PROVISION IN THE NON-GOVERNMENT SECTOR

There were two approaches to the collection of data on mental health service provision in the non-government sector.

Firstly, all non-government organisations funded to support people with a mental illness within the survey catchment sites were invited to participate in the census by screening for psychosis all people in contact with them in the census month. Overall, 86% of individual centres that were part of these non-government organisations and located within the catchment areas participated. In general, those not participating were smaller centres within larger participating organisations, predominantly in rural areas.

Using this approach, it was possible to identify those people using non-government services, and to estimate the numbers of people and, in turn, the prevalence of ICD-10 psychotic disorders in people in contact with these agencies but not receiving public specialised mental health services during the census month of March 2010.

People in these non-government organisations who were screened as positive for psychosis were added to the pool of people to be randomised and selected for interview. In total, 926 people from this sector were screen positive for psychosis and 205 of these were randomly selected for interview and assessment.

Secondly, all 1,825 participants were asked about their use of mental health services provided by non-government organisations in the previous year.

Over the past year, almost one third of participants (29.8%) had used services provided by non-government organisations funded to assist people with a mental illness. One in ten (11.2%) had only received mental health services provided by non-government organisations in the census month.

16.1 People solely in contact with non-government mental health services in the census month

16.1.1 One-month prevalence estimate

The estimated national one-month prevalence of ICD-10 psychotic disorders in people solely receiving mental health services through non-government organisations was 0.4 cases per 1,000 population aged 18-64 years. The rate was higher for males than females, at 0.6 and 0.3 cases per 1,000 population respectively. The total number of people with psychosis receiving services through these non-government organisations is estimated at 6,204 persons. Further information on the prevalences and estimated persons by sex and age group is provided in Appendix Table 16-1.

Figure 16-1 shows the prevalence of contact with the non-government sector by sex and age group. This demographic profile differs from the pattern of prevalence for public specialised mental health services in Figure 2-1. Rather than peaking for men in early adulthood (25-34 years), there is a gradual increase in prevalence of contact with non-government organisations with age. Higher rates in males relative to females, however, are maintained through to the oldest age group, as is the case for those aged 18-54 years treated by public specialised mental health services.

Figure 16-1. Estimated national one month prevalence of ICD-10 psychotic disorders in people solely in contact with non-government organisations by sex

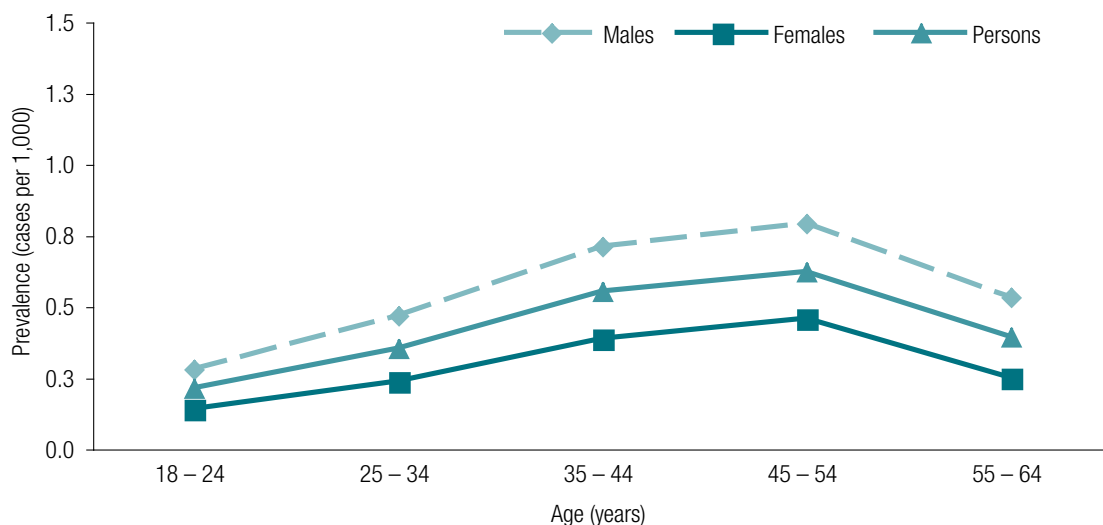
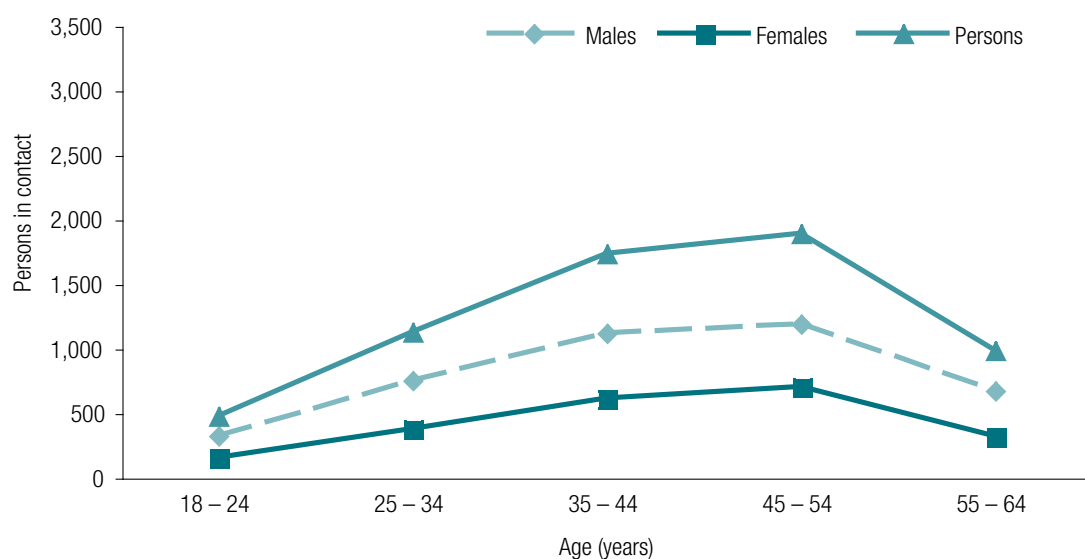


Figure 16-2 shows the estimated number of Australians with psychosis receiving mental health services only provided by the non-government organisations by sex and age group. The pattern of estimated numbers in contact with these services closely mirrors the prevalences shown in Figure 16-1.

Figure 16-2. Estimated people with ICD-10 psychotic disorders solely in contact with non-government organisations in one month by sex



16.1.2 Key characteristics of those solely in contact with non-government organisations in the census month

One in ten (11.2%) participants was only in contact with non-government organisations funded to support people with a mental illness in the census month and not in contact with public specialised mental health services over the same period.

Those solely in contact with non-government organisations differed from participants using public specialised mental health services on a few key variables. They were more likely to be older, with three quarters (74.2%) aged 35-64 years (compared with 60.4% of those aged 35-64 years receiving public specialised mental health services). They were less likely to be employed, either currently or in the past year.

Although they were less likely to have a diagnosis of schizophrenia or schizoaffective disorder, people receiving mental health services solely through non-government organisations were a more disabled group with markedly poorer functioning.

Despite only using non-government mental health services in the census month, many had used other health services either in the 11 months prior to census or between census and interview. However, they were much less likely to have used public health services for mental health treatment and a little more likely to have used public health services for physical health reasons over the past year (Table 16-1). They were also a little more likely to use general practitioner services.

Table 16-1. Key characteristics of people solely in contact with non-government organisations in the census month compared to those in contact with public specialised mental health services

	Proportion (%)		
	Non-government organisations only	Public specialised mental health services	Public specialised mental health services
	Census month	Census month	11 months
Males	60.5	60.0	57.7
Older age group (35-64 years)	69.3	57.4	52.6
Completed Year 12 education	30.7	31.2	32.5
Formal studies in past 12 months	27.8	19.0	22.5
In paid employment (past year)	24.9	30.5	43.0
In paid employment (past 7 days)	16.6	19.2	30.6
ICD-10 schizophrenia or schizoaffective disorder	46.3	67.2	58.9
Service use			
Any inpatient admission (past year)	32.7	45.6	43.5
<i>Mental health related</i>	19.5	37.6	34.5
<i>Physical health related</i>	17.1	12.6	13.7
Involuntary admission (past year)	7.8	22.7	21.0
Any emergency department attendance (past year)	31.7	43.0	39.9
<i>Mental health related</i>	13.7	29.0	25.2
<i>Physical health related</i>	22.0	21.6	20.0
Any outpatient contact (past year)	65.9	92.8	77.3
<i>Mental health related</i>	54.1	90.5	71.9
<i>Physical health related</i>	29.3	22.4	22.7
Mental health rehabilitation program (past year)	74.1	36.8	16.6
Case manager (past year)	67.8	78.1	43.3
Consultation with general practitioner (past year)	91.2	87.8	88.0
Chronic course of illness	32.2	33.0	22.0
Global independent functioning: moderately, significantly, extremely or totally disabled (past four weeks)	60.0	52.3	39.4

16.2 People using non-government mental health services in the past year

Many participants were in contact with both non-government and the public specialised mental health services, with one in three (29.8%) participants overall using mental health services provided by the non-government sector in the past year. One quarter (26.5%) of people identified in public specialised mental health services in census month had used mental health services provided by the non-government sector in the past year compared to 12.2% of those identified in public specialised mental health services in the 11 months prior to census.

This section describes the types of programs and kind of support that any participants were receiving from these agencies regardless of how they were selected for the survey.

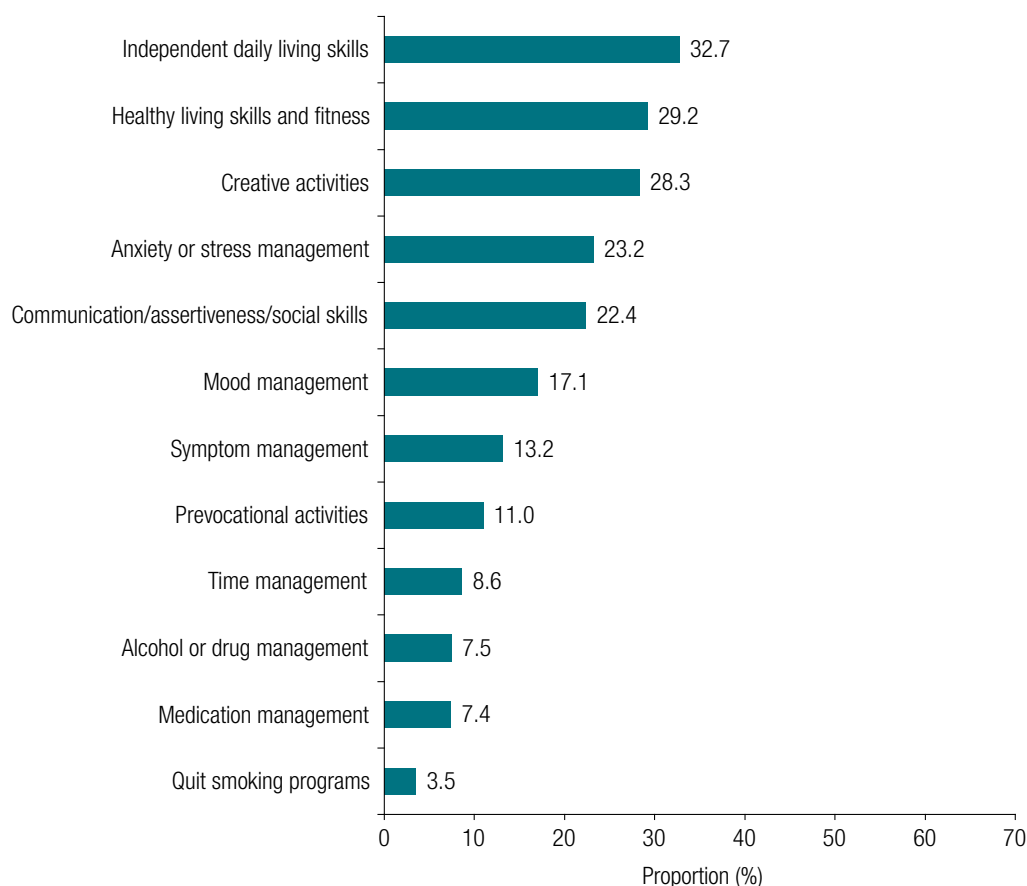
16.2.1 Group-based rehabilitation programs

An important aim of rehabilitation programs for people with a mental illness is to promote recovery and reduce disability by providing education, support and individual plans to help improve independent functioning.

Non-government organisations are key providers of rehabilitation programs to people with psychotic illnesses, with one quarter (22.4%) of all participants attending non-government run programs in this sector and 90.0% of these people reporting that the programs were very or somewhat helpful (Table 14-1).

The most commonly attended programs were independent daily living skills programs (32.7%), healthy living and fitness programs (29.2%) and creative activities (28.3%). These were followed by programs targeting anxiety and stress (23.2%), communication and social skills (22.4%), mood management (17.1%) and symptom management (13.2%). Smaller proportions of people had attended alcohol and drug management programs (7.5%) and anti-smoking programs (3.5%) (Figure 16-3).

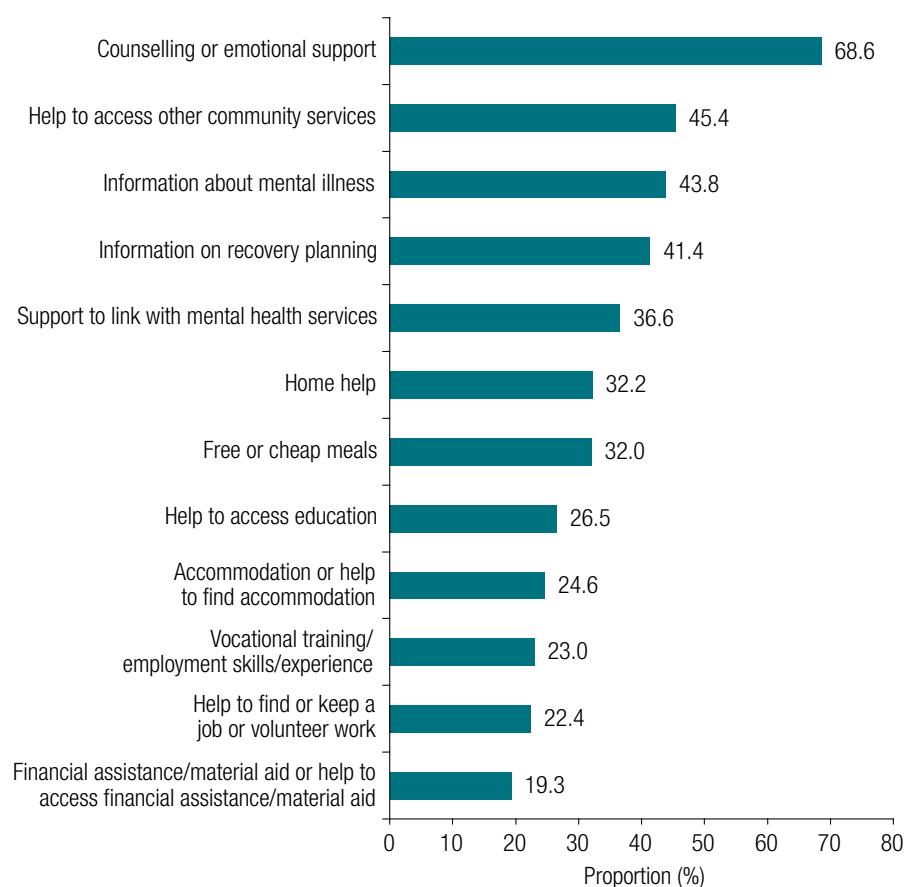
Figure 16-3. Non-government organisation group-based rehabilitation programs



16.2.2 One-to-one support

As well as running groups-based rehabilitation programs, non-government organisations also provided one-to-one support and assistance. Two thirds of participants supported by non-government organisations (68.6%) had received counselling or emotional support, while many had received help to access other services, including community services (45.4%) and mental health services (36.6%). Just over two-fifths had received information on mental illness (43.8%) or recovery planning (41.4%). One third had been given practical assistance in the form of home help (32.2%) and subsidised meals (32.0%), and one quarter had received housing assistance (24.6%). Almost one quarter had received vocational or skills training (23.0%) or help with paid or unpaid employment (22.4%) (Figure 16-4).

Figure 16-4. Non-government organisation one-to-one support programs



16.2.3 Case management and home visits

Two thirds (67.6%) of participants who had used non-government sector mental health services in the past year had case managers. Satisfaction with case management was high, with 69.6% very satisfied and 19.8% satisfied (Table 14-2). Two thirds (64.0%) saw their case manager once a week or more and 30.4% saw their case manager every one to four weeks. The majority (77.8%) were satisfied with the frequency of their contact with case managers.

Around half (53.3%) had had one or more home visits in the past year by someone from a non-government organisation.

16.2.4 Personal Helpers and Mentors Services

The Personal Helpers and Mentors Services (PHaMS) is an Australian Government initiative delivered through non-government organisations to support people with a severe mental illness manage their daily activities and live independently in the community with coordinated, integrated access to community services. The first demonstration sites were funded in 2007.

In all, 12.3% of participants had a personal helper over the past year. Many had used the service for a long time. The majority of those using the service (59.6%) had had a personal helper for a year or longer, and over a quarter (27.6%) had had one for two years or more.

Two thirds (64.0%) of those participants with a personal helper received support to manage daily activities. Personal helpers also assisted by referring participants to other services (49.3%), accompanying participants to appointments (45.3%), acting as an advocate (45.3%), Services had also provided support with physical activities to one third of participants (34.2%) and support to one-fifth of participants' families and other carers (21.3%) (Table 16-2).

Table 16-2. Type of support provided by personal helper in past year

	Proportion of those with a personal helper (%)
Provided participant with support to manage daily activities	64.0
Referred participant to other relevant services	49.3
Accompanied participant to appointments	45.3
Acted as an advocate	45.3
Provided support with physical activities	34.2
Supported participant's family or carer	21.3
Total respondents	225

17 CONSULTATIONS WITH GENERAL PRACTITIONERS

General practitioners play a key role in providing health care to people living with mental illness in the community, including people with psychosis. Given this role, participants were asked to consent to their general practitioner being contacted to provide further information and the majority (95.6%) did so. Information was returned for half (49.2%) of the participants who gave consent.

17.1 Utilisation of general practitioner services

Most participants (88.2%) had seen a general practitioner for some reason in the past year, with half (49.3%) making at least one mental health related visit and 76.3% making at least one physical health related visit. While the average number of visits, if any, was nine, just over one quarter (28.8%) had had 12 or more consultations over the past year.

In terms of the general population, a slightly lower proportion (79.3%) had visited a general practitioner at least once over a 12-month period⁸. The average number of visits was also lower at 5²⁶ and just 8.7% of the general population had had 12 or more consultations over the past year.⁸

One in ten people with psychosis (9.4%) had a general practitioner mental health care plan.

17.2 General practitioner feedback on the health and care of participant-patients

Section 17.2 draws on the additional data provided by general practitioners on 709 participants for whom they provided general practice services, the “participant-patients”.

17.2.1 Length of consultation and consistency of care

General practitioners reported that two thirds (65.4%) of these patients with psychotic illness usually had consultations ranging from 10-19 minutes. Only 1.2% usually had longer consultations of 40 minutes or more (Table 17-1).

The majority of participants (83.2%) saw the same general practitioner at each visit.

Table 17-1. Usual length of consultation in general practice, minutes

Consultation length	Proportion of participant-patients (%)
Less than 10 minutes	10.4
10-19	65.4
20-29	17.8
30-39	3.4
40-49	0.6
50 minutes or more	0.6
Not known	1.8
Total respondents	709

17.2.2 Reasons for visiting the general practitioner

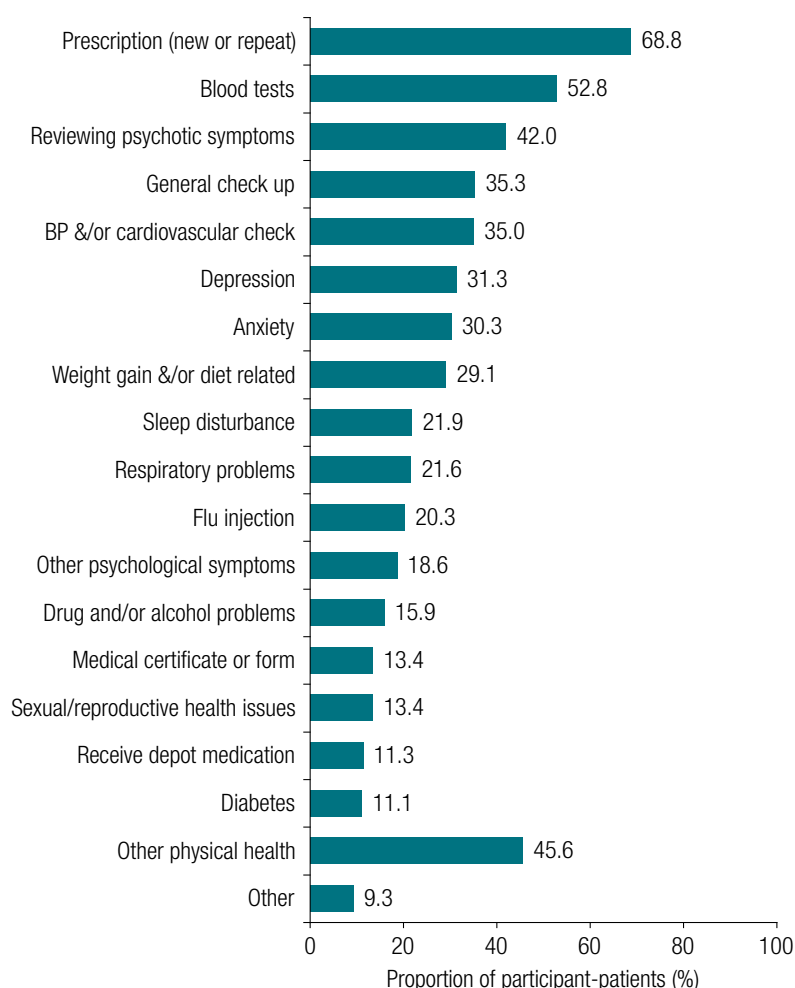
The most common reasons for seeing a general practitioner were for a prescription (68.8%) or a blood test (52.8%), either of which may have been physical or mental health related (Figure 17-1).

Just over one third (35.3%) had had a general health examination and 35.0% had seen their general practitioner for specific cardiovascular-related checks. One in three (29.1%) participants had attended for reasons related to weight gain and diet.

In the previous 12 months, general practitioners had treated one third of participants (32.2%) for metabolic, cardiovascular or kidney disorders and had referred 11.4% for specialist treatment for these conditions.

In terms of mental health related visits, 42.0% had attended to have their psychotic symptoms reviewed, almost one third (31.3%) had attended for depression and a similar proportion (30.3%) had seen their general practitioner for anxiety.

Figure 17-1. Reasons for consultation with general practitioner



17.2.3 Management of patients with psychosis by general practitioners

Just over one quarter (27.6%) of participant-patients had a general practitioner mental health care plan. It should be noted, however, that only one in ten (9.4%) of all participants had a mental health care plan. Females were more likely than males to have a plan (33.5% compared to 23.0% respectively).

Table 17-2. Frequency of review of general practitioner mental health care plans

	Proportion of participant-patients with general practitioner mental health care plan (%)
No set time for review	21.9
Monthly	6.6
Every 3 months	19.4
Every 6 months	29.1
Annually	13.3
Other	6.1
Missing	3.6
Total respondents	196

General practitioners were asked to name the top three difficulties that they faced managing participant-patients within their medical practice (Table 17-3). Among the top difficulties named were treatment non-adherence (22.1%) and non-attendance at appointments (20.7%). Time constraints and lack of feedback from treating mental health service providers were each identified by one-fifth of general practitioners (22.1% and 20.0%, respectively). Two-fifths (44.3%) of general practitioners, however, said they had no difficulties.

Table 17-3. Difficulties identified by general practitioner in managing the participant-patient in the past year

	Proportion of participant-patients (%)
No difficulties	44.3
Participant non-compliance with planned treatment	22.1
Time constraints	22.1
Participant non attendance at scheduled appointments	20.7
Lack of feedback to general practitioner from treating mental health service providers	20.0
General practitioner has difficulty getting access to specialists	15.5
General practitioner lacks of knowledge about/confidence in managing psychosis	7.1
General practitioner has insufficient knowledge of mental health services	4.5
Other	9.6

17.2.4 Challenges for patients with psychosis

When asked to name the top three challenges that participant-patients faced, general practitioners identified social isolation (41.3%), lack of employment (37.7%) and financial problems (37.5%) as key challenges. Uncontrolled symptoms of mental illness were ranked next, at 32.2%. Poor physical health also ranked highly at 30.5% (Table 17-4).

The general practitioner perspective was remarkably similar to that of participants who identified financial problems, loneliness and social isolation, lack of employment, physical health issues and mental health issues in that order, as their top challenges for the coming year (Table 18-5).

Table 17-4. Participant-patient challenges in the past year identified by general practitioners

	Proportion of participant-patients facing challenge (%)
Social isolation/no social networks	41.3
Lack of employment	37.7
Financial problems	37.5
Uncontrolled symptoms of mental illness	32.2
Poor physical health/medication side effects	30.5
Stigma/discrimination	20.5
Lack of suitable housing	11.8
No family or carer	8.6
Inability to access specialised mental health services (including psychiatrists)	5.9
Difficulty getting a medical appointment	3.1
Other	14.5

18 SUPPORT, NEEDS AND SATISFACTION

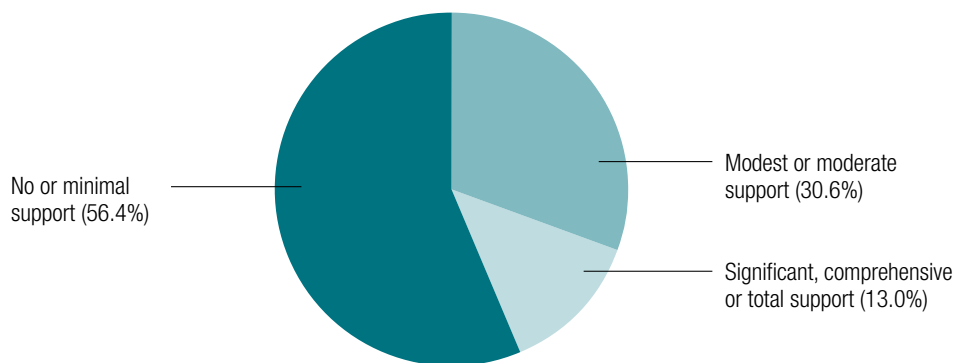
18.1 Level of support and its helpfulness

A number of sections in this report identified the roles that people with psychosis undertake in a variety of domains such as at home (including child care), at work and in study, and examined their performance in those roles. This section addresses the level of support that participants received to maintain their roles and to function effectively in the community setting.

The Multidimensional Scale of Independent Functioning⁹ was used to provide a global measure of the level of formal and/or informal support from any source that participants had received in the four weeks prior to interview to maintain performance across the three domains of work, study and activities of daily living. It takes into account the frequency, quality and proximity of support, who provides this support (family, friends or professionals) and consequences if support was absent.

Just over half (56.4%) of participants reported receiving no or only minimal support to maintain role performance across these domains. One in three (30.6%) were receiving modest or moderate support and 13.0% were receiving significant, comprehensive or total support (Figure 18-1).

Figure 18-1. Global level of support (home, work, study)⁹



One quarter (24.5%) of the participants had support in the form of a carer. For two-fifths (40.8%) of those with carers, the carer was their mother and for one quarter (25.7%) it was their partner.

For another 5.4% of participants, this carer was their child, with more females being supported by their children than males (10.2% for females and 1.2% for males). The proportion cared for by a child was also higher for the older age group (9.0% for those aged 35-64 years). The age of the carer was not recorded.

One in eight (12.3%) participants had had a personal support worker at some stage over the past year.

The survey collected data on other forms of support received and the helpfulness of that support. These data are presented in Table 18-1. The most common form of support received was help with domestic responsibilities. Half (50.6%) the participants had received some help of this kind in the past four weeks. Almost everyone receiving this assistance (94.5%) found that the support provided was very or somewhat helpful, and one third (35.1%) said they would have had a lot of difficulty in maintaining their responsibilities without it.

Table 18-1. Support in non-health related domains and its helpfulness

	Proportion receiving support (%)	Proportion of those receiving support who found it helpful* (%)
Socialising, past year	29.5	76.3
Help with domestic responsibilities, past 4 weeks	50.6	94.5
Help with financial management, past year	32.2	86.2
Employment and study		
Employment support worker, past year	4.8	84.1
Other help to keep employment, past year	5.4	82.9
Help to find employment, past year	20.5	58.7
Help with study, past 4 weeks	4.0	95.9
Housing		
State department of housing, past year	37.4	61.1
Other help with housing needs, past year	21.9	83.7

* Includes 'needs met adequately', 'helpful' and 'very helpful'.

The proportion receiving help was, however, low in a number of critical areas. For example, two thirds (63.2%) of participants were rated by interviewers as having obvious or severe dysfunction in socialising, but only 29.5% said they had received support in this area in the past year.

Only 7.6% had had an employment support worker or some other form of support to retain employment, although 24.4% had been in competitive employment in their main job in the past year. A higher percentage (20.5%) had received help in finding employment in the past year and 58.7% of those receiving this help said that the assistance they had been provided met their needs. Of those receiving this form of help, the most common sources of assistance were public employment services (42.9%), disability employment services (38.4%) and family and friends (31.7%), with 15.7% using a private recruitment company.

18.2 Who helped with mental health matters

People with psychosis were asked who was the person who spent the most time helping them with their mental health problems over the past year. One quarter (23.3%) of participants reported that this was their case manager and a similar proportion (23.1%) reported this was family or friends (Table 18-2). A further 14.7% reported it was their psychiatrist. Other persons named included: mental health nurse (7.5%), general practitioner (6.8%), other mental health professional (6.0%) and psychologist (5.5%).

Table 18-2. Person spending the most time helping participants with mental health problems in the past year

	Proportion (%)
Case manager	23.3
Family or friend	23.1
Psychiatrist (private or public)	14.7
Mental health nurse	7.5
General practitioner	6.8
Other mental health professional	6.0
Psychologist	5.5
Complementary or alternative therapist	0.2
Other	2.5
No one	7.7
Missing	2.7
Total respondents	1,825

The professional most involved in providing counselling or talking therapies over the past year was a psychologist (named by 41.8% of those who had received counselling), followed by case manager (14.8%), psychiatrist (13.9%), other mental health professional (9.4%) and mental health nurse (7.7%).

The person most involved in providing mental health information was the case manager (named by 30.9% of those who had received such information), followed by psychiatrist (18.5%), mental health nurse (12.6%), other mental health professional (10.9%), general practitioner (7.4%) and psychologist (6.2%).

18.3 What helped the most

Participants had received many different forms of help, care and treatment for their mental and physical health in the year prior to interview. Toward the end of the interview, they were asked an open-ended question about what two forms of care they felt had helped them most. Qualitative responses were coded into categories (Table 18-3).

Mental health staff topped the list at 29.6%, with 11.9% of participants identifying case managers/key workers specifically and a further 9.0% identified psychiatrists and other medical officers as helping them most in the past year. One quarter (27.2%) reported that medication for their mental health and 18.8% reported that other forms of mental health care, such as counselling, education, rehabilitation and programs in non-government organisations, had helped them most. The two other commonly endorsed categories were: help and support from others (18.1%) and a category covering diet, sleep and physical activity (15.5%).

Table 18-3. Participants' perceptions of who or what helped them most in the past year

	Proportion (%)
Mental health staff	29.6
Mental health medication	27.2
Mental health treatment (e.g. counselling, education, rehabilitation, NGO programs)	18.8
Help and support from others (e.g. carer, family, friends)	18.1
Diet/sleep/physical activity	15.5
Change in own behaviour/attitude	7.9
Employment/housing/financial support and security	7.6
Socialising; creative/leisure activities	5.5
Other treatment (not mental health)	5.0

Three-fifths (59.5%) of participants reported in a separate question that religion and/or spirituality were important or very important aspects of their lives.

18.4 Unmet needs

Just over one quarter of participants (27.5%) had had a need in the past year for one or more services that they had wanted and had not received. In response to an open-ended question, many named unmet needs related to treatment (55.5%) or treating services (26.9%), which were primarily but not wholly mental health related. A further 30.5% reported the need for assistance in other areas of their lives including, but not limited to, housing, finances, employment, legal assistance and practical assistance (for example, help with household goods), while 4.6% had socialising and leisure related needs.

In addition, in response to a question in the physical health section of the interview, 22.8% of participants said they had unmet physical health needs.

When asked the reason why they had not received the service they needed, 37.9% said it was not available, 31.3% reported that they could not afford it and 20.0% did not know how to access that service (Table 18-4).

Table 18-4. Reasons for not receiving a service for which there was a perceived need in those with an unmet need

	Proportion (%)
Not available	37.9
Not affordable	31.3
Did not know how or where to ask	20.0
Waiting time too long	9.6
Did not think anyone/anything could help	5.0
Preferred to manage things themselves	2.0
Afraid to ask for help, or of what others would think of them if they did	1.2
Did not get around to it	1.2
Problems with things like transportation, childcare or scheduling	1.2
Other	11.0

18.5 Overall satisfaction

Reflecting on the four weeks prior to interview, seven out of ten participants (71.9%) were satisfied or very satisfied with their own independence. Similarly, 71.1% never, rarely or only sometimes felt they were not in control of general life events, such as their personal life, health, work and finances.

When looking back over the past year, half (47.4%) were mostly or very satisfied with their lives, although one third (34.5%) had mixed feelings and 17.0% were mostly or very dissatisfied.

18.6 Challenges into the future

Surprisingly, concerns regarding the treatment and control of their mental illness were not the prime issues for most participants (Table 18-5).

While one quarter (25.7%) identified uncontrolled symptoms of mental illness and 5.8% identified lack of access to mental health services among their top challenges for the coming year, around two-fifths of participants identified financial matters and lack of employment as their top challenges (42.7% and 35.1% respectively). Lack of stable or suitable housing was reported as a challenge by 18.1% of participants.

For one quarter (27.4%) of participants, their physical health was one of the biggest challenges.

One in ten participants (11.6%) reported that stigma and discrimination were a challenge. Many more (37.2%) reported that loneliness and social isolation was one of their greatest challenges and 6.2% reported the absence of family or a carer as a challenge.

Table 18-5. Challenges for the next 12 months

	Proportion (%)
Financial matters	42.7
Loneliness/Social isolation	37.2
Lack of employment	35.1
Poor physical health/Physical health issues	27.4
Uncontrolled symptoms of mental illness	25.7
Lack of stable/suitable housing	18.1
Stigma/Discrimination	11.6
No family or carer	6.7
Inability to access specialised mental health services	5.8
Difficulty getting a medical appointment	3.0
Other	12.7

Regardless of the difficulties facing them, three out of four (77.4%) people believed their circumstances would improve over the next year.

19 HOW THINGS HAVE CHANGED SINCE 1997-98

This report summarises the findings from the second Australian survey of people living with psychotic illness undertaken in 2010. In 1997-98 a national survey determined, for the first time, data on people living with psychotic illness in Australia. The aims of both surveys were the same. Both determined the prevalence of psychotic disorders, who had these disorders, the impact of these disorders in terms of a broad range of social and health factors, and documented the health services people used.

The survey designs for these two surveys, however, differed in a number of important ways. Firstly, a separate sample of people receiving services through government funded non-government organisations was included in the 2010 survey, whereas in the first survey, people receiving private sector services from private psychiatrists and general practitioners were covered. The first survey also made specific attempts to survey homeless people.

It should be noted that general practitioners were surveyed in the second survey, but not to determine additional counts or to collect information on people with psychotic illness who were only receiving services through them, as in the first survey. Rather the second survey collected information on the types of general practitioner services provided to those receiving services through public specialised mental health services and non-government organisations.

A major component of the sample in both surveys, however, was people who were receiving services through state run specialised mental health services in a given month. To assist in analysis of the changes over the 12 years between the surveys, data from just these subsets of the surveys are presented below.

19.1 Comparison of the samples

Information on 1,211 people who were receiving services through public specialised mental health services in the census month of March 2010 was available from the second survey. Information on a comparable sample of 687 people receiving services in a month period was examined from the first survey. The month of collection varied across sites from June to September 1997.

Table 19-1 shows that the sex and age profiles of these two samples were very similar, with three-fifths of each sample being male and a similar proportion in the older age group of those aged 35 to 64 years.

Table 19-1. Sex and age profile of respondents in census month, 1997-98 and 2010

	1997-98	2010
Males proportion (%)	60.8	60.0
Older age group (35-64 years) proportion (%)	59.4	57.4
Total respondents	687	1,211

The profile of psychotic disorders with which the respondents were diagnosed was similar, with around two thirds of each sample being diagnosed with schizophrenia or schizoaffective disorders. The samples, however, varied somewhat between the two surveys on less prevalent psychotic disorders (Table 19-2). In particular, the proportion of people diagnosed with 'delusional and other non organic psychoses' was considerably less (4.5% compared with 13.2% in 1997-98). It should also be noted that the sample from 2010 comprised a far larger proportion of people (7.0% compared with 0.7% in 1997-98) who had severe depression without psychotic illness. It is not possible to separate out the data for this group from further analyses undertaken in this chapter.

Table 19-2. ICD-10 lifetime diagnosis, 1997-98 and 2010

	Proportion (%)	
	1997-98	2010
Schizophrenia	53.4	50.8
Schizoaffective disorder	11.5	16.4
Bipolar, mania	12.4	17.1
Depressive psychosis	6.0	3.7
Delusional and other non organic psychoses	13.2	4.5
Severe depression without psychosis	0.7	7.0
Other	2.8	0.5

Comparing the data from the two surveys appears to show marked changes in the course of illness for people in 2010 (Table 19-3). Around half the total sample experienced multiple episodes of psychotic illness, but more experienced periods of good recovery in between these than in 1997-98 (29.3% compared with 21.3%). Around ten percent of the sample experienced continuous chronic psychotic illness with deterioration, half that found in 1997-98.

Table 19-3. Course of disorder, 1997-98 and 2010

	Proportion (%)	
	1997-98	2010
Single episode	8.0	7.6
Multiple episodes – good recovery in between	21.3	29.3
Multiple episodes – partial recovery in between	29.5	30.1
Continuous chronic illness	17.6	21.7
Continuous chronic illness with deterioration	23.6	11.3
Total respondents	1,087	738

In terms of the available comparable functioning scales, there was little difference found in the measure of severe dysfunction in the quality of self care, however, there did appear to be a marked change in people's satisfaction with their own independence, rising from 57.6% to 70.8% of people (Table 19-4).

Table 19-4. Functioning and quality of life, 1997-98 and 2010

	Proportion (%)	
	1997-98	2010
Obvious or severe dysfunction in quality of self care	32.0	32.4
Satisfied with own independence (1997-98: Mostly versus 2010: Very/Somewhat)	57.6	70.8

19.2 Comparison of service and medication use

An important area of difference between the samples was in relation to the services used. This reflects the major changes in mental health service delivery between the 1997-98 and 2010.

General practitioners remained key providers of health care to people with psychotic illness with the proportion visiting general practitioners increasing slightly from 76.7% to 87.8% in 2010. High proportions of people with psychotic illness receiving services through the public system continue to have case managers, rising slightly from 71.9% in 1997-98 to 78.1% in 2010 (Table 19-5).

In terms of hospital services, emergency department attendances remained relatively stable. The key areas of change, however, were in hospital admissions, decreasing by 27.5% from 62.9% of people in 1997-98 to 45.6% in 2010. Of particular note is that this reflects a 35.9% decrease in admissions for mental health reasons. In contrast admissions for physical ill health increased slightly. Involuntary admissions have also decreased significantly by 27.7%, from 31.4% of people in 1997-98 to 22.7% of people in 2010 being involuntarily admitted to hospital in the previous year.

Community servicing also increased markedly in 2010, with 92.8% of people in contact with an outpatient or community clinic (some 23.2% higher than the 75.3% reported in 1997-98) and 36.8% undertaking community rehabilitation or day programs (60.7% higher than the 22.9% in 1997-98). The data also reflect the increasing role of non-government organisations in the provision of mental health services with one quarter of the sample (26.5%) receiving mental health services through non-government organisations compared with 18.9%, an increase of 40.2% from 1997-98.

Table 19-5. Proportion of people using health services in past year, 1997-98 and 2010

	Proportion (%)	
	1997-98	2010
Inpatient – Any admission	62.9	45.6
<i>Mental health</i>	58.7	37.6
<i>Physical health</i>	7.9	12.6
Involuntary admission	31.4	22.7
Emergency department attendance	47.6	43.0
Outpatient/community clinic contact	75.3	92.8
Community rehabilitation/day program	22.9	36.8
Case manager	71.9	78.1
Non-government organisation for mental health	18.9	26.5
General practitioner visits	76.7	87.8

The data from the two surveys also reflect the major shift in the types of medications used for treating psychosis. By 2010 some 78.4% of people were taking atypical antipsychotics compared with just 37.1% of people in 1997-98 (Table 19-6).

Table 19-6. Medication use in past 4 weeks, 1997-98 and 2010

	Proportion (%)	
	1997-98	2010
Antipsychotics (any)	84.1	87.6
<i>Atypical antipsychotics: All</i>	37.1	78.4
<i>Clozapine</i>	11.8	19.7
<i>Typical antipsychotics</i>	54.7	18.2
Antidepressants (any)	24.6	37.2
Mood stabilisers (any)	27.5	26.5
Anxiolytics, hypnotics, sedatives (any)	9.3	17.2
Total on medication for mental health	94.8	94.9

19.3 Comparison of other health and social outcomes

A suite of data was collected on a range of demographic, housing and social factors. These provide important insights into how the lives of people with psychotic illness have changed given these differences in services and treatment.

The data show a consistency in the proportion of people on some form of government income support. The proportion that has completed Year 12 is not very different, at around one third of people only. Those enrolled in formal studies (19.0% in 2010) and in paid employment have gone up slightly, with one-fifth of people (19.2%) being employed in the past seven days and 30.5% in paid employment in the past year.

There are, however, marked changes in the housing status. Many more people are in their own home or rented accommodation and there are double the numbers in supported accommodation. There has also been a marked decrease in those actually experiencing homelessness (5.0% in 2010 compared with 13.0% in 1997-98).

There were some differences in the comparable variables related to social and family relationships, with more people 'never having had a confiding relationship' and fewer people in face-to-face contact with their families.

The surveys also collected a range of data on smoking, drug and alcohol use and dependence. Smoking rates have remained exceptionally high, with just over two thirds of people smoking compared with one quarter (25.3%) of the general population in 2010. However, lifetime alcohol and drug abuse or dependence, that is at levels that qualify for disorder status, have increased dramatically, with each rising from around 30% to over half of these people with psychotic illness having these disorders (50.5% and 56.4% respectively).

Table 19-7. Other key health and social outcomes, 1997-98 and 2010

	Proportion (%)	
	1997-98	2010
Income, education and employment		
Private health insurance	10.6	14.3
Main source of income: government payment	86.9	87.4
Completed Year 12 education	33.9	31.2
Enrolled in formal studies (past year)	15.3	19.0
In paid employment (past year)	24.3	30.5
In paid employment (past 7 days)	14.8	19.2
Housing status		
Accommodation		
(1997-98 in past 4 weeks versus 2010 at time of interview)		
<i>Rented home or unit</i>	34.2	49.2
<i>Own home</i>	14.8	12.3
<i>Family home</i>	16.3	19.2
<i>Supported housing</i>	5.2	10.9
<i>Homeless – primary, secondary or tertiary</i>	13.0	5.0
Smoking, drug and alcohol		
Current smoker	68.9	67.2
Lifetime alcohol abuse/dependence	29.0	50.5
Lifetime drug abuse/dependence	30.4	56.4
Social and family relationships		
No friends	13.2	13.3
Has never had a confiding relationship	9.6	15.7
Daily or almost daily face-to-face contact with family	67.1	55.2
Victim of violence (actual not threatened)	17.0	15.3

19.4 Determining changes in prevalence

The one-month prevalence of psychotic illness for those receiving public specialised mental health services was estimated as 3.1 cases per 1,000 population in 2010. The one-month prevalence found in 1997-98 was determined as 3.3 cases per 1,000 population, suggesting that the treated prevalence of psychosis in public sector has remained relatively stable.

These are the prevalences for those receiving public specialised mental health services. The 1997-98 survey, however, provides additional information on subgroups of people with psychotic illness who were not covered in the more recent survey. Specifically, people receiving services from private psychiatrists and general practitioners were surveyed. The prevalence for those accessing services in both in the public system and through these private providers was estimated as being 4.7 cases per 1,000 population.

A sample of homeless people, identified as those in marginal accommodation and not in other service settings, added a further 0.4 cases per 1,000 population to the estimates derived from the public and private sector samples.

Together these data suggest that the prevalence of psychotic illness in the Australian population is up to 25% to 50% higher than that reported above for those receiving services through public specialised mental health services only. Using this additional evidence it is estimated that the overall one-month prevalence of psychotic disorders is around 4-5 cases per 1,000 population. This is equivalent to around 65,000 people across Australia in 2010.

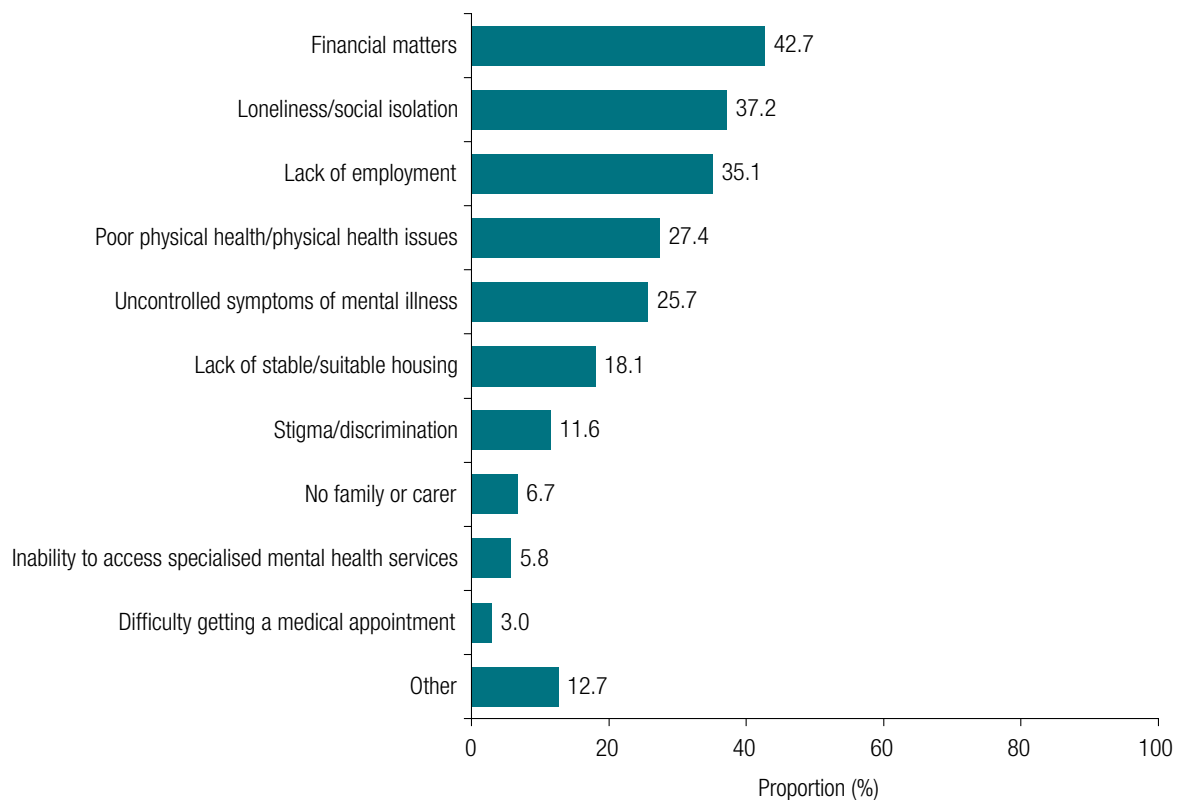
20 CONCLUSIONS

This is the largest and most comprehensive assessment of psychotic disorders undertaken in Australia, and one of the most detailed undertaken internationally. The survey has provided a snapshot of people living with psychotic illness, the circumstances in which they live and the services they receive. The results confirm that psychosis is associated with substantial and persistent disability. Apart from the psychiatric features of psychosis, these disorders impact on physical health, education, employment, and housing. Yet, in the face of disability, disadvantage, stigma and social isolation, people with psychotic disorder display resilience and tenacity.

20.1 Challenges for people with psychosis

People with psychosis identified the most important challenges for them in the coming year (Figure 20-1). The three top challenges were not health-related. They were financial problems (42.7%), loneliness and social isolation (37.2%) and lack of employment (35.1%). Health-related issues were ranked next, with 27.4% naming physical health issues and 25.7% naming the uncontrolled symptoms of mental illness. Housing was ranked sixth, at 18.1%.

Figure 20-1. Most important challenges for the coming year



Overall, the six top-ranked challenges were the same for males and females, and for the younger and the older age groups. Notably, however, younger people ranked unemployment issues first (44.5%). When participants' general practitioners were asked a similar question, they endorsed the same top five challenges for their patients (Table 17-4).

20.2 Quantifying the challenges identified by people with psychosis

The 2010 psychosis survey furnishes abundant evidence quantifying the extent to which people with psychosis are currently facing these challenges in the areas of mental and physical health, income, employment, housing and social isolation.

20.2.1 Impact of psychosis

Psychosis impacts on individuals not only in terms of the symptoms of the illness, but from side effects of medication used to treat psychosis, as well as other associated impairments such as limited capacity to undertake activities of daily living, dysfunction in socialising and cognitive impairment. The prevalence of suicidal thinking and behaviour is very high in people with psychosis.

- While the majority of people with psychosis reported multiple episodes of illness with either good recovery or partial recovery in between (61.5%), almost a third (30.5%) experienced a continuous, chronic illness.
- Over a lifetime and currently, delusions and hallucinations were prominent, along with depressed mood, loss of pleasure, poor concentration and, to a lesser extent, abnormally elevated mood and irritability.
- Symptoms associated with anxiety/phobia and with depression were common: 59.8% and 53.1% of people with psychosis, respectively, reported having these symptoms over the past year.
- Over 90 percent (91.6%) were taking prescribed medication for their mental illness and the majority said that they got relief from the medications they were using.
- While most people with psychosis were on antipsychotic medication, the majority were not receiving adjunctive psychosocial therapies despite evidence-based guidelines for their concurrent use in the management of symptoms and impairments associated with psychotic illness.
- Over the past year, almost one third (30.5%) had received counselling, group therapy or other talking therapies, only one in five (22.3%) had had cognitive behavioural therapy and only one in ten (11.4%) had had family therapy.
- Three quarters (77.4%) complained of medication side effects. The most common side effects included daytime drowsiness, drier or more watery mouth, weight gain (an average of nine kilograms in the past six months), inner restlessness, trembling or shaking of limbs and inability to relax.
- Sixty percent (61.0%) had impairments attributed to medication side effects. Almost one third (29.9%) said the impairments had a moderate or severe impact on their daily lives.
- Nine out of ten reported deterioration in social, occupational or emotional functioning after the onset of their illness.
- One third (32.3%) was rated as having marked impairment in self care in the four weeks prior to interview.
- There was evidence of some cognitive impairment in people with psychosis prior to illness onset that was amplified in the years after illness onset.
- One half (49.5%) of people with psychosis had attempted suicide at least once at some point in their lives compared to 3.7% of the general population.
- Two thirds (67.0%) had had serious thoughts about taking their own life in the past and one in ten (11.5%) was thinking seriously about taking their own life currently.

20.2.2 Physical health

People with psychosis are affected by physical conditions at rates well above those for the general population. This amplifies the burden of ill health that they already carry. In particular, rates of cardiometabolic risk factors are high, predisposing this group to increased risk of metabolic disorders, cardiovascular disease and premature death. High levels of substance use contribute to poor health. Smoking rates remain very high and unchanged for over more than a decade, with lifetime drug and alcohol use or dependence disorders also well above population estimates.

- Levels of lifetime physical health morbidity were higher among people with psychosis than general population levels for a wide range of conditions.
- Half (49.9%) met criteria for metabolic syndrome, a risk factor for cardiovascular disease and type 2 diabetes.
- One quarter (24.0%) had a high absolute risk of cardiovascular disease in the next five years, or already had cardiovascular disease.
- Almost one half (45.1%) had a body mass index in the obese range compared to 20% of the general population.
- One third (33.5%) had no or very little daily physical activity and almost all the rest (62.9%) reported low levels of activity. The figures for the general population were 19% and 54% respectively.
- Two thirds (66.1%) of people with psychosis were currently smoking. Despite a fall in tobacco use in the general community, the proportion smoking had not changed since the first national psychosis survey in 1997-98. The rate was two and a half times the population rate of 25.3%.
- The lifetime rate of alcohol abuse or dependence, at 50.5%, was double the population figure of 24.7%.
- The lifetime rate of any drug abuse or dependence, at 50.8%, was almost six times the population figure of 8.9%.
- The majority of people using cannabis in the past year was using it at least once a week (58.5%), with 38.1% using it daily or almost daily.

20.2.3 Income, employment and housing

Income

People with psychosis have levels of income well below the national average.

- Three-quarters of people with psychosis had earned less than half the national estimated average disposable income.
- The main source of income for 85.0% of people was the Disability Support Pension.

Employment

Not only is paid employment an important source of income, it is a key form of community engagement and a factor that contributes to self-worth. However, employment rates are low among people with psychosis. Most of those with any employment are working part-time only, with a substantial minority preferring more hours of work.

- One in three (32.7%) people with psychosis had been in paid employment in the past year.
- One in five (21.5%) were in paid employment at the time of interview.
- Of those working in the past year, for their main job:
 - The majority (74.8%) was in open, competitive employment.
 - Over two thirds (69.0%) were working part-time only.
 - The average number of hours worked per week was 23.
 - One quarter (27.5%) would have preferred more hours of work.

Housing

While half of the people with psychosis are very satisfied with their housing, residential mobility is high and one quarter is on public housing waiting lists. Moreover, many fear becoming homelessness and for many this is a reality.

- Half (48.6%) of people with psychosis were living in rented housing, 19.1% were in a family residence and 13.1% were in their own residence at the time of interview.
- One in ten (11.0%) was living in supported accommodation.
- One quarter of people with psychosis (25.0%) worried about becoming homeless.
- One in twenty (5.2%) was homeless at the time of interview compared to 0.5% of the general population.
- Up to one in eight (12.8%) had been homeless at some time over the past year.
- One quarter (27.4%) had changed accommodation at least once over the past year and 6.7% had moved three or more times.
- Almost one quarter (22.7%) was on a public housing waiting list.

20.2.4 Loneliness and social isolation

Loneliness and social isolation

Loneliness and social isolation are recurring themes among many people with psychosis. Social support is a key factor in facilitating recovery, but people with psychosis often have impairments in the social skills necessary for forming supportive social networks. Added to this, continuing symptoms of illness and stigma impact on their capacity to develop and maintain social relationships.

- Two thirds (63.2%) of people with psychosis were rated as having marked impairment in socialising over the past year.
- Two thirds (69.3%) said their illness made it hard for them to maintain a close relationship.
- Almost half (48.8%) had never been married or in a long term de facto relationship.
- Almost half (47.5%) said they needed and would like more friends.
- Almost one quarter (22.4%) felt socially isolated and lonely.
- In terms of contact with friends, 13.3% reported having no friends at all, 14.1% had no-one to rely on at times of serious need and 15.4% had never had anyone to confide in.

20.3 Other important findings

20.3.1 Educational profile

Poor school and post-school completion rates observed for many people with psychosis further detract from their employability and compound the effects of cognitive impairment associated with psychosis. These rates reflect the impact of early onset of illness in late adolescence and early adulthood at a critical stage for education and training, and for the consolidation of life skills.

- For almost two thirds (64.8%) illness onset was before the age of 25 years and, for a substantial minority (39.4%) it was under the age of 20 years.
- Only one third (31.5%) of people with psychosis had completed year 12 schooling compared to over half (53.0%) of the general population.
- Less than half (47.1%) had a post-school qualification compared to 59.4% of the general population.
- One in five (18.4%) had difficulty reading and/or writing.

20.3.2 Parenting

Many people with psychosis are parents. This is of considerable consequence from a service perspective, creating an imperative for services to identify the needs of these families and ensure that affected parents and their children are well supported.

- Just over half the women with psychosis (56.2%) and one quarter of the men (25.9%) were parents with children of their own.
- One quarter of the women (23.6%) and 5.5% of men had dependent children living at home with them.
- Just 44.8% of the mothers with dependent children at home were in a relationship, either married or defacto.
- The majority of parents with dependent children at home were parenting very well, however, almost one quarter (23.1%) were rated as having obvious or severe dysfunction in their provision of care for their children.

20.3.3 Victimisation

High victimisation rates highlight the vulnerability of people with psychosis.

- Almost two-fifths (38.6%) of people with psychosis had been a victim of an offence such as theft or assault over the past year.
- One quarter (24.8%) had been a victim of an assault in the previous year compared to 4.8% of the general population.

20.4 Conclusion

Like all Australians, people with a psychotic illness have the same requirements for good nutrition, adequate housing, worthwhile employment and sufficient income to meet basic needs. They express a similar yearning for social interaction and meaningful relations with others. Many have partners and children and some are carers for others with a disability who rely on them.

Because of their illness, people with a psychotic illness face additional challenges. Many of these challenges are not health issues, but relate to employment, income, housing, social contact and the need for social support. Indeed people living with psychosis in Australia in 2010 ranked social and economic disadvantage and loneliness and social isolation above their very profound physical and mental health needs.

These challenges highlight the importance of an integrated approach to service provision for people with psychosis to ensure that their living requirements and needs for social participation are met, as well as meeting their very considerable mental and physical health needs.

The population-level data collected as part of the 2010 national psychosis survey provide a solid, empirical foundation to guide policy development and service provision around all aspects of the lives of people living with psychosis.

21 APPENDICES

21.1 Notes

1. All percentages in the tables in the appendices use the total sample as the denominator unless otherwise indicated. The base numbers are: 1,087 male participants and 738 female participants; 773 participants aged 18-34 years and 1,052 participants aged 35-64 years; and a total of 1,825 participants.
2. Tables that cover all coding options for a variable, whether aggregated or disaggregated, will include 100% and the denominators on which percentages are based in the bottom two rows. In some cases, percentages will not add to 100.0% due to rounding error.

21.2 List of appendices

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Appendix 1. Background, aims and methodology

Catchment sites

New South Wales

Hunter New England

Orange

Queensland

West Moreton

South Australia

Northern Mental Health

Victoria

North West Area Mental Health Service

St Vincent's Mental Health Service

Western Australia

Fremantle, Peel and Rockingham and Kwinana

Catchment site profiles are provided in Appendix Table 1-3.

Census month

March 2010

Inclusion criteria

Diagnosis

Census month: screen-positive rating for psychosis on the Psychosis Screener

11 months prior to census: a diagnosis of psychosis on administrative records, namely, ICD-10 schizophrenia (F20), schizotypal disorder (F21), persistent delusional disorder (F22), acute or transient psychotic disorder (F23), induced delusional disorder (F24), schizoaffective disorders (F25), other and unspecified non-organic psychotic disorder (F28, F29), manic episode with psychotic symptoms (F30.2), bipolar affective disorder with psychotic symptoms (F31.2, F31.5), severe depressive episode with psychotic symptoms (F32.3), recurrent depressive disorder with psychotic symptoms (F33.3) OR at least two admissions with a drug- or alcohol- induced psychosis (F10-F19: .5 and .7 only)

People may experience transient psychotic symptoms related to acute substance intoxication or withdrawal. These disorders are not the focus of the current survey. However, the links between psychotic disorders and substance misuse are complicated and many individuals with psychotic disorders have co-morbid alcohol or illicit drug use/dependence disorders. A case of psychosis may be missed if the primary diagnosis at the time of an inpatient admission is a substance-induced psychosis, masking an underlying psychotic disorder. For this reason, screening of administrative registers in the 11 months prior to the census month included screening for people with at least two inpatient admissions with a substance-induced psychosis. Only 1.8% of the total number screen positive for psychosis met this criterion. If they did not meet full criteria for a psychotic disorder at the time of interview, they were coded as "other" in the diagnostic groupings.

Age range

Aged 18-64 years during the census month.

Residency

Resident in designated postcodes/suburbs as determined by the catchment area of the relevant mental health services.

Exclusion criteria

The survey excluded:

- people with insufficient English or a communication or cognitive impairment that would interfere with a person's capacity to give informed consent and to complete a valid interview; and
- those unavailable for screening or interview due to residence in a nursing home or prison.

Coverage

The survey targeted:

- people in contact with public specialised mental health services in March 2010, that is including inpatient units, emergency departments, community liaison, public outpatient and community care mental health services units, but excluding drug and alcohol services;
- people who used public specialised mental health services in 11 months prior to March 2010, that is from April 2009; and
- people in contact with non-government organisations funded to support people with mental illnesses in March 2010 census month.

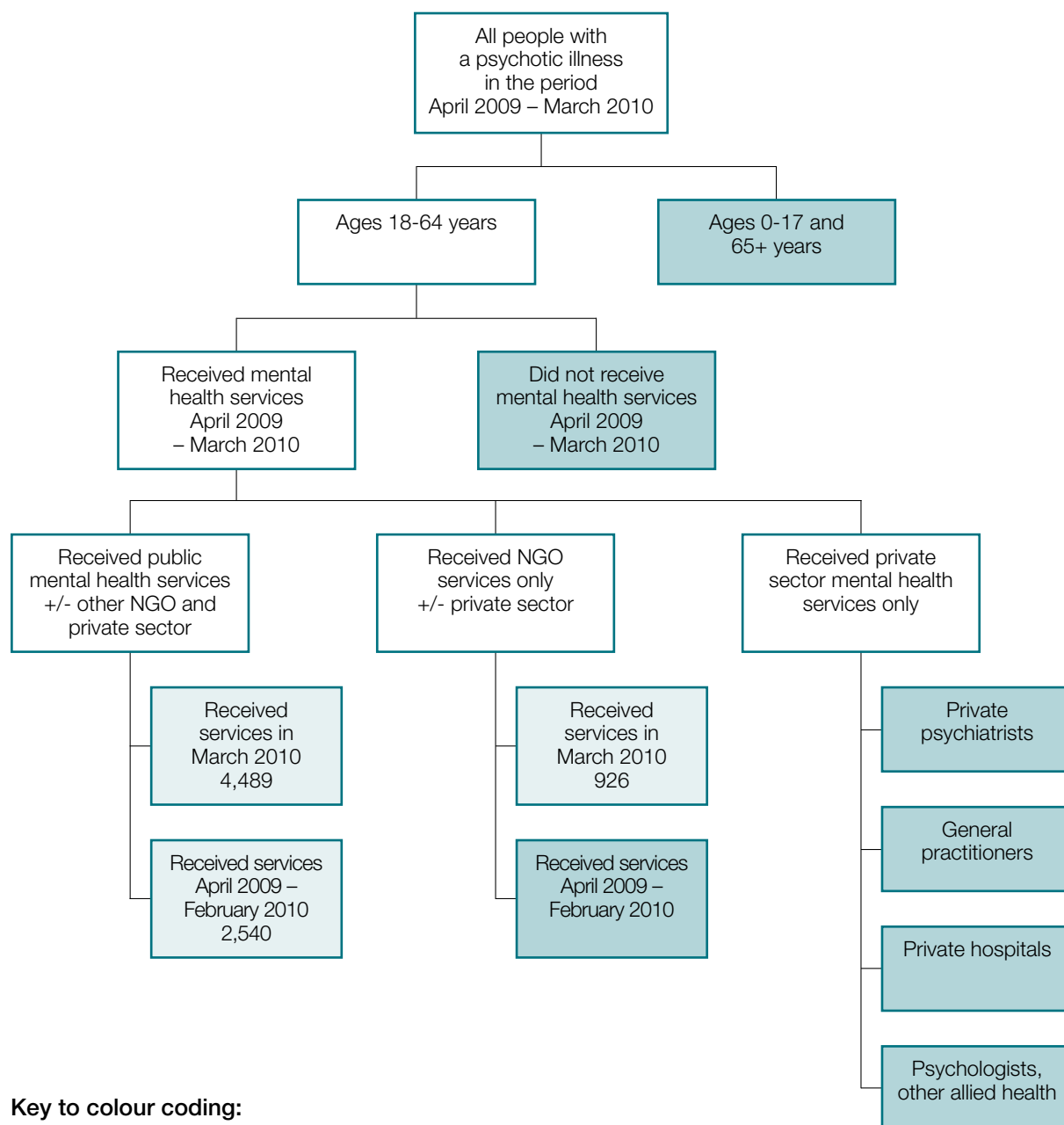
Screening identified 7,955 people who were screen positive for psychosis (Appendix Table 1-1). These were adults aged 18-64 years in contact with public specialised mental health services between April 2009 and March 2010 inclusive, as well those receiving mental health services from government funded non-government organisations in March 2010.

Just over half (56.4%) were current clients of the public specialised mental health services, that is in March 2010.

Appendix Table 1-1. People who were screen positive for psychosis by sector

	Persons	Proportion (%)
Used public specialised mental health services in the census month	4,489	56.4
Used public specialised mental health services in the 11 months prior to census month	2,540	31.9
Only used non-government organisation funded to support people with mental illnesses in the census month	926	11.6
Total	7,955	100.0

Appendix Figure 1-1. Service use by people with psychotic illness and who was included in 2010 national psychosis survey



Key to colour coding:

- People with psychotic illness **included** in the survey sample.
7,955 people were identified through the three cohort entry pathways.
Of these, a sample of 1,825 was randomly selected for interview.
- People with psychotic illness **not included** in the survey sample.

To enumerate people only using non-government organisations funded to support people with mental illnesses in the census month, all potential non-government agencies were invited to participate in the census.

- Overall, 86% of individual centres that were part of these non-government organisations and located within the survey catchment area participated.
- In general, those not participating were smaller centres within larger participating organisations, predominantly in rural areas.
- These data were used in national prevalence estimates.

The survey did not enumerate certain groups of people:

- those under the age of 18 years or those over the age of 64 years;
- those who did not make contact with public specialised mental health services within the selected 12-month period or non-government organisations funded to support people with mental illnesses in the census month; and
- those who, in the census month, were solely in contact with general practitioners or private psychiatrists and psychologists, or who were homeless and not in contact with treatment services.

Homeless people were not a specific target for enumeration since this group was covered in the 1997-98 psychosis survey where they represented a small proportion of the census month sample. The 1997-98 survey also found that the majority of people who had been homeless in the census month had had some contact with treatment services in the previous 11 months or between screening and interview. Consequently, the current survey elicited comprehensive data on primary, secondary and tertiary homelessness at any point in the 12-month period prior to interview from all survey participants.

Generalisability

These data were collected using a two-phase design, recognised in the research literature as appropriate for the collection of data on low prevalence disorders.^{27, 28} Through its national, epidemiological approach to sampling, the survey catchment sites represented 10% of Australians aged 18-64 years, ensuring generalisability of the survey data to all people with psychosis in contact with public sector treatment services over a one-year period in Australia.

Interview sample

In total, 1,825 people completed interviews. These people were randomly selected by age group and catchment site from the 7,955 people who were screen-positive for psychosis and who met survey eligibility criteria.

Appendix Table 1-2. Full interview sample by sector

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Used public specialised mental health services in the census month	66.9	65.6	66.8	66.1	66.4
Used public specialised mental health services in the 11 months prior to census month	21.7	23.4	25.1	20.4	22.4
Only used non-government organisation funded to support people with mental illnesses in the census month	11.4	11.0	8.2	13.5	11.2
Total	1,087	738	773	1,052	1,825

To be eligible for interview, participants required positive ratings for at least two items on the screening instrument. These items covered hallucinations and delusions (six items), and being on antipsychotic medication (key worker form) or told by a doctor that they had a psychotic disorder (participant form). Alternatively, they were eligible if they had a recorded diagnosis of psychosis or two admissions with a drug or alcohol induced psychosis in the 11 months prior to census.

Not all eligible people, however, met full diagnostic criteria for psychosis when interviewed by trained mental health professional staff using the detailed Diagnostic Module of the Diagnostic Interview for Psychosis⁴ to elicit the signs and symptoms of psychotic disorders. Nonetheless, people interviewed represent the range of severe disorders, with associated disability and comorbidities, presenting to public specialised mental health services at any point in time.

Participation by those screen-positive and selected for interview was 29% overall.

There were a number of reasons for non-participation.

- Passive non-response that is people being selected from the census under random sampling, but ultimately not directly asked to participate, was a significant cause of non-participation. Passive non-responders made up 47% of all non-responders. There were several reasons why they were not contacted:
 - One quarter (27%) were eligible but contact was not made, either because they could not be tracked or because they had died in the period since screening.
 - For 10% of cases, case managers had not invited clients to participate because they had assessed them as not being well enough or, in some cases, had neglected to pass on the request.
- Ten percent (10%) were judged by the interviewers to be too unwell physically or mentally to provide consent.
- Almost half (47%) had refused.
- A small proportion (6%) had agreed, but could not find a time to be interviewed.

With the exclusion of those not given the opportunity to participate (passive non-responders), the response rate is 44% overall. This is generally consistent with the results of the 1997-98 survey and comparable to similar studies internationally. Higher response rates are not typically found in surveys of people who have psychotic illness or for surveys of more unwell populations.

Interviewing those without psychosis

In addition to the screen positive sample, 164 people were randomly selected for interview from the pool of people who were screened as negative for psychosis. This group completed the diagnostic module only and their data were used in the determination of census group and population prevalence.

Sample bias

To assess whether non-participation had introduced a systematic bias into the data collection, the demographic and psychosis screening data for those interviewed were compared with data for those selected for interview, but who did not participate for any reason.

- Both groups were similar in terms of sex, with 60% of those interviewed male compared with 62% of those selected but not interviewed.
- The proportions in each age group were similar, with 44% of those interviewed aged 18-34 years at the time of screening compared with 43% of those not interviewed.
- The psychosis screening profiles for both groups were very similar indicating no marked differences in terms of lifetime symptom profiles based on the screener items. There were no differences on six of the eight screener items. There were differences of three and four percentage points for delusional mood and delusions of persecution respectively, with the proportion lower in the interviewed sample, but no differences on the other three delusional items or all delusional items combined.

Prevalence

The prevalence of psychosis is based upon estimates of the number of people who met the ICD-10 diagnostic criteria for psychosis. These disorders include schizophrenia, schizoaffective disorder, depressive psychosis and other psychotic disorders.

It is largely limited to those being treated through public specialised mental health services.

It does not take account of the large numbers of people receiving services through the public system who do not have a psychotic illness nor does it take account of those with psychosis being treated only in the private sector.

Data from the Orange catchment were not included in the prevalence estimates. Geographic and operational factors at this site made fulfilment of the sampling framework unfeasible. This would have resulted in large or undefined weights for many strata, yielding prevalence estimates of uncertain validity. Orange data were included in all the descriptive statistics where the issues that precluded their use in prevalence estimates had little impact.

Psychosis screener

The psychosis screener used for census month screening was developed as part of the first national psychosis survey and its psychometric properties have been published.²⁻³ For the second survey, pre-enumeration piloting led to enhancements that further improved its psychometric properties.

The screener consists of seven questions targeting specific psychotic symptoms (over the lifetime) and an eighth item recording the clinical judgement of the mental health professional administering the screener whether, on the basis of all the information available, psychotic symptoms had ever been present and the person met the criteria for inclusion.

Interview schedule

The interview schedule comprised of 32 modules in total. These included a number of embedded instruments, as well as some modules that have been specifically designed for this survey.

The Diagnostic Interview for Psychosis – Diagnostic Module (DIP-DM)⁴ was developed for use by trained mental health professionals in the first Australian survey of psychosis in 1997-98.²⁻³ It uses SCAN prompts²⁹ to draw out signs and symptoms, then applies the OPCRIT criteria developed by Farmer et al³⁰ using a computer algorithm to generate diagnoses according to, among others, ICD-10 and DSM-IV classification systems. It has well established psychometric properties⁴ and has been translated into eight languages for use internationally in psychosis surveys and studies and in clinical settings.

Other modules covered the following:

Demographics, social participation and functioning: 1 General Information; 2 Education; 3 Housing; 4 Activities of daily living; 5 Employment 6 Child care; 7 Caring; 8 Global work ratings; 9 Childhood experiences; 10 Socialising; 11 Finances; 12 Crime and offending; 13 Personal safety; 14 Satisfaction with life; 15 Global functioning ratings

Physical Health: 16 Nutrition; 17 Physical activity; 18 Physical health and metabolic measures

Quality of life: 19 Assessment of Quality of Life

Psychopathology and cognition: 20 Diagnostic Interview for Psychosis (Diagnostic Module); 21 Negative symptoms; 22 Worry, panic, anxiety and obsession; 23 Cognition

Service use and perceived need: 24 Inpatient; 25 Emergency; 26 Outpatient; 27 Public community mental health; 28 Community rehabilitation and day therapy; 29 General practice; 30 Medication use; 31 Non-government agencies; 32 Mental health care and unmet need

A number of externally developed instruments were used in their entirety, namely:

- Assessment of Quality of Life³¹
- Alcohol Use Disorders Identification Test³²
- CAGE³³
- Carpenter: World Health Organization Schedules for Clinical Assessment in Neuropsychiatry items of the Carpenter Deficits syndrome^{29, 34}
- Fagerstrom Test for Nicotine Dependence³⁵
- International Physical Activity Questionnaire (short format)¹⁸
- Multidimensional Scale of Independent Functioning⁹
- National Adult Reading Test¹⁴
- Personal and Social Performance Scale¹⁰
- RBANS Digit Symbol Coding Test²⁰

Comparison data

The three main sources of comparison data in this report are:

1. The first Australian psychosis survey, the Survey of Low Prevalence (Psychotic) Disorders;^{2, 3}
2. Population data from the 2007 National Survey of Mental Health and Wellbeing, a household survey of people aged 16-85 years designed to estimate the prevalence of common mental disorders in the Australian general population^{6, 8, 19}; and
3. Australian Bureau of Statistics data, referenced as appropriate.

Many of the survey questions were derived from these sources to ensure comparability.

Appendix Table 1-3. Catchment site population profiles

	NSW Hunter New England	NSW Orange	QLD West Moreton	SA Northern	VIC North West	VIC St Vincent's	WA Fremantle, Peel and Rockingham Kwinana	Australia
Estimated Resident Population (2010, extrapolated) aged 18-64 (n) (a)	378,935	83,711	135,407	230,400	207,962	172,485	280,454	
Females (2010, extrapolated) aged 18-64 (%) (a)	49.7	49.4	49.8	50.4	50.2	50.5	49.6	
Estimated Resident Population (June 2009) aged 18-64 (n) (b)	372,705	82,352	133,230	226,654	204,548	169,512	275,922	14,220,230
Females (June 2009) aged 18-64 (%) (b)	49.7	49.4	49.8	50.3	50.2	50.4	49.5	49.9
Area (square kilometres) (c)	22,554.7	27,701.5	6,660.1	814.7	554.6	79.5	3,317.1	–
Population density (total population per km ²) (b)	26.4	4.9	31.0	432.4	557.1	3,049.3	128.1	2.9
Population age structure (c)								
Population aged 0-17 (%)	24.2	26.5	28.4	25.0	24.6	19.4	24.4	24.0
Population aged 18-64 (%)	60.6	58.5	61.0	62.8	63.2	67.6	61.4	62.7
Population aged 65 years and over (%)	15.2	14.9	10.5	12.2	12.2	13.0	14.2	13.3
Other characteristics (c)								
Indigenous persons (all ages) (%)	2.6	4.5	3.1	1.6	0.5	0.2	1.4	2.3
Australian-born (all ages) (%)	85.0	88.2	78.9	70.7	62.1	66.6	65.0	70.9
Language spoken at home-English only (all ages) (%)	91.9	93.3	88.9	83.7	56.6	72.5	83.7	78.5
Marital Status (15 years and over) (c)								
Never married (%)	31.2	31.4	32.4	32.3	35.6	42.6	31.0	33.2
Family Structure (c)								
One parent family (%)	17.3	16.1	18.1	18.8	17.2	12.9	14.9	15.8
Couple family without children (%)	38.1	39.3	35.1	35.7	30.7	37.6	39.3	37.2
Couple family with children (%)	43.2	43.2	45.4	44.2	49.9	46.3	44.4	45.3
Other family (%)	1.4	1.4	1.4	1.3	2.2	3.2	1.4	1.7
Total (%)	100	100	100	100	100	100	100	100
Employment Status (15 years and over) (c)								
Employed (%)	53.2	55.6	57.8	56.5	53.8	61.4	56.5	57.2
Unemployed (%)	3.9	3.6	3.1	3.4	3.8	2.8	2.4	3.2
Not in labour force/Not stated (%)	42.9	40.9	39.2	40.1	42.5	35.9	41.2	39.6
Total (%)	100	100	100	100	100	100	100	100
Median Weekly Income (15 years and over) (c)	399.0	403.4	447.9	428.2	407.7	644.6	471.0	466.3
Same usual residence (c)								
One year ago (%)	80.0	78.7	75.1	81.3	79.8	75.7	74.1	77.3
Five years ago (%)	53.4	50.5	44.9	55.2	54.3	48.9	44.6	49.6

	NSW Hunter New England	NSW Orange	QLD West Moreton	SA Northern	VIC North West	VIC St Vincent's	WA Fremantle, Peel and Rockingham Kwinana	Australia
Private, occupied dwellings by tenure type (c)								
Fully owned (%)	35.5	37.0	29.0	28.9	32.8	32.3	31.9	32.6
Being purchased (%)	31.9	30.4	37.4	40.9	35.3	26.1	36.2	32.2
Being rented (%)	25.1	25.1	26.1	23.3	23.2	32.5	22.7	26.1
Other/Not stated (%)	7.5	7.6	7.5	6.9	8.7	9.1	9.2	9.1
Total (%)	100	100	100	100	100	100	100	100
Persons by dwelling type (c)								
Separate house (%)	88.8	92.5	95.5	89.5	82.0	56.7	88.6	81.2
Semi-detached, terrace, townhouse (%)	5.5	2.6	1.8	7.3	9.6	22.3	7.0	7.5
Flat, unit, apartment (%)	4.7	3.7	1.7	2.7	7.9	20.2	3.8	9.9
Other/Not stated (%)	1.1	1.1	1.0	0.4	0.5	0.8	0.7	1.3
Total (%)	100	100	100	100	100	100	100	100
Educational Attainment (18 to 64 years) (c)								
School level qualification only or had not attended school (%)	47.3	49.1	54.7	56.2	49.2	29.3	45.3	45.6
Proportion of Collection Districts by Remoteness Area (d)								
Major Cities (%)	68.9	0.0	70.6	97.9	98.9	100.0	75.6	—
Inner Regional (%)	28.1	68.6	29.2	2.1	1.1	0.0	24.4	—
Outer Regional (%)	2.9	31.4	0.3	0.0	0.0	0.0	0.0	—
Total (%)	100	100	100	100	100	100	100	—
Index of Relative Socio-Economic Disadvantage (e)								
(weighted index score and range for each catchment)	986.2	978.5	970.5	962.7	975.6	1,078.2	1,023.4	—
	483-1159	657-1161	676-1152	567-1150	655-1134	433-1167	698-1199	—
Index of Relative Socio-Economic Advantage and Disadvantage (e)	975.5	956.5	950.5	941.1	976.3	1,121.9	1,018.0	—
(weighted index score and range for each catchment)	610-1,188	725-1,147	731-1,192	653-1,134	748-1,140	634-1,228	736-1,306	—
Index of Economic Resources (e)								
(weighted index score and range for each catchment)	984.0	979.8	988.5	968.1	985.8	1,053.5	1,038.0	—
	492-1,178	709-1,181	720-1,222	611-1,184	663-1,212	509-1,202	768-1,240	—
Index of Education and Occupation (e)	952.9	957.8	927.6	924.8	971.1	1161.2	994.5	—
(weighted index score and range for each catchment)	690-1,199	750-1,162	781-1,136	736-1,116	790-1,242	748-1,263	783-1,365	—

(a) Estimated Resident Population data for 2010 extrapolated from Estimated Resident Population data for 2009 (preliminary) extracted by the Australian Bureau of Statistics.

(b) Estimated Resident Population data (preliminary) for 30 June 2009 were extracted by the Australian Bureau of Statistics.

(c) Census data (2006) for the catchment areas were extracted by the Australian Bureau of Statistics using catchment area postcodes.

(d) Remoteness Area data were extracted by the ABS and are based on the Australian Standard Geographical Classification.

(e) The Socio-Economic Indexes for Areas (SEIFA) were extracted by the Australian Bureau of Statistics using catchment area postcodes to obtain postal area level indexes. The higher the score, the more positive the catchment profile. For example, the higher the Index of Relative Socio-Economic Disadvantage, the less disadvantaged the catchment area.

Appendix 2. Prevalence estimates and explanatory notes

Estimation of census month prevalence rates

Estimation of prevalence in the 2010 national psychosis survey was by means of a two-phase survey. This involves the use of a brief and easy to administer screening instrument at the first phase. Participants are differentially sampled for a detailed and more accurate interview at the second phase based on screening status.²⁸ Typically, a much larger proportion of screen positive participants is interviewed than of screen negative participants.

For prevalence estimation, data from screen negative participants are critical. Unless it can be assumed that the screen has perfect sensitivity and thus the prevalence of the condition of interest in screen negatives is zero, ignoring this group will lead to the under-estimation of prevalence. Conversely, ignoring the relative sampling frequencies of screen positive and screen negative participants will lead to over-estimation, as second phase interviews are enriched with those more likely to meet diagnostic criteria.

There are a number of methods in use for prevalence estimation in two-phase surveys.^{28, 36} The application of sampling weights derived from phase 1 to phase 2 data is the most widely used method and was used in this report. This method is known as Horvitz-Thompson inverse probability weighting.³⁶

Participants were classified according to sex and age strata and screen status within sites. Phase 2 sampling weights were calculated according to the ratio of the number of members of the census population in each 'cell' relative to the number interviewed. For example, a sampling weight of 10 implies that each phase 2 interviewee in a particular stratum with a particular screening status at a site represents 10 comparable members of the phase 1 census. The phase 2 sample was designed to recruit equal numbers of men and women and equal numbers into younger (18-34) and older (35-64) strata. Weights were based on actual strata frequencies – empirical weights – rather according to design weights as this has been demonstrated to yield results that are more accurate.

At some sites, no screen negative individuals in particular strata were interviewed leading to an undefined weight. These members of the census were not 'represented' by anyone at phase 2. In these circumstances, the stratum was combined with the same sex age-adjacent stratum or strata at that site.

Prevalence in the census population within each stratum at each site was estimated as the weighted proportion of persons meeting diagnostic criteria. The statistical package Stata/IC version 10.1 was used for estimation. As the number of cells in the design was large and small numbers could lead to unstable individual estimates, a logistic model was fitted to the data with diagnostic status predicted by site, sex and age group. This yielded results highly consistent with the approach using cell-based proportions.

Estimation of one-month population prevalence

From the estimated prevalence and size of each stratum at each site, the numbers of people meeting criteria in that cell could be calculated. The corresponding resident population was estimated from data provided by the Australian Bureau of Statistics for each catchment. Population numbers for 2010 were not available at the time of calculation so growth rates for each stratum in the whole Australian population were applied to 2009 population estimates.

Prevalence for each stratum at each site is the estimated number of people in the census group divided by estimated catchment population of the stratum.

Prevalences from sites were combined by weighting each value by the proportion of the population across all catchments represented by each site. Weighting was applied separately for each stratum. This assumes that the sites are either a random or a representative sample of sites nationally. This yielded the strata specific prevalences reported in Table 2-1.

National numbers of people meeting criteria were derived from these prevalence values and the corresponding population size.

Where prevalences are reported aggregating strata over sex or age groups, adjustments were made so that the estimates correspond to the age and, where appropriate, sex distribution of the Australian population aged 18 to 64.

Estimation of 12-month prevalence rates

Phase 1 of the survey included the enumeration of people in each catchment who were screen positive for psychosis and, while not in contact with public specialised mental health services during the census month, had been in contact with these services in the prior 11 months. Individuals in this category were eligible for recruitment to Phase 2, during which the formal diagnosis could be confirmed by the diagnostic interview.

Unlike the one-month prevalence estimates, the enumeration process could not, by definition, yield screen negative individuals and so 11-month prevalence estimates are based only on screen positive individuals and calibrated for false positives. Apart from this difference, prevalence rates and estimated numbers were estimated using the same methods as for one-month values.

The 12-month prevalence rates and estimated numbers reported in Table 2-2 aggregate values for the 11 months prior to the census month with the one-month values reported in Table 2-1.

Estimation of prevalence in non-government organisations

The relatively smaller numbers of participants ascertained from non-government organisations who were interviewed precluded construction of a separate set of weights for this group.

A set of weights for the combined groups of those presenting at mainstream mental health services and non-government organisations was developed and the logistic model described above was fitted to the interview data with the addition of an indicator of non-government organisation status. Prevalence was estimated for members of the census from non-government organisations using this model and all other statistics were then derived in a manner identical to that used for attendees of mainstream mental health services.

Possible sources of uncertainty and bias in estimates

There are a number of sources of potential uncertainty or imprecision in the estimates reported. These arise from normal sampling variation and any errors in population estimates. In addition, the Diagnostic Interview for Psychosis – Diagnostic Module (DIP-DM)⁴, developed for the first psychosis survey in 1997-98, was used to determine the diagnosis of a psychotic illness using formal ICD-10 criteria. While this diagnostic instrument has been validated and translated into eight languages for use internationally for research and clinical purposes, it is possible that a small number of people were misclassified. Further, some people attending public mental health services within a catchment site may have been missed, resulting in an underestimation of prevalence at the site.

Of particular concern are participant refusal and the inability to interview some very ill patients. This may have biased prevalences downward, particularly if refusal was associated with a higher likelihood of meeting diagnostic criteria. In addition, this may also impact on the results particularly in relation to course of illness and functioning.

The aggregate effect of these factors is difficult to estimate. Beyond straightforward sampling variation, factors that might bias estimates can generally be seen to be likely to be negligible or to result in underestimation of the prevalence of psychotic illnesses.

Appendix 3. Sociodemographic profile

Appendix Table 3-1. Sex

	Age 18-34 years		Age 35-64 years		Persons	
	Respondents	Proportion (%)	Respondents	Proportion (%)	Respondents	Proportion (%)
Males	505	65.3	582	55.3	1,087	59.6
Females	268	34.7	470	44.7	738	40.4
Total	773	100.0	1,052	100.0	1,825	100.0

Appendix Table 3-2. Age group at interview

	Age 18-34 years		Age 35-64 years		Persons	
	Respondents	Proportion (%)	Respondents	Proportion (%)	Respondents	Proportion (%)
18-34 years	505	46.5	268	36.3	773	42.4
35-64 years	582	53.5	470	63.7	1,052	57.6
Total	1,087	100.0	738	100.0	1,825	100.0

Appendix Table 3-3. Country of birth and main language spoken

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Born in Australia	83.3	80.6	85.4	79.9	82.2
Main language spoken at home is other than English	9.4	8.9	10.7	8.1	9.2

Appendix Table 3-4. Educational profile

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Completed year 12	31.0	32.1	38.2	26.5	31.5
Post-school qualifications	43.3	52.6	46.7	47.3	47.1
Difficulty reading, writing or both	19.6	16.5	18.4	18.3	18.4
Enrolled in formal studies (past year)	16.7	26.7	29.0	14.7	20.8
Enrolled in vocational studies (past year)	8.3	13.3	13.2	8.2	10.3

Appendix Table 3-5. Coverage for health care costs

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Health care card	86.8	84.3	84.3	86.9	85.8
Private health insurance	13.2	18.0	17.9	13.1	15.1

Appendix 4. Mental health profile

Appendix Table 4-1. ICD-10 lifetime diagnosis

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Schizophrenia	56.3	33.2	52.1	43.2	47.0
Schizoaffective disorder	14.4	18.4	16.3	15.9	16.1
Bipolar, mania	13.0	24.1	13.1	20.7	17.5
Depressive psychosis	3.0	6.5	3.9	4.8	4.4
Delusional and other non organic psychoses	6.0	3.7	5.3	4.8	5.0
Severe depression without psychosis	5.7	13.0	7.8	9.3	8.7
Other	1.6	1.1	1.6	1.2	1.4
Total respondents	1,087	738	773	1,052	1,825

Appendix Table 4-2. Age at onset

Age of onset (years)	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Under 15	4.0	7.9	7.1	4.5	5.6
15-19	35.9	30.8	48.6	22.9	33.8
20-24	27.0	22.9	29.8	22.1	25.4
25-29	14.8	12.6	11.0	16.1	13.9
30-34	8.3	10.7	3.0	13.9	9.3
35-39	3.4	6.2	–	7.9	4.5
40-44	2.4	4.1	–	5.3	3.1
45-49	2.1	2.6	–	4.0	2.3
50-54	0.6	1.6	–	1.8	1.0
55-59	0.4	0.4	–	0.7	0.4
60-64	0.3	–	–	0.3	0.2
Not available	0.7	0.3	0.5	0.6	0.5
Total respondents	1,087	738	773	1,052	1,825

Appendix Table 4-3. Course of disorder*

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Single episode	7.9	8.3	11.8	5.3	8.1
Multiple episodes – good recovery in between	28.1	32.1	30.9	28.8	29.7
Multiple episodes – partial recovery in between	30.4	33.9	31.3	32.1	31.8
Continuous chronic illness	22.4	18.0	18.0	22.5	20.6
Continuous chronic illness with deterioration	11.3	7.7	8.0	11.2	9.9
Total (%)	100.0	100.0	100.0	100.0	100.0
Total respondents	1,087	738	773	1,052	1,825

* See Glossary for definitions

Appendix Table 4-4. Lifetime symptom profile

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Dysphoria, depressed mood	73.9	88.1	76.8	81.7	79.6
Loss of pleasure	66.6	81.3	68.6	75.5	72.5
Suicidal ideation	63.0	72.9	64.4	68.9	67.0
Elevated mood	28.5	43.9	32.7	36.2	34.7
Irritability	28.2	38.5	32.2	32.5	32.4
Poor concentration	58.8	77.1	63.1	68.4	66.2
Hallucinations (any form)	80.4	76.7	81.8	76.8	78.9
Subjective thought disorder	49.9	42.7	52.1	43.2	47.0
Passivity phenomena	19.2	17.2	20.6	16.8	18.4
Delusions	89.8	82.2	87.8	85.9	86.7

Appendix Table 4-5. Current symptom profile

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Dysphoria, depressed mood	24.4	29.4	26.6	26.2	26.4
Loss of pleasure	22.2	27.9	24.3	24.6	24.5
Suicidal ideation	10.2	13.4	12.4	10.8	11.5
Elevated mood	3.4	7.2	5.6	4.5	4.9
Irritability	5.5	8.4	7.2	6.3	6.7
Poor concentration	20.2	28.0	22.6	24.0	23.4
Hallucinations (any form)	39.9	34.0	38.6	36.8	37.5
Subjective thought disorder	24.4	19.5	24.3	21.0	22.4
Passivity phenomena	6.2	4.7	6.7	4.8	5.6
Delusions	45.4	35.4	42.0	40.8	41.3

Appendix Table 4-6. Anxiety in past year

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Worrying (moderate-severe)	35.4	52.8	36.2	47.1	42.5
Any symptoms of anxiety or phobia	52.4	70.7	58.0	61.2	59.8
Anxiety	40.7	60.4	47.6	49.4	48.7
Phobia	29.3	44.3	31.8	37.9	35.3
Social phobia	39.3	46.5	40.4	43.5	42.2

Appendix Table 4-7. Negative symptoms* in past year

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Dysfunction in overall socialising	64.8	61.0	59.0	66.3	63.2
Diminished sense of purpose	56.2	45.8	49.8	53.6	52.0
Loss of interest	51.4	52.2	52.1	51.4	51.7
Diminished emotional range	53.6	48.5	49.7	52.9	51.6
Restricted affect	47.3	38.2	44.2	43.2	43.6
Poverty of speech	22.1	14.2	19.4	18.6	19.0

* As attribution data were not collected, it is impossible to determine if symptoms are primary or secondary to psychosis.

Appendix Table 4-8. Obsessions and compulsions in past year

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
At least one obsession/compulsion	25.4	31.8	27.3	28.5	28.0
Obsessional checking and repeating	19.2	24.8	20.1	22.5	21.5
Obsessional actions associated with excessive orderliness	10.4	12.6	10.1	12.2	11.3
Obsessional actions associated with cleanliness	5.1	8.4	6.3	6.5	6.4

Appendix 5. Suicidality

Appendix Table 5-1. Suicidality

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Suicidal ideation – lifetime	63.0	72.9	64.4	68.9	67.0
Suicidal ideation – past year	25.4	34.1	30.7	27.7	28.9
Suicidal ideation – current	10.2	13.4	12.4	10.8	11.5
Suicide attempt – lifetime	44.2	57.5	47.3	51.1	49.5
Deliberate self-harm – past year	12.9	22.1	20.6	13.7	16.6
Deliberate self-harm requiring hospitalisation in past year	6.3	12.6	10.9	7.3	8.8

Appendix 6. Functioning and impairment

The Multidimensional Scale of Independent Functioning⁹ was used to make global ratings of participants' level of functioning over the past four weeks. The Multidimensional Scale of Independent Functioning focuses on role performance in the home, at work (broadly defined to include employment, childcare and caring) and in study. Its subscales rate: level of role responsibility; degree of support; quality of performance for the level of responsibility and degree of support ('tolerated' or supported performance); and global functioning, correcting for support and performance. The latter provides a score of independent functioning relative to community norms.

Appendix Table 6-1. Premorbid functioning

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Employed* or studying at onset	69.5	72.8	70.0	71.4	70.8
Good work* adjustment before onset	66.1	72.5	62.6	73.2	68.7
Good social adjustment before onset	63.1	65.2	64.4	63.6	63.9

* Broadly defined to include paid and unpaid work and full-time home duties

Appendix Table 6-2. Level of impairment

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Deterioration from pre-onset level of functioning	92.1	87.9	87.5	92.6	90.4
Obvious/severe dysfunction in socialising, past year	64.8	61.0	59.0	66.3	63.2
Obvious/severe dysfunction in self care, past 4 weeks	35.9	27.1	27.2	36.1	32.3

Appendix Table 6-3. Global supported performance⁹ in past 4 weeks

Age of onset (years)	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
No deficits	18.4	22.5	21.2	19.2	20.1
Minimal deficits	27.3	27.2	27.7	27.0	27.3
Modest but definite deficits	29.7	30.4	29.0	30.7	30.0
Moderate deficits	12.5	11.8	11.5	12.7	12.2
Significant deficits	6.3	4.9	6.1	5.5	5.8
Severe deficits	2.9	1.5	2.1	2.6	2.4
Extremely severe deficits	2.8	1.8	2.5	2.3	2.4
Total respondents	1,087	738	773	1,052	1,825

No or minimal deficits: normal performance or performance with only mild deficits.

Modest but definite deficits: clear deficits but performance is still minimally acceptable.

Moderate deficits: clear deficits but performance is no longer acceptable.

Significant deficits: severe deficits with responsibilities completed poorly and with difficulty.

Severe deficits: deficits so severe that responsibilities are rarely completed or of unacceptable quality.

Extremely severe deficits: responsibilities are completely neglected.

Appendix Table 6-4. Global independent functioning⁹ in past 4 weeks

Age of onset (years)	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Normal	4.4	7.7	7.4	4.6	5.8
Very mild disability	14.3	24.1	18.9	17.8	18.2
Somewhat disabled	23.5	29.1	25.0	26.3	25.8
Moderately disabled	30.6	22.9	25.7	28.8	27.5
Significantly disabled	19.5	12.7	17.6	16.2	16.8
Extremely disabled	6.8	1.9	4.1	5.3	4.8
Totally disabled	0.9	1.5	1.3	1.0	1.2
Total respondents	1,087	738	773	1,052	1,825

Very mild disability: functioning at the low end of the normal range but with no or minimal support.

Somewhat disabled: functioning adequately with some support or with some difficulty but no support.

Moderately disabled: functioning with significant difficulty with no supports or with some difficulty in spite of regular supports in mainstream environment.

Significantly disabled: generally unable to function at all without supports, functioning with significant difficulty even with significant supports in mainstream environment and with some difficulty in non mainstream environment.

Extremely disabled: generally not able to function in mainstream environments even with supports, functioning with significant difficulty in non mainstream environment, functioning well and showing some independent functioning in comprehensive care environment (e.g. hospital).

Totally disabled: virtually total care provided in institutional environment with no independent functioning.

Appendix Table 6-5. Personal and Social Performance Scale¹⁰ in past year

Age of onset (years)	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Absence of disability or only mild difficulties	13.7	23.6	19.3	16.5	17.7
Varying degrees of disability	80.7	72.5	75.8	78.5	77.4
Poor functioning sufficient to require intensive support and supervision	5.6	3.9	4.9	4.9	4.9
Total respondents	1,087	738	773	1,052	1,825

Appendix 7. Physical health profile

In the tables below, metabolic syndrome has been defined using the International Diabetes Federation metabolic syndrome consensus definition of at risk abdominal obesity based on waist circumference and at least two other at risk measures.¹³

The definitions of “at risk” for the individual components of metabolic syndrome are:

- waist circumference greater than or equal to 94 cm for males, greater than or equal to 80cm for females;
- fasting high density lipoproteins less than 1.03mmol/L for males, less than 1.29mmol/L for females;
- fasting triglycerides greater than or equal to 1.7mmol/L;
- fasting plasma glucose greater than or equal to 5.6mmol/L;
- systolic blood pressure greater than or equal to 130 mmHg; and
- diastolic blood pressure greater than or equal to 85 mmHg.

Absolute five-year cardiovascular risk was calculated using the Framingham risk equation^{15, 16}. In line with National Vascular Disease Prevention Alliance guidelines¹⁶ for the assessment of absolute cardiovascular disease, high risk was assumed automatically for those with: pre-existing cardiovascular disease; diabetes and aged over 60 years; systolic blood pressure of 180 mmHg or more; diastolic blood pressure of 110 mmHg or more; or total serum cholesterol higher than 7.5 mmol/L. Other conditions covered in the guidelines could not be included as survey data were not available for them.

The World Health Organisation body mass index reference range, widely used in Australia, has been used to classify overweight and obesity as follows:

- underweight: body mass index less than 18.5;
- normal: body mass index between 18.5 and 24.99;
- overweight: body mass index between 25.00 and 29.99; and
- obese: body mass index greater than or equal to 30.00.¹⁷

Data on level of physical activity were collected using the International Physical Activity Questionnaire¹⁸ and have been classified according to Australian Bureau of Statistics categories used in the 2007 National Mental Health Survey.¹⁹

Appendix Table 7-1. Self-reported physical ill health, as told by doctor in lifetime

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Chronic back, neck or other pain	28.7	36.3	21.7	39.2	31.8
Asthma	26.9	34.8	29.8	30.3	30.1
High cholesterol	27.1	32.5	19.4	36.6	29.3
Heart or circulatory condition	26.0	28.0	17.6	33.7	26.8
Allergies	21.2	33.1	22.9	28.2	26.0
Frequent/severe headaches/migraines	21.6	30.9	21.5	28.2	25.4
Arthritis	16.7	26.8	10.7	28.2	20.8
Diabetes	19.4	22.1	11.5	27.1	20.5
Respiratory problems	16.8	19.6	12.9	21.7	18.0
Anaemia	4.2	27.0	9.4	16.3	13.4
Hepatitis	12.7	8.9	8.9	12.8	11.2
Eating disorder	2.9	15.6	8.5	7.6	8.0
Epilepsy	7.7	6.8	6.3	8.1	7.3
Cancer	2.9	7.9	1.4	7.5	4.9
Liver disease other than hepatitis	4.4	4.6	2.3	6.1	4.5
Kidney disease	2.6	3.9	2.1	3.9	3.1
Stroke	2.0	2.3	0.1	3.6	2.1
Parkinson's disease	0.2	0.5	0.0	0.6	0.3
Gynaecological problems (women only)	–	27.1	26.1	27.7	27.1
Other	7.3	12.1	6.5	11.2	9.2

Appendix Table 7-2. Metabolic syndrome and cardiometabolic risk factors assessed at time of interview

Age of onset (years)	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Met criteria for metabolic syndrome*	49.9	50.0	40.9	56.4	49.9
Met at risk criteria for individual cardiometabolic measures:					
Abdominal obesity	76.1	91.2	74.5	87.7	82.1
High density lipoproteins†	48.4	51.8	50.3	49.3	49.7
Blood pressure	51.4	44.8	40.7	54.7	48.8
Triglycerides†	51.3	43.2	40.5	53.5	48.0
Plasma glucose†	30.6	25.6	20.4	34.6	28.6

* International Diabetes Federation metabolic syndrome consensus criteria¹³ applied to those with no missing data.

† Fasting blood tests.

Appendix Table 7-3. Absolute 5-year cardiovascular disease risk*

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Low risk	66.6	72.1	87.2	56.3	68.8
Medium risk	9.4	3.8	0.0	12.0	7.2
High risk	24.0	24.2	12.8	31.7	24.0

* Framingham risk equation¹⁵⁻¹⁶ applied to those with no missing data

Appendix Table 7-4. Body Mass Index¹⁷

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Underweight	1.2	1.8	2.8	0.4	1.4
Normal	23.0	21.5	28.1	18.3	22.4
Overweight	32.4	22.2	28.7	27.9	28.3
Obese	41.6	50.3	37.8	50.5	45.1
Not known	1.8	4.2	2.6	2.9	2.8

Appendix Table 7-5. Level of physical activity* in past 7 days

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Sedentary	32.3	35.2	28.6	37.1	33.5
Low	63.3	62.3	66.1	60.6	62.9
Moderate	3.7	1.9	4.4	1.9	3.0
High	0.4	0.3	0.3	0.4	0.3
Not known	0.4	0.3	0.6	0.1	0.3

* Classified using categories from the 2007 National Survey of Mental Health and Wellbeing¹⁹

Appendix Table 7-6. Nutrition in past 4 weeks

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Breakfast: Does not have breakfast	34.0	32.5	34.2	32.9	33.4
Fruit: Does not eat fruit	26.4	17.5	24.2	21.8	22.8
Fruit: One serve or less per day	48.3	48.2	49.8	47.1	48.3
Vegetables: Does not eat vegetables	7.9	5.8	7.9	6.5	7.1
Vegetables: One serve or less per day	44.2	37.7	43.5	40.1	41.5
Ran out of food (past year)	28.1	29.0	30.0	27.3	28.4

Appendix Table 7-7. Physical health assessments in past year

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
<i>In past year:</i>					
Blood pressure measurement	84.8	86.7	83.2	87.4	85.6
Waist or weight measurement	77.3	76.2	73.9	79.0	76.8
Physical examination	66.1	69.0	62.0	71.2	67.3
Blood tests	63.7	62.7	57.4	67.6	63.3
Dental examination	44.5	50.7	47.1	47.0	47.0
X-ray or scan	40.0	46.6	41.3	43.7	42.7
Eye test	33.4	38.6	29.8	39.7	35.5
Hearing test	11.1	10.7	7.9	13.2	11.0
<i>In past two years:</i>					
Bowel examination	11.9	16.1	7.2	18.3	13.6
Cervical smear (Women only)	–	55.0	52.6	56.4	55.0
Mammogram (Women only)	–	23.8	8.6	32.6	23.8
Prostate cancer screen (Men only)	13.8	–	3.8	22.5	13.8

Appendix Table 7-8. Different types of physical health assessments in past year

	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Mean	4	4	4	4	4
Median	4	5	4	5	4

Appendix 8. Substance use

Appendix Table 8-1. Tobacco, alcohol and illicit drug use

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Currently smoking tobacco	71.1	58.8	69.9	63.4	66.1
Lifetime history of alcohol abuse or dependence	58.3	38.9	54.7	47.3	50.5
Lifetime history of cannabis abuse or dependence	60.7	36.2	64.3	40.9	50.8
Lifetime history of drug abuse or dependence other than cannabis	36.7	24.1	42.0	24.0	31.6
Lifetime history of cannabis or other drug abuse/dependence	63.2	41.7	67.4	45.1	54.5

Appendix Table 8-2. Outcomes related to alcohol and illicit drug use in past year

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Alcohol-related failure to fulfil role	11.6	9.2	13.5	8.6	10.6
Alcohol-related social and/or legal issues	11.4	8.3	13.6	7.6	10.1
Alcohol-related risk taking behaviour without injury	28.9	19.6	26.0	24.5	25.2
Alcohol-related risk taking resulting in injury	2.1	0.4	1.7	1.2	1.4
Drug-related failure to fulfil role	12.3	9.3	17.2	6.7	11.1
Drug-related social and/or legal issues	13.1	8.3	18.0	6.1	11.1
Drug-related risk taking behaviour without injury	31.8	17.1	31.0	22.1	25.9
Drug-related risk taking resulting in injury	0.8	0.3	0.6	0.6	0.6

Appendix Table 8-3. Alcohol Use Disorder Identification Test³²

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Low	63.0	75.5	59.8	74.1	68.1
Hazardous	19.6	15.9	23.4	14.2	18.1
Harmful	6.6	2.8	7.8	3.1	5.1
Dependent	10.8	5.8	9.1	8.6	8.8
Total respondents	1,087	738	773	1,052	1,825

Appendix Table 8-4. Fagerstrom Test for Nicotine Dependence³⁵

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Very low	34.6	48.6	37.9	42.0	40.3
Low	11.5	8.4	10.3	10.2	10.2
Moderate	10.9	7.3	11.4	8.1	9.5
High	23.0	20.7	24.2	20.5	22.1
Very High	20.0	14.9	16.2	19.2	17.9
Total respondents	1,087	738	773	1,052	1,825

Appendix 9. Cognition

Two short cognitive tests of five minutes each were selected to assess general cognitive ability. Both tests are widely used with people with a psychotic disorder.

The Digit Symbol Coding test from the Repeatable Battery for the Assessment of Neuropsychological Status was used to assess *current* general cognitive ability.²⁰ The population comparison came from Australian Schizophrenia Research Bank general population data.²¹

The National Adult Reading Test-Revised¹⁴ was used to estimate general cognitive ability *prior* to illness onset. Only the predicted full scale IQ score was included in this report. The population comparison came from National Adult Reading Test-Revised standardised norms.

There were 1,619 participants (88.7%) with valid Digit Symbol Coding test data and 1,546 participants (84.7%) with valid National Adult Reading Test-Revised data.

Participants had a mean Digit Symbol Coding test score of 38.6 (standard deviation 10.7) compared to a population average of 54.2 (standard deviation, 9.8).

The mean National Adult Reading Test-Revised score was 98.1 (standard deviation, 11.3) for participants compared to a population average of 107.4 (standard deviation, 17.1).

Appendix 10. Income and employment

Disability Support Pension

On 1 July 2010, the Disability Support Pension for a single person aged at least 21 years, without children was \$644.20 per fortnight, and \$485.60 per fortnight if the person was one of a couple.³⁷ With inclusion of pension supplements and Remote Area Allowances, payments could increase to \$832.70 and \$651.10 respectively.

For persons below pension age, the basic Disability Support Pension is non-taxable, as is the Remote Area Allowance, thus the gross and net income is equivalent for the persons described.

Labour force participation

The labour force participation rate is calculated as the proportion of the survey population working or actively seeking work during the reference period.

Unemployment rate

The unemployment rate is calculated as the proportion of the labour force actively seeking work during the reference period.

Appendix Table 10-1. Current net fortnightly income, all sources

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Less than \$300 per fortnight or missing	7.7	11.0	8.4	9.5	9.0
Between \$300 – \$499 per fortnight	11.8	11.0	15.9	8.2	11.5
Between \$500 – \$799 per fortnight	61.2	56.2	56.4	61.2	59.2
Between \$800 – \$1,000 per fortnight	12.4	13.1	12.2	13.1	12.7
More than \$1,000 per fortnight	6.9	8.7	7.1	8.0	7.6
Total %	100.0	100.0	100.0	100.0	100.0
Total respondents	1,087	738	773	1,052	1,825

Appendix Table 10-2. Sources of income

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Any source of income (past year)	99.5	97.8	99.1	98.7	98.8
Main source of income is government pension (past year)	85.6	83.7	81.8	87.4	85.0
Disability Support Pension (past year)	75.4	68.6	62.2	80.3	72.7
Paid employment (past year)	33.6	31.3	40.4	27.0	32.7
Paid employment (current)	21.2	22.0	25.4	18.6	21.5

Appendix Table 10-3. Employment type in main employment in past year

	Proportion of those employed (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Competitive full-time	35.6	15.2	32.7	22.2	27.7
Competitive part-time	37.0	63.2	50.6	43.3	47.1
Self-employed full-time	2.5	1.3	1.3	2.8	2.0
Self-employed part-time	3.0	9.5	2.9	8.5	5.5
Non competitive full-time	1.1	0.4	0.6	1.1	0.8
Non-competitive part-time	20.0	10.4	11.2	21.8	16.3
Not known	0.8	0.0	0.6	0.4	0.5
Total %	100.0	100.0	100.0	100.0	100.0
Total employed	365	231	312	284	596

Appendix Table 10-4. Occupation in main employment in past year

	Proportion of those employed (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Manager	1.1	0.4	1.3	0.4	0.8
Professional	6.6	12.6	6.7	11.3	8.9
Technician and trades worker	14.2	3.5	11.5	8.5	10.1
Community and personal service worker	12.1	26.4	20.5	14.4	17.6
Clerical and administrative worker	4.1	14.7	6.4	10.2	8.2
Sales worker	6.0	14.3	11.2	7.0	9.2
Machinery operator and driver	7.4	1.3	5.1	4.9	5.0
Labourer	48.5	26.5	36.9	43.3	39.9
Not known	0.0	0.4	0.3	0.0	0.2
Total %	100.0	100.0	100.0	100.0	100.0
Total employed	365	231	312	284	596

Appendix Table 10-5. Hours per week in main employment in past year

	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Mean	26	20	25	22	23
Median	24	16	24	16	20

Appendix Table 10-6. Satisfaction with hours per week in main employment in past year

	Proportion of those employed (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Satisfied	59.2	61.0	58.3	61.6	59.9
Prefer more hours	27.9	26.8	27.9	27.1	27.5
Prefer fewer hours	10.7	11.3	11.5	10.2	10.9
Not known	2.2	0.9	2.2	1.1	1.7
Total %	100.0	100.0	100.0	100.0	100.0
Total employed	365	231	312	284	596

Appendix Table 10-7. Disclosure of mental illness to employer in past year

	Proportion of those employed (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Disclosed mental illness to employer	61.4	48.1	51.9	60.9	56.2

Appendix Table 10-8. Actively sought employment in past year

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Actively sought employment in past year	27.5	26.0	36.1	20.2	26.9

Appendix 11. Social roles

Appendix Table 11-1. Marital status

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Currently single, never married	72.6	44.4	80.3	47.1	61.2
Currently married, de facto	12.1	24.5	14.4	19.1	17.1
Currently separated, divorced or widowed	15.4	31.0	5.3	33.7	21.7
Single, never married or de facto (6 months or more)	59.4	33.2	65.7	36.4	48.8

Appendix Table 11-2. Parenting

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Own children (any age)	25.9	56.2	22.6	49.5	38.1
Dependent children under 18 living at home	5.5	23.6	12.2	13.3	12.8
<i>If dependent children living at home</i>					
Primary caregiver	21.7	69.5	52.1	60.7	57.3
Care shared equally with other(s)	45.0	21.3	36.2	21.4	27.4
Currently married or in a de facto relationship	71.7	44.8	57.4	47.9	51.7
Contact with department of family/community services (past year)	23.3	25.9	29.8	22.1	25.2
Obvious/severe dysfunction in care provision (past year)	28.3	21.3	19.1	25.7	23.1

Appendix Table 11-3. Caring for others

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Caring for others (elderly, disabled)	11.3	19.6	10.9	17.5	14.7

Appendix Table 11-4. Contact with others and formal social activities

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Living alone	31.6	30.2	23.4	36.6	31.0
Any contact with family, daily/nearly every day	59.3	74.4	71.9	60.6	65.4
Face-to-face contact with family, daily/nearly every day	50.1	65.9	63.0	51.7	56.5
Need and would like more friends	48.6	45.8	47.1	47.7	47.5
No friends at all	14.3	11.9	11.6	14.5	13.3
No-one to rely on at times of serious need	14.6	13.4	10.7	16.6	14.1
No-one to confide in ever	18.0	11.5	15.4	15.4	15.4
Felt socially isolated and lonely, past year	21.1	24.4	20.2	24.0	22.4
Did not attend any social programs, past year	71.6	64.2	73.2	65.2	68.6
Did not attend any recreational programs, past year	71.0	67.1	63.6	73.7	69.4

Appendix Table 11-5. Deterioration in interpersonal relationships in past year

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
No deterioration compared to previous years	41.2	33.5	35.6	39.9	38.1
Deterioration	21.2	23.4	23.0	21.4	22.1
Improvement compared to previous years	36.1	42.5	40.5	37.4	38.7
Not known	1.6	0.5	0.9	1.3	1.2
Total %	100.0	100.0	100.0	100.0	100.0
Total respondents	1,087	738	773	1,052	1,825

Appendix 12. Housing and homelessness

Appendix Table 12-1. Current accommodation type

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Public rented house/unit	23.6	31.6	19.0	32.6	26.8
Private rented house/unit	19.8	24.7	23.7	20.3	21.8
Family home	21.6	15.4	29.4	11.6	19.1
Own home/unit	9.8	17.9	7.2	17.4	13.1
Supported accommodation	14.4	6.0	10.7	11.1	11.0
Homeless (primary, secondary, tertiary)*	7.3	2.0	6.3	4.3	5.2
Institution/hospital	2.2	1.6	2.6	1.5	2.0
Other (e.g. caravan)	1.3	0.8	1.0	1.1	1.1

* Homelessness. Primary: living on the streets, in parks or in deserted buildings; secondary: living in temporary shelters such as refuge, emergency accommodation or sleeping on friend's couch; tertiary: private boarding room ²³.

Appendix Table 12-2. Preferred accommodation type

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Public rented house/unit	25.3	26.8	20.6	29.8	25.9
Private rented house/unit	19.1	14.4	21.8	13.8	17.2
Family home	11.5	8.8	13.2	8.4	10.4
Own home/unit	36.9	44.2	38.3	41.0	39.8
Supported accommodation	2.8	2.8	1.4	3.8	2.8
Homeless (primary, secondary, tertiary)*	2.7	2.0	3.8	1.4	2.4
Institution/hospital	0.1	0.1	0.0	0.2	0.1
Other (e.g. caravan)	1.7	0.8	0.9	1.6	1.3

* Homelessness. Primary: living on the streets, in parks or in deserted buildings; secondary: living in temporary shelters such as refuge, emergency accommodation, or sleeping on friend's couch; tertiary: private boarding room ²³.

Appendix Table 12-3. Satisfaction with current living situation

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Very satisfied	50.0	53.7	46.4	55.2	51.5
Somewhat satisfied	29.5	25.2	33.2	23.8	27.8
Neither satisfied not dissatisfied	6.4	5.8	6.1	6.3	6.2
Somewhat dissatisfied	7.9	8.5	7.4	8.7	8.2
Very dissatisfied	3.7	5.3	3.9	4.7	4.3
Not known	2.4	1.5	3.0	1.3	2.0

Appendix Table 12-4. Changed housing in past year

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Changed housing in the past year	29.2	24.8	37.3	20.2	27.4

Appendix Table 12-5. Number of times changed housing in past year

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
None	70.8	75.1	62.7	79.8	72.5
One move	17.8	15.7	22.8	12.7	17.0
Two moves	4.0	3.4	5.0	2.8	3.7
Three or more moves	7.4	5.7	9.4	4.7	6.7
Not known	0.0	0.1	0.0	0.1	0.1
Total respondents	1,087	738	773	1,052	1,825

Appendix Table 12-6. Homelessness*, current and in past year

		Proportion (%)				
		Sex		Age (years)		Persons
		Males	Females	18-34	35-64	
Homelessness, current	Any	7.3	2.0	6.3	4.3	5.2
Homelessness, past year	Any	15.4	8.9	16.4	10.1	12.8
	Primary	6.5	3.0	6.2	4.3	5.1
	Secondary	7.6	5.7	9.7	4.8	6.8
	Tertiary	6.6	2.8	6.1	4.4	5.1
Marginal accommodation,† past year		1.1	0.5	0.9	0.9	0.9

* Homelessness. Primary: living on the streets, in parks, in deserted buildings; secondary: living in temporary shelters such as refuge, emergency accommodation, friend's couch; tertiary: private boarding room ²³.

† Marginal accommodation: living in caravan due to financial necessity, not lifestyle choice.²³

Appendix Table 12-7. Days of homelessness, if any in past year

	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Mean	170	117	146	167	155
Median	140	35	84	120	99

* Homelessness. Primary: living on the streets, in parks, in deserted buildings; secondary: living in temporary shelters such as refuge, emergency accommodation, friend's couch; tertiary: private boarding room ²³.

Appendix 13. Stigma, victimisation and community safety

Appendix Table 13-1. Stigma and discrimination in past year

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Experienced stigma or discrimination due to mental illness	31.8	46.9	36.7	38.8	37.9
Stopped doing things due to fear of stigma	17.6	30.4	21.9	23.4	22.7
Stopped doing things due to actual experience of stigma	15.7	27.0	18.2	21.8	20.3

Appendix Table 13-2. Personal safety and victimisation in past year

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Feels unsafe/very unsafe at home alone during the day	8.0	12.9	9.6	10.3	10.0
Feels unsafe/very unsafe at home alone at night	14.5	29.7	19.5	21.5	20.7
Feels unsafe/very unsafe in local area alone at night	22.7	34.4	27.2	27.7	27.5
Any victimisation theft, break-in, robbery, assault	37.4	40.5	40.4	37.4	38.6
Assault	23.6	26.7	27.7	22.7	24.8
Most recent assault, if any, reported to police	26.8	32.4	27.8	30.5	29.2

Appendix Table 13-3. Offending in past year

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Any charges	13.4	6.5	14.0	8.2	10.6
Any time in prison/lock-up	4.5	1.4	4.5	2.3	3.2
Median number of days in prison/lock-up	1	1	1	1	1

Appendix 14. Health service utilisation

Appendix Table 14-1. Health service utilisation*

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Inpatient – Any admission	41.9	46.3	47.2	41.1	43.7
<i>Mental health</i>	33.6	36.7	40.4	30.8	34.8
<i>Physical health</i>	12.1	15.0	10.5	15.4	13.3
Involuntary admission	19.6	22.2	26.4	16.4	20.7
Emergency department – Any attendance	37.8	45.8	43.3	39.4	41.0
<i>Mental health</i>	23.9	30.1	30.0	23.8	26.4
<i>Physical health</i>	19.7	23.6	20.4	21.9	21.3
Outpatient/community clinic – Any contact	85.1	88.1	87.2	85.6	86.3
<i>Mental health</i>	81.5	83.3	85.0	80.2	82.2
<i>Physical health</i>	19.9	28.2	17.7	27.3	23.2
Early intervention psychosis program – Ever	8.6	8.1	16.8	2.3	8.4
<i>Past year</i>	3.3	4.3	7.5	1.0	3.7
Non-government organisation for mental health	30.3	29.1	27.8	31.3	29.8
Community rehabilitation/day program	36.4	36.6	34.5	37.9	36.5
Drug and alcohol services and programs	14.4	10.7	16.7	10.1	12.9
General practitioner – Any visits	85.5	92.3	84.5	91.0	88.2
<i>Mental health</i>	45.8	54.3	44.6	52.7	49.3
<i>Physical health</i>	71.6	83.2	70.6	80.4	76.3

* Unless otherwise indicated, these numbers relate to health services used in the past year

Appendix Table 14-2. Community treatment order in past year

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Community treatment order	22.1	14.9	23.2	16.3	19.2

Appendix Table 14-3. Case management* in past year

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Any case manager	69.6	68.4	74.8	65.0	69.2
Case manager provided by public mental health services	62.4	60.4	68.0	56.8	61.6
Case manager provided by non-government organisation	20.1	20.5	19.9	20.4	20.2

* Case management, at its best, has been defined as a collaborative process of assessment, planning, facilitation and advocacy for options and services to meet an individual's health needs through communication and available resources to promote quality cost effective outcomes⁴⁰.

Appendix Table 14-4. Home visits in past year

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Home visits by public mental health services or non-government organisations – Any	50.8	54.7	54.7	50.7	52.4
Home visits by public mental health services – Any	44.4	46.7	49.4	42.4	45.4
<i>For routine care</i>	39.2	42.0	43.1	38.3	40.3
<i>For crisis care</i>	13.9	16.9	16.9	13.8	15.1
Home visits by non-government organisations – Any	14.7	17.8	13.6	17.7	15.9
Assertive community treatment	9.0	8.5	10.1	7.9	8.8

Appendix 15. Medication use and psychosocial interventions

Medications for mental illness

Psychotropic medications are used to treat the symptoms of mental illness. Those that play an important role in the treatment and management of psychotic disorders and comorbid psychiatric conditions include:

- antipsychotics used either orally or in an injectable (short or long-acting) form to control the acute symptoms of psychosis and prevent relapse;
- antidepressants used to treat depression which may be an early feature of psychosis or a secondary feature arising in the context of psychosis, as in ICD-10 post-psychotic depression;
- mood stabilisers used to treat mania, including bipolar disorder, and to prevent relapse; they may also be used for treatment-resistant depression or as an adjunct to antipsychotic medications;
- anxiolytics, hypnotics and sedatives used to treat common and non-specific symptoms, such as anxiety, insomnia and restlessness; or used as an adjunct to antipsychotic medication to ameliorate the symptoms of acute psychosis; and
- anticholinergics used to reduce neuromuscular side effects, such as Parkinson-like movement disorders, associated with the use of antipsychotic medication, particularly typical antipsychotics.

Antipsychotics may be sub-classified as typical (or first generation) antipsychotics, an older form of antipsychotic medication, and atypical antipsychotics, a more recent form.

Typical and atypical antipsychotics are effective in reducing the positive symptoms of psychosis, but are less effective in ameliorating negative symptoms. In general, atypical antipsychotics are less likely to produce neuromuscular side effects (for example, Parkinson-like movement disorders) than typical antipsychotics. However, they have also been associated with weight gain and consequent risk of poor physical health outcomes, especially metabolic disorders such as diabetes type 2.

Clozapine, an early atypical antipsychotic, is often used in cases of treatment-resistant schizophrenia, that is cases that do not respond to other antipsychotic medications.

Appendix Table 15-1. Prescribed medication used in past 4 weeks

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Medications for mental health					
Atypical antipsychotics: <i>All</i>	76.3	70.7	75.2	73.2	74.0
<i>Clozapine</i>	19.9	11.4	16.2	16.6	16.4
Typical antipsychotics	16.0	14.1	12.5	17.2	15.2
Antidepressants	32.5	44.7	31.7	41.6	37.4
Mood stabilisers	24.5	30.1	22.3	30.0	26.7
Anxiolytics, hypnotics, sedatives	15.7	20.7	15.1	19.7	17.8
Anticholinergics	4.7	3.4	3.6	4.6	4.2
Alcohol/Nicotine/Opioid dependence	4.0	2.8	4.5	2.8	3.5
<i>Subtotal on antipsychotics</i>	84.4	77.6	80.6	82.4	81.6
Total in past 4 weeks	91.4	91.9	88.6	93.8	91.6
Total in past year	94.1	94.7	93.5	95.0	94.4
Medications for physical conditions					
Cardiovascular	17.1	19.8	7.4	26.1	18.2
Endocrine: <i>Any</i>	10.2	21.4	7.2	20.2	14.7
<i>For diabetes</i>	7.7	8.8	3.1	11.9	8.2
Gastrointestinal	11.5	14.8	6.9	17.2	12.8
Respiratory	4.6	8.0	4.3	7.2	6.0
Blood and electrolytes	3.4	4.9	1.8	5.6	4.0
Neurological	3.4	4.3	2.8	4.5	3.8
Musculoskeletal	3.2	4.5	1.7	5.2	3.7
Genitourinary	0.7	0.8	0.3	1.1	0.8
Total in past 4 weeks	38.5	45.0	27.8	50.9	41.1
Median number of prescribed medications (if using)	2	3	2	3	3
Non-prescribed supplements for mental health	20.1	24.5	20.4	23.0	21.9
Proportion taking supplements for mental health					

* Unless otherwise indicated, these numbers relate to prescribed medication use in the past four weeks

Appendix Table 15-2. Impairments due to medication prescribed for mental health in past 4 weeks

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Any medication side effects	76.6	78.5	75.9	78.4	77.4
Moderate/Severe impairment in daily life due to medication side effects	30.0	29.8	29.4	30.3	29.9

Appendix Table 15-3. Side effects attributed to medication prescribed for mental health in past 4 weeks

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Drowsiness, sleepiness during day	43.4	46.6	45.0	44.5	44.7
Mouth dry or more watery than normal	37.4	42.5	34.3	43.3	39.5
Increase in weight	33.1	44.0	39.5	36.1	37.5
Inner restlessness	26.5	24.7	24.3	26.8	25.8
Trembling, shaking hand/arm/leg	22.8	25.6	21.2	26.0	23.9
Inability to relax	21.5	19.6	18.9	22.1	20.8
Inability to stand still, desire to move legs, pacing	19.1	19.6	19.4	19.3	19.3
Stiff, tensed muscles	18.3	20.1	16.6	20.8	19.0
Increased dreaming	17.6	20.2	19.0	18.3	18.6
Dizziness or vertigo	16.7	21.5	16.0	20.5	18.6
Trouble with eyesight	16.0	18.8	13.3	20.0	17.2
Unsteady when standing or walking	15.2	19.1	14.2	18.6	16.8
Slowing down of movements	15.5	17.8	14.2	18.1	16.4
Change in interest in sex	16.9	15.2	15.8	16.5	16.2
Nauseous/Feeling sick	14.4	18.3	16.2	15.8	15.9
Constipation	13.9	18.7	12.9	18.0	15.8
Increased sweating	14.8	15.6	13.8	16.1	15.1
Period pain or change in frequency (Females only)	–	12.2	14.6	10.9	12.2
Palpitations	9.8	14.9	10.3	12.9	11.8
Difficulty swallowing	10.2	12.7	9.3	12.6	11.2
Sexual dysfunction	10.2	10.6	9.7	10.8	10.4
Shuffling along	7.8	6.2	5.2	8.7	7.2
Skin rashes	6.3	8.4	5.2	8.6	7.1
Unwanted tongue movement	7.3	6.5	5.7	7.9	7.0
Swollen tender chest	2.9	4.6	3.2	3.8	3.6
Decrease in weight	3.2	3.4	2.8	3.6	3.3

Appendix Table 15-4. Weight gain in past 6 months related to use of medication for mental health

	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Mean	10	9	10	9	9
Median	8	8	10	8	8

Appendix Table 15-5. Relief from mental health symptoms due to medication use

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
A lot	56.7	58.0	53.7	59.7	57.2
A little	28.3	28.0	32.1	25.4	28.2
Not at all	10.4	8.4	9.5	9.6	9.6
Not known	4.6	5.6	4.7	5.3	5.0
Total of those using medications	994	678	685	987	1,672

Appendix Table 15-6. Psychosocial interventions in past year

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Counselling, psychotherapy or group therapy	26.0	37.1	30.7	30.4	30.5
Cognitive behavioural therapy	18.1	28.5	24.6	20.6	22.3
Family intervention	11.1	11.8	14.4	9.2	11.4

Appendix 16. Mental health service provision in the non-government sector

Appendix Table 16-1 shows the one-month prevalence of ICD-10 psychotic disorders in people solely in contact with non-government organisations and the estimated total numbers of such people nationally. The overall national monthly prevalence is 0.4 cases per 1,000 members of the population, with total number affected an estimated 6,204 persons. For men and women, the prevalence is 0.6 and 0.3 cases per 1,000 respectively. These values are appropriately adjusted to reflect the population age and sex structure.

Appendix Table 16-1. Estimated national one-month prevalence of ICD-10 psychotic disorders in people solely in contact with non-government organisations

Age (years)	Catchment ERP*	Australian ERP	Prevalence (Cases per 1,000)	Estimated persons†
Males				
18 – 24‡	117,596	1,167,678	0.3	323
25 – 34	161,314	1,613,064	0.5	751
35 – 44	156,498	1,574,669	0.7	1,116
45 – 54	147,866	1,508,028	0.8	1,189
55 – 64	120,137	1,260,193	0.5	669
18 – 64	703,411	7,123,632	0.6	4,048
Females				
18 – 24‡	111,731	1,100,550	0.1	152
25 – 34	158,354	1,586,242	0.2	374
35 – 44	158,092	1,594,048	0.4	614
45 – 54	149,953	1,537,401	0.5	701
55 – 64	124,102	1,278,357	0.2	315
18 – 64	702,232	7,096,598	0.3	2,155
Persons				
18 – 24‡	229,327	2,268,228	0.2	475
25 – 34	319,668	3,199,306	0.4	1,125
35 – 44	314,590	3,168,717	0.5	1,730
45 – 54	297,819	3,045,429	0.6	1,890
55 – 64	244,239	2,538,550	0.4	984
All Persons	1,405,643	14,220,230	0.4	6,204

* ERP Estimated resident population for 2010 extrapolated from 2009 data provided by the Australian Bureau of Statistics

† Estimated totals for ages 18-64 may not equal the sum of the individual age groups due to rounding

‡ The 18-24 year age group covers seven years only in contrast to the 10 years in each of the older groups.

Appendix Tables 14-1, 14-3 and 14-4 provide additional information on non-government use and services.

Appendix 17. Consultations in general medical practices

Appendix Table 17-1 shows the number of visits made to general practitioners in the year from April 2009 to March 2010 by all participants.

Appendix Table 17-1. Visits to general practitioner in past year

	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Mean	8	10	8	10	9
Median	5	6	5	6	5

Most survey participants who had a general practitioner (95.6%) gave consent for their practitioner to supply further information on the health care they had provided to the participant over the past year.

Information was returned by general practitioners for half (49.2%) of the consenting participants (representing 39.7% of the total sample). Of these, 97.9% had consulted their general practitioner in the previous year.

Appendix Tables 17-2 to 17-5 are based on the data for these 'participant-patients'. In this subsample, 55.9% of participants were male and 37.9% were aged 18-34 years.

Appendix Table 17-2. General practitioner subsample: Visits to general practitioner by participant-patients in past year

	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Mean	11	12	10	13	12
Median	8	10	7	11	9

Appendix Table 17-3. General practitioner subsample: Reasons for consultation with general practitioner in past year

Reason for consultation	Proportion of subsample (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Prescription (new or repeat)	66.7	71.6	62.8	72.5	68.8
Blood tests	52.0	53.7	41.3	59.8	52.8
Other physical health problems	43.9	47.6	38.3	50.0	45.6
Review of psychotic symptoms	39.6	45.0	41.3	42.5	42.0
General check up	35.1	35.5	25.3	41.4	35.3
Blood pressure and/or cardiovascular check	37.9	31.3	21.9	43.0	35.0
Depression	22.7	42.2	28.6	33.0	31.3
Anxiety	24.2	38.0	26.8	32.5	30.3
Weight gain and/or diet	26.5	32.3	27.9	29.8	29.1
Sleep disturbance	17.7	27.2	20.1	23.0	21.9
Respiratory problems	19.7	24.0	17.5	24.1	21.6
Influenza injection	20.7	19.8	13.4	24.5	20.3
Other psychological symptoms	14.6	23.6	19.7	18.0	18.6
Drug and/or alcohol problem	18.4	12.8	18.6	14.3	15.9
Medical certificate or form	13.1	13.7	16.4	11.6	13.4
Sexual/reproductive health issues	6.3	22.4	16.4	11.6	13.4
Depot medication	12.9	9.3	11.5	11.1	11.3
Diabetes	11.9	10.2	4.5	15.2	11.1
Other	10.6	7.7	10.4	8.6	9.3

Appendix Table 17-4. General practitioner subsample: Management of specified physical conditions by general practitioner in past year

Management of specified physical condition	Proportion of subsample (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Provide treatment to participant for metabolic, cardiovascular or kidney conditions	33.1	31.0	21.9	38.4	32.2
Referred participant to specialist for metabolic, cardiovascular or kidney conditions	10.9	12.1	8.2	13.4	11.4

Appendix Table 17-5. General practitioner subsample: General practitioner mental health care plan in past year

	Proportion of subsample (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
General practitioner mental health care plan (proportion)	23.0	33.5	25.3	29.1	27.6
Frequency of plan reviews (proportion of those with a mental health care plan):					
<i>No set time for review</i>	25.3	19.0	26.5	19.5	21.9
<i>Monthly</i>	6.6	6.7	2.9	8.6	6.6
<i>Every 3 months</i>	16.5	21.9	22.1	18.0	19.4
<i>Every 6 months</i>	26.4	31.4	26.5	30.5	29.1
<i>Annually</i>	14.3	12.4	14.7	12.5	13.3
<i>Other</i>	6.6	5.7	5.9	6.3	6.1
<i>Missing</i>	4.4	2.9	1.5	4.7	3.6
Total respondents	91	105	68	128	196

Appendix 18. Support, needs and satisfaction**Appendix Table 18-1. Global support received* in past 4 weeks**

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
No support	32.1	32.5	30.8	33.4	32.3
Minimal support	22.6	26.4	24.6	23.9	24.2
Modest support	18.8	20.5	22.3	17.4	19.5
Moderate support	10.9	11.4	10.5	11.6	11.1
Significant support	7.9	5.0	6.0	7.3	6.7
Comprehensive support	4.9	2.6	3.6	4.2	3.9
Total support in all environments	2.8	1.6	2.3	2.3	2.3
Total %	100.0	100.0	100.0	100.0	100.0
Total respondents	1,087	738	773	1,052	1,825

* Multidimensional Scale of Independent Functioning⁹

Appendix Table 18-2. Carer or personal support worker in past year

Reason for consultation	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Personal support worker (past year)	12.1	12.6	11.9	12.6	12.3
Carer (past year)	22.4	27.8	23.3	25.5	24.5

Appendix Table 18-3. Importance of religion/spirituality in past year

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Very important	27.5	31.3	25.4	31.7	29.0
Important	29.3	32.2	31.4	29.8	30.5
Unimportant	22.3	19.4	23.0	19.7	21.1
Very unimportant	15.3	13.0	15.4	13.6	14.4
Not known	5.7	4.1	4.8	5.2	5.0
Total %	100.0	100.0	100.0	100.0	100.0
Total respondents	1,087	738	773	1,052	1,825

Appendix Table 18-4. Satisfaction with own independence in past 4 weeks

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Very satisfied	38.4	37.9	36.5	39.4	38.2
Somewhat satisfied	34.3	32.8	35.7	32.2	33.7
Neither satisfied nor dissatisfied	9.5	8.8	9.6	8.9	9.2
Somewhat dissatisfied	10.2	12.9	11.5	11.1	11.3
Very dissatisfied	6.4	7.0	6.0	7.2	6.7
Not known	1.2	0.5	0.8	1.0	0.9
Total %	100.0	100.0	100.0	100.0	100.0
Total respondents	1,087	738	773	1,052	1,825

Appendix Table 18-5. Lack of control over life events in past 4 weeks

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Never or rarely feels a lack of control	37.1	32.2	32.1	37.4	35.1
Sometimes feels a lack of control	37.1	34.3	38.3	34.2	35.9
Often feels a lack of control	14.5	21.3	18.8	16.2	17.3
Feels a lack of control nearly all the time	9.8	11.5	9.7	11.1	10.5
Not known	1.5	0.7	1.2	1.1	1.2
Total %	100.0	100.0	100.0	100.0	100.0
Total respondents	1,087	738	773	1,052	1,825

Appendix Table 18-6. Feelings about life as a whole, reflecting back on past year

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Very satisfied (delighted, very pleased)	20.0	20.6	20.1	20.3	20.2
Mostly satisfied	28.7	24.9	27.8	26.7	27.2
Mixed	34.7	34.1	34.9	34.1	34.5
Mostly dissatisfied	6.8	7.2	7.9	6.3	7.0
Very dissatisfied (unhappy, terrible)	8.4	12.3	8.4	11.1	10.0
Not known	1.5	0.8	0.9	1.4	1.2
Total %	100.0	100.0	100.0	100.0	100.0
Total respondents	1,087	738	773	1,052	1,825

Appendix Table 18-7. Change in circumstances in next 12 months

	Proportion (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Believe circumstances will improve	76.4	78.7	82.1	73.9	77.4

Appendix Table 18-8. Challenges for the next 12 months

	Proportion of subsample (%)				
	Sex		Age (years)		Persons
	Males	Females	18-34	35-64	
Financial matters	41.4	44.7	42.9	42.6	42.7
Loneliness/Social isolation	36.6	37.9	36.2	37.8	37.2
Lack of employment	39.0	29.3	44.5	28.1	35.1
Poor physical health/Physical health issues	27.2	27.6	23.8	30.0	27.4
Uncontrolled symptoms of mental illness	23.6	28.7	25.7	25.7	25.7
Lack of stable/suitable housing	20.6	14.5	21.2	15.9	18.1
Stigma/Discrimination	10.7	13.0	10.1	12.7	11.6
No family or carer	5.4	8.5	4.5	8.3	6.7
Inability to access specialised mental health services	4.5	7.6	4.3	6.8	5.8
Difficulty getting a medical appointment	2.4	3.9	3.1	2.9	3.0
Other	11.1	15.0	13.8	11.9	12.7

Appendix 19. How things have changed since 1997-98

The first psychosis survey was conducted in 1997-98 over four predominantly metropolitan sites in the Australian Capital Territory (Canberra), Queensland (inner and outer metropolitan areas of Brisbane and a more rural catchment), Victoria (two inner city areas in Melbourne) and Western Australia (an inner city area and several suburbs in Perth).

The total catchment population aged 18-64 years was 1,084,978 people.

The survey used the same inclusion criteria and two-phase methodology as employed in the 2010 survey. Phase I screening for psychosis took place over a 30-day census in 1997.

Screening took place in public inpatient and outpatient/ambulatory/community mental health services, private psychiatric and general practices.

Homeless people, identified as those living in marginal accommodation and not identified in other service settings, were also surveyed. These people were contacted in marginalised settings, including soup kitchens, refuges and welfare centres, in each of the sites.

The total number screened positive for psychosis was 3,800.

In Phase 2, 980 individuals were randomly selected, stratified by treatment setting, for interview from those who were screen-positive in Phase 1.

The same instruments, with some modifications, were used in both surveys: the psychosis screener for census month screening and the Diagnostic Interview for Psychosis⁴ for the interview, although the 2010 interview schedule included many additional questions and assessments.

Further information on the first survey and the initial findings are available in Jablensky A, McGrath J, Herrman H et al. *People Living with Psychotic Illness: An Australian Study 1997-98* (1999).²

Appendix 20. Survey management and research teams

Technical Advisory Group

The second national survey of psychosis, the Survey of High Impact Psychosis (SHIP), was commissioned by the Australian Government Department of Health and Ageing under contract to The University of Western Australia.

The survey was managed by a Technical Advisory Group, which oversaw, contributed to and approved the study protocol and procedures, including the interview and assessment schedule.

Appendix Table 21-1 lists the members of the Technical Advisory Group.

Appendix Table 20-1. Technical Advisory Group membership

Convenor / National Project Director	Prof Vera Morgan
National Project Coordinator	Assist. Prof Anna Waterreus
Chief Scientific Advisor	Prof Assen Jablensky
Chief Statistical Advisor	Prof Andrew Mackinnon
NSW1: Hunter New England	Dr Martin Cohen
NSW2: Orange	Dr Helen Stain
QLD: West Moreton	Prof John McGrath; Prof Robert Bush
SA: Northern Mental Health	Prof Cherrie Galletly
VIC1: North West Area Mental Health Service*	Assoc. Prof Carol Harvey; Prof Pat McGorry
VIC2: St Vincent's Mental Health Service	Prof David Castle
WA: Fremantle, Peel and Rockingham Kwinana	Prof Vera Morgan, Prof Assen Jablensky
Health Economics Adviser	Dr Amanda Neil
Community/Consumer/Carer Representative	Ms Barbara Hocking (SANE Australia)
Australian Government Department of Health and Ageing Representative	Ms Suzy Saw
Australian Schizophrenia Research Bank Representative	Prof Vaughan Carr

* Includes Orygen Youth Health clinical program

In addition, Prof Stan Catts and Prof Phil Mitchell were members of the Technical Advisory Group in Phase 1 (Instrument development phase). Prof Vera Morgan, Assist. Prof Anna Waterreus and Prof Assen Jablensky had overall responsibility for the development of the interview and assessment schedule. In particular, Assist. Prof Anna Waterreus oversaw the production of the interview schedule, including coordinating responses, sourcing and integrating available resources and producing drafts of modules for further discussion and refinement.

The following individuals made invaluable contributions to the development of specific modules: Prof Johanna Badcock (Brief Cognitive Assessment Tool), Dr John Farhall and Assoc. Prof Carol Harvey (evidence base), Prof Assen Jablensky (Diagnostic Interview of Psychosis: Diagnostic Module), Dr Judith Jaeger (Multidimensional Scale of Independent Functioning), Assoc. Prof Frank Morgan (offending and victimisation module), Dr Geoffrey Waghorn (employment and education modules), Assist. Prof Anna Waterreus (general practitioner survey; substance use section of the Diagnostic Interview of Psychosis: Diagnostic Module). Prof Johanna Badcock chaired the Brief Cognitive Assessment Tool subcommittee. Assist. Prof Sonal Shah played an integral role in data management and variable construction.

We also thank Dr Tim Slade for the provision of comparison data from the 2007 National Survey of Mental Health and Wellbeing, as well as those individuals who assisted in the preparation of this report, particularly Ms Marcelle Noja, Ms Michelle Warwick and Mr Bill Buckingham.



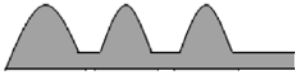

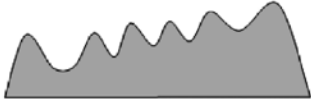
Catchment teams

Appendix Table 20-2. Catchment site research teams

	NSW Hunter New England	NSW Orange	QLD West Moreton	SA Northern	VIC North West	VIC St Vincent's	WA Fremantle, Peel & Rockingham Kwinana
Project directors	Martin Cohen	Helen Stain	John McGrath Robert Bush	Cherrie Galletly	Carol Harvey Pat McGorry	David Castle	Vera Morgan Assenablensky
Site data custodian	Martin Cohen	Helen Stain	John McGrath	Cherrie Galletly	Carol Harvey	David Castle	Vera Morgan
Catchment site mental health service director	Dinesh Arya	Scott Clark Robin Murray Russell Roberts	Douglas Scott	Peter Tyllis	David Muirhead	Peter Bosanac	Steve Addis Mathew Samuel Gordon Shymko
Site coordinator	Linda Campbell Mary-Claire Hanlon	Jennifer Green	Andrea Baker	Shaun Sweeney	Laura Hayes Abner Poon (deputy)	Maria Haydock	Jenny Griffith
Site interviewers	Kerri Barrack Lainie Drinkwater Dominique Rich	Lauren Anthes Katie Douglas Emily Killen Denika Novello	Fiona Barclay Stacey Dixon Belinda Hulse	Lynda Dixon Michael Heath Imelda Cairney Robert Caley	Nicole Atkinson Vicky Fenby Cathy Harper Suzy Turner	Lisa Bates Andrew Brown Jan Waterson	Richard Bush Paula Edwards Leslie-Anne Niven Grahame Roddis Kirsty Scholes
Site NART consultant	Mary-Claire Hanlon	Jen Green	Andrea Baker	Imelda Cairney	Laura Hayes	Lisa Bates	Kirsty Scholes

Appendix 21. Glossary

Absolute five-year cardiovascular risk	Absolute five-year cardiovascular risk was calculated using the Framingham risk equation. In line with National Vascular Disease Prevention Alliance guidelines for the assessment of absolute cardiovascular disease, high risk was assumed automatically for those with: pre-existing cardiovascular disease; diabetes and aged over 60 years; systolic blood pressure of 180 mmHg or more; diastolic blood pressure of 110 mmHg or more; or total serum cholesterol higher than 7.5 mmol/L. Other conditions covered in the guidelines could not be included as survey data were not available for them.
Accommodation: supported accommodation	This is accommodation for people with mental illness who require high levels of daily support. This is provided 24 hours a day by mental health clinicians and support workers. It includes residential rehabilitation.
Accommodation: marginal	Living in a caravan park due to financial necessity, not lifestyle choice.
Age group: older	Aged 35 to 64 years.
Age group: younger	Aged 18 to 34 years.
Alcohol/drug abuse	The repeated use of alcohol or drugs (binging or on regular occasions) that results in consequences to physical and mental health as well as having possible social consequences. This includes: failure to fulfil role/function at work, school, or family life; experiencing feelings of guilt or remorseful after use; repeated risk taking behaviour and/or sustained injuries as a result of drinking/drug use.
Alcohol/drug dependence	Refers to behavioural, cognitive and physiological phenomena that may develop after repeated use. This includes: a strong desire to use, often taking larger amounts or over a longer period than was intended; a persistent desire or unsuccessful efforts to cut down or control use; withdrawal symptoms when use is discontinued/cut down; persistent use despite knowledge of having a physical or psychological problem that is likely to have been caused or exacerbated by the substance.
Alcohol Use Disorders Identification Test	The Alcohol Use Disorders Identification Test (AUDIT) is a internationally recognised questionnaire used to screen for excessive drinking and to help identify alcohol dependence and specific consequences of harmful drinking.
Antipsychotic medication: atypical	<p>This is a group of drugs used to treat symptoms of psychotic disorders. They are thought to be safer than typical antipsychotics, although still cause side effects including weight gain. This group includes clozapine, olanzapine and risperidone.</p> <p>Antipsychotic medication: typical Also known as first generation or conventional antipsychotics. This is a group of drugs first used to treat psychotic disorders. This group includes chlorpromazine, haloperidol and fluphenazine.</p>
Anxiety	Anxiety is characterised by physiological arousal (including increased blood pressure, heart rate, overbreathing), preparing for a “flight or fight” response. It becomes a disorder when it is out of keeping with the “threat” and causes distress to the individual and impacts negatively on day-to-day functioning.
Assertive case management	Assertive community treatment is team-based intensive case management involving assertive outreach and an extended hours service. In assertive community treatment, regular mental health care is provided in the home by a team from the mental health services, with each clinician working with a small number of clients/consumers (typically 10).

Bipolar affective disorder	Bipolar affective disorder is a disorder characterised by periods of elevated or irritable mood. In many cases these fluctuate with periods of depressed mood. Bipolar affective disorder has previously been termed 'manic depressive disorder'.
Body mass index	The World Health Organisation body mass index reference range, widely used in Australia, has been used to classify overweight and obesity as follows: underweight (body mass index less than 18.5); normal (body mass index between 18.5 and 24.99); overweight (body mass index between 25.00 and 29.99); and obese (body mass index greater than or equal to 30.00).
Case manager	A case manager is a specific person who is responsible for coordinating care, providing ongoing support, checking on medication and symptoms, and helping with crises.
Community rehabilitation and day therapy	These are programs that assist people to improve their quality of life, participate in everyday living activities, and function as independently as possible in the community.
Continuous chronic illness	In continuous, chronic disease, a person has persistent symptoms, no remissions and significant impairment in functioning.
Course of disorder	Course of disorder refers to the way mental illness evolves over time. It reflects the number of periods of illness (episodes) and the recovery after each period of illness. Did the person recover their normal self, or were they still bothered by symptoms or a reduced ability to cope with everyday life?
	 <p>Single episode: One episode only with no impairment.</p>
	 <p>Multiple episodes with good recovery in between: Several episodes with no or minimal impairment.</p>
	 <p>Multiple episodes with partial recovery in between: Impairment after the first episode with subsequent exacerbation and no return to normality.</p>
	 <p>Continuous chronic illness without deterioration: Impairment increasing with each of several episodes and no return to normality.</p>
	 <p>Continuous chronic illness with deterioration: Continuous illness with exacerbations, no remissions, and significant impairment.</p>
Days out of role	This is the number of days over the four weeks prior to interview that participants were unable to fulfil their usual role due to physical or mental health problems.
Delusions	A delusion is an impossible, incredible or patently false belief held with a basic and compelling subjective conviction, though the degree of certainty may fluctuate or be concealed. It is not susceptible, or only briefly to, modification by experience or evidence that contradicts it.
Dysphoria	Persistent, unresponsive, and pervasive depressed mood.

Early intervention in psychosis program	Specialised services for younger people, focusing on early detection and treatment of early symptoms of psychosis.
Elevated mood	A feeling of intense, unnatural elation out of proportion to the circumstances or without reason that lasts for days on end.
Employment: competitive	Employment in a mainstream setting, paid at award wages or above, and not in a setting designed to provide supported employment.
Employment: full-time	35 or more hours of employment per week.
Employment: non-competitive	Employment in a supported employment setting, where the employer has accessed a wage subsidy or a supported wage scheme, or employment at a specialised service designed to assist people experiencing a disability to return to work.
Employment: part-time	Less than 35 hours of employment per week.
Fagerstrom Test for Nicotine Dependence	A test commonly used by health professionals to measure the intensity of nicotine dependence.
Hallucinations	Person experiences perceptions (visual, auditory, olfactory, or other bodily sensations) without external stimuli when consciousness is clear, e.g. sees objects or people that others cannot see. It is experienced throughout the day for several days or intermittently for one week or longer.
Homelessness: primary	Living on the streets, in parks, in deserted buildings, or in cars/vehicles.
Homelessness: secondary	Living in temporary shelters such as refuges, emergency accommodation, night shelters or sleeping on a friend's couch.
Homelessness: tertiary	Living in a boarding room.
Inpatient admission	Admission for at least an overnight stay to any hospital.
Involuntary admission	Admission to a hospital against a person's will, under a Mental Health Act or other legal order.
Irritability	Irritability or irritable mood is a pervasive mood of excessive anger, impatience or over readiness to respond to minor annoyances. It is difficult to control, excessive and which lasts for days on end.
Loss of pleasure	A persistent, pervasive, inability to enjoy things that would normally be enjoyed.
Metabolic syndrome	Metabolic syndrome has been defined using the International Diabetes Federation metabolic syndrome consensus definition of at risk abdominal obesity based on waist circumference and at least two other at risk measures. The definitions of "at risk" for the individual components of metabolic syndrome are: waist circumference greater than or equal to 94 cm for males, greater than or equal to 80 cm for females; fasting high density lipoproteins less than 1.03mmol/L for males, less than 1.29mmol/L for females; fasting triglycerides greater than or equal to 1.7mmol/L; fasting plasma glucose greater than or equal to 5.6mmol/L; systolic blood pressure greater than or equal to 130 mmHg; and diastolic blood pressure greater than or equal to 85 mmHg.

**Multidimensional
Scale of Independent
Functioning: Overall
global independent
functioning**

Independent functioning is a rating of functioning, corrected for the level of support used and performance, relative to the community norm. It reflects an overall level of disability. Two people with the same level of disability but different levels of functioning may score the same if one is provided with more support. For example, adequate functioning with regular support is equivalent to functioning with some difficulty with no support.

The overall global rating covers role performance at work (broadly defined to include paid and unpaid work, childcare and caring), in study and in the activities of daily living.

**Multidimensional
Scale of Independent
Functioning: Overall
global performance**

Performance rates participants' performance given the responsibilities dictated by their specific role and their level of disability irrespective of the level of support that they receive. Two people in the same role with the same level of disability may score differently if one is supported to better performance than the other.

The overall global rating covers performance at work (broadly defined to include paid and unpaid work, childcare and caring), in study and in the activities of daily living.

**Multidimensional
Scale of Independent
Functioning: Overall
global support**

Support rates of the amount of assistance participants received in their specified roles or tasks. The frequency, quality and proximity of support, who provides this support (family, friends or professionals) and consequences if support was absent were all taken into account.

The overall global rating covers support provided at work (broadly defined to include paid and unpaid work, childcare and caring), in study and in the activities of daily living.

Negative symptoms

These include: a diminished sense of purpose, loss of interest in things, diminished emotional range or a reduction in the variety or intensity of emotions expressed, restricted affect indicated by reduced facial and vocal expression, poverty of speech, and impairment in socialising.

**Obsessive-compulsive
disorder**

A disorder characterised by repeated thoughts, images or impulses that the person feels are inappropriate, and repetitive behaviours, such as hand-washing, designed to reduce the anxiety generated by the thoughts.

Onset of illness

The earliest age at which medical advice was sought for psychiatric reasons or at which symptoms began to cause subjective distress or impair functioning.

Outpatient contact

An appointment at a clinic in a hospital, community health centre, or a private clinic, when the person was not an inpatient.

Passivity phenomena

The experience that one's own thoughts, feelings, actions or sensations are not under conscious control, but are being controlled or imposed by an external power or agency.

**Personal and Social
Performance Scale**

The Personal and Social Performance Scale score is based on information gathered on level of functioning in social activities including work and study, relationships, self care and disturbing and aggressive behaviours.

Phobia

Is a persistent fear of a situation (e.g. a social scenario) or "thing" (e.g. snakes) that causes undue anxiety and leads to an avoidance response.

Point prevalence	The number of residents within a defined geographical area, aged between 18 and 64 years, who had made a contact with any treatment service (in-patient, emergency, outpatient or non-government organisation for mental health) during a one-month census period and were identified as having a psychotic disorder, per 1000 population in the same age range resident in the same area.
Poor concentration	Inability to think clearly, make decisions, or give full attention to matters, which is a change from normal.
Premorbid social adjustment	Social adjustment before onset of illness which includes ability to enter or maintain social relationships.
Premorbid work adjustment	Work history before onset of illness which includes ability to keep a job for six months or more, sustain a job at their expected educational level, or keep up with studies if a student.
Psychosocial stressor	Severely or moderately threatening event that is unlikely to have resulted from a person's own behaviour, for example, death of a family member or being a victim of crime.
Psychotic disorders	A group of illnesses characterised by: delusions; hallucinations; disorganised thought, speech and non-verbal communication; and loss of motivation and planning ability. These disorders include, among others, schizophrenia, schizoaffective disorder, bipolar disorder and delusional disorder.
Schizophrenia	A disorder characterised by a distorted perception and interpretation of reality, involving delusions and hallucinations, disorders of logical thinking, and withdrawal from social interaction.
Severe depression with psychosis	In severe depression with psychosis, also referred to as psychotic depression, people suffer from symptoms of severe depression (see below) as well as symptoms of psychosis such as hallucinations and delusions.
Severe depression without psychosis	In severe depression without psychosis, also referred to as major depression, people suffer from a range of marked and distressing symptoms, which are present most days last for at least several weeks. These symptoms include depressed mood, loss of pleasure, poor concentration, sleep and appetite disturbances and ideas of guilt or worthlessness.
Social phobia	A strong fear of social interaction or performance situations. People with social phobia avoid social situations in case of embarrassment or humiliation.
Subjective thought disorder	This includes the abnormal experience by affected people of having thoughts that are not their own, of thoughts being inserted into their mind by some external agency, their own thoughts being directly accessible to others or thoughts being extracted from their mind.
Suicidal ideation	Persistent, intrusive thoughts of wishing to be dead, or deliberate planning or actual attempts to take one's own life.

Appendix 22. References

1. Carr VJ, Neil AL, Halpin SA, Holmes S, Lewin TJ. Costs of schizophrenia and other psychoses in urban Australia: findings from the Low Prevalence (Psychotic) Disorders Study. *Aust N Z J Psychiatry*. 2003;37:31-40.
2. Jablensky A, McGrath J, Herrman H, et al. *People Living with Psychotic Illness: An Australian Study 1997-98. National Survey of Mental Health and Wellbeing: Report 4. National Mental Health Strategy* Canberra: Mental Health Branch, Australian Commonwealth Department of Health and Aged Care; 1999.
(<http://www.mentalhealth.gov.au/internet/mentalhealth/publishing.nsf/Content/doha-living-psychotic-illness-1>).
3. Jablensky A, McGrath J, Herrman H, et al. Psychotic disorders in urban areas: An overview of the methods and findings of the Study on Low Prevalence Disorders, National Survey of Mental Health and Wellbeing 1996-1998. *Aust N Z J Psychiatry*. 2000;34:221-236.
4. Castle D, Jablensky A, McGrath J, et al. The Diagnostic Interview for Psychoses (DIP): Development, reliability and applications. *Psychol Med*. 2006;36:69-80.
5. Australian Bureau of Statistics. Customised report.
6. Slade T, Johnston A, Teeson M, et al. *The Mental Health of Australians 2. Report on the 2007 National Survey of Mental Health and Wellbeing*. Canberra: Department of Health and Ageing; 2009.
7. Morgan VA, Castle DJ, Jablensky AV. Do women express and experience psychosis differently from men? Epidemiological evidence from the Australian National Study of Low Prevalence (Psychotic) Disorders. *Aust N Z J Psychiatry*. 2008;42(1):74 – 82.
8. Slade T. Unpublished data, 2007 National Survey of Mental Health and Wellbeing. 2011.
9. Jaeger J, Berns SM, Czobor P. The multidimensional scale of independent functioning: a new instrument for measuring functional disability in psychiatric populations. *Schizophr Bull*. 2003;29(1):153-168.
10. Morosini P-L, Magliano L, Brambilla L, Ugolini S, Pioli R. Development, reliability and acceptability of a new version of the DSM-IV Social and Occupational Functioning Assessment Scale (SOFAS) to assess routine social functioning. *Acta Psychiatr Scand*. 2000;323-329.
11. Lawrence D, Holman C, Jablensky A. *Duty to care. Preventable physical illness in people with mental illness*. Perth: The University of Western Australia; 2001.
12. Von Hausswolff-Juhlin Y, Bjartveit M, Lindström E, Jones P. Schizophrenia and physical health problems. *Acta Psychiatr Scand*. 2009;119:15-21.
13. International Diabetes Federation. *The IDF consensus worldwide definition of the metabolic syndrome*. Brussels: International Diabetes Federation; 2006.
14. Nelson HE, Willison J. *National Adult Reading Test (NART): Test Manual*. Second Edition. Windsor, UK: NFER Nelson; 1991.
15. Anderson K, Odell P, Wilson P, Kannel W. Cardiovascular disease risk profiles. *Am Heart J*. 1990;121:293-298.
16. National Vascular Disease Prevention Alliance. *Technical report: review of the evidence and evidence-based recommendations for practice 2009*.
17. World Health Organization. *Physical status: the use and interpretation of anthropometry. Report of a WHO Expert Committee. WHO Technical Report Series 854*. Geneva: World Health Organization; 1995.
18. Craig CL, Marshall AL, Sjöström M, et al. International physical activity questionnaire: 12-country reliability and validity. *Med Sci Sports Exerc*. 2003;35:1381-1395.
19. Australian Bureau of Statistics. *National Survey of Mental Health and Wellbeing 2007. Catalogue No. 4326.0*. Canberra: Australian Bureau of Statistics; 2008.

20. Randolph C. *Repeatable Battery for the Assessment of Neuropsychological Status (RBANS): Test Manual*. San Antonio: Harcourt Brace and Company; 1998.
21. Customised data provided by the Australian Schizophrenia Research Bank. Australian Schizophrenia Research Bank is supported by the National Health and Medical Research Council of Australia, the Pratt Foundation; Ramsay Health Care and the Schizophrenia Research Institute; 2011.
22. Australian Bureau of Statistics. *Labour Force, Australia, July 2010 Catalogue No. 6202.0*. Canberra: Australian Bureau of Statistics; 2010.
23. Australian Bureau of Statistics. *Australian Census Analytic Program: Counting the Homeless 2006. Catalogue No. 2050.0*. Canberra: Australian Bureau of Statistics; 2008.
24. van Dijk J, van Kesteren J, Smit P. *Criminal Victimization in International Perspective*. Meppel: Boom Jurisdiscie; 2007.
25. Australian Bureau of Statistics. *Crime and Safety, Australia. Catalogue no. 4509.0*. Canberra: Australian Bureau of Statistics; 2005.
26. Australian Government Department of Health and Ageing. Table B1B – MEDICARE: Number of services per capita, 2009/2010.
[http://www.health.gov.au/internet/main/publishing.nsf/Content/20514689C20514683DD20514683A20514610CA25783200824E25783200844/\\$File/tableb25783200821b.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/20514689C20514683DD20514683A20514610CA25783200824E25783200844/$File/tableb25783200821b.pdf).
27. Dunn G, Pickles A, Tansella M, Vázquez-Barquero J. Two-phase epidemiological surveys in psychiatric research. *Br J Psychiatry*. 1999;174:95-100.
28. Pickles A, Dunn G, Vázquez-Barquero JL. Screening for stratification in two-phase ('two-stage') epidemiological surveys. *Stat Methods Med Res*. 1995;4:73-89.
29. World Health Organization. *Schedules for Clinical Assessment in Neuropsychiatry*. Geneva: World Health Organization; 1999.
30. McGuffin PC, Farmer A, Harvey I. A polydiagnostic application of operational criteria in studies of psychotic illness. Development and reliability of the OPCRIT system. *Arch Gen Psychiatry*. 1991;48:764-770.
31. Hawthorne G, Richardson J, Osborne R. The assessment of quality of life (AQoL) instrument: a psychometric measure of health related quality of life. *Qual Life Res*. 1999;8:209-224.
32. Babor TF, Higgins-Biddle JC, Saunders JB, Monteiro MG. AUDIT. *The Alcohol Use Disorders Identification Test. Guidelines for use in primary care. 2nd ed. WHO/MSD/01.6a*. Geneva: World Health Organization; 2001.
33. Mayfield D, McLeod G, Hall P. The CAGE Questionnaire: Validation of a New Alcoholism Screening Instrument. *Am J Psychiatry*. October 1, 1974 1974;131(10):1121-1123.
34. Kirkpatrick B, Buchanan RW, McKenney PD, Alphs LD, Carpenter WT. The schedule for the deficit syndrome: an instrument for research in schizophrenia. *Psychiatry Res*. 1989;30:119-123.
35. Heatherton TF, Kozlowski LT, Frecker RC, Fagerström K-O. The Fagerström Test for Nicotine Dependence: a revision of the Fagerström Tolerance Questionnaire. *Br J Addict Alcohol Other Drugs*. 1991;86(9):1119-1127.
36. Alonzo TA, Pepe MS, Lumley T. Estimating disease prevalence in two-phase studies. *Biostatistics* 2003;4:313-326.
37. Centrelink. *Guide to Australian Government Payments (effective 1 July 2010)* 2010.
38. Australian Bureau of Statistics. *Average Weekly Earnings, Australia, Aug 2010 Catalogue No. 6302.0*. Canberra: Australian Bureau of Statistics; 2010.
39. Australian Taxation Office *Comprehensive Tax Calculator 2011* [computer program]. Version; 2011.
40. Case Management Society of Australia. *Case Management and Community Care. A Discussion Paper*. 2006.

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All information in this publication is correct as at November 2011.