



Mental Health and Suicide Prevention Needs Assessment

2017

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HUNTER NEW ENGLAND
AND CENTRAL COAST

An Australian Government Initiative

Acknowledgements

The participation by 782 stakeholders through interviews, focus groups, surveys and an online forum in this needs assessment reflects the strong commitment to improving mental health and to preventing suicide across the HNECC PHN region. Many people contributed willingly to this process with a common aim of trying to improve the mental health of the community. The views of service providers from many different disciplines and organisations who are committed to providing care to people in their communities were greatly appreciated and provided the needed insight into the mental health system. Most importantly we acknowledge the contribution of consumers, carers and community members. Your generosity in providing your mental health experiences has been invaluable and provided insight into the need to improve the mental health system to better meet your needs.

Needs Assessment Team

The preparation of this Mental Health and Suicide Prevention Needs Assessment has been undertaken as a collaborative project between the Hunter New England and Central Coast Primary Health Network and Consan Consulting. The team from the Hunter New England and Central Coast Primary Health Network included Jane Mendelson, Brooke Kelehear, Katrina Wallace and Karen Morris. Scott White and Kevin Rigby have supported communication and the consultation approaches used in the needs assessment. The Consan Consulting team included Robyn Considine, Dr Kate Davies, Dr Tonelle Handley and Dr Jane Rich.

Glossary

ABS	Australian Bureau of Statistics
AIHW	Australian Institute of Health and Welfare
ANSMHWB	Australian National Survey of Mental Health and Well-being
ATAPS	Access to Allied Psychological Services
ATSI	Aboriginal and Torres Strait Islander Peoples
CALD	Culturally and Linguistically Diverse
CAMHS	Child and Adolescent Mental Health Services
CC LHD	Central Coast Local Health District
ED	Emergency Department
GP	General Practitioner
HNE LHD	Hunter New England Local Health District
LGA	Local Government Area
LGBTIQ	Lesbian, Gay, Bisexual, Transgender, Intersex, and Questioning
LHD	Local Health District
MBS	Medicare Benefits Schedule
MHNIP	Mental Health Nurse Incentive Program
NDIS	National Disability Insurance Scheme
NGO	Non-Government Organisation
NMHC	National Mental Health Commission
NSWMHC	New South Wales Mental Health Commission
PBS	Pharmaceutical Benefits Scheme
PHN	Primary Health Network
PIR	Partners in Recovery
SEIFA	Socio-Economic Indexes for Areas
SES	Socio-Economic Status
SMHSOP	Specialist Mental Health Services for Older People
WHO	World Health Organization

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Executive Summary

Mental illness is a significant contributor to the disease burden in Australia. The systems for promoting mental health, preventing mental illness and suicide, and providing care for those experiencing mental illness need strengthening, with the primary health care sector playing a central role. Primary Health Networks are well placed to realise opportunities to facilitate a stronger mental health care system to better provide care to meet community needs.

This needs assessment is a key element in the role of Hunter New England and Central Coast Primary Health Network (HNECC) in leading mental health and suicide prevention planning and integration at a regional level. It aims to identify gaps and opportunities for the efficient commissioning and targeting of primary mental health services. Further, it will inform the development of regional mental health and suicide prevention plans to guide and support an improved and integrated mental health system.

Reviews of literature for mental health burden of illness, service models and barriers guided the needs assessment. Quantitative analysis of prevalence, morbidity and mortality data for the region and where possible by local government area was undertaken by HNECC. Qualitative methods were used with interviews and surveys of key stakeholders across all local government areas. Data from both these methods were triangulated to identify priority mental health, suicide prevention and service needs. The HNECC Clinical Councils and Community Advisory Committees were involved through consultations and in the validation of the priority needs.

The identified needs guided the development of 40 recommendations, which provide an opportunity to inform the development of integrated services to meet the needs of communities across the HNECC PHN region. The strength of this needs assessment is in the consistency of findings between the quantitative and qualitative methods, and the commitment of stakeholders to willingly share their views on mental health and suicide prevention needs. This needs assessment has built high expectations that mental health and suicide prevention services can be improved to meet the identified priorities with effective planning as the key first step.

Mental Health Needs

As reflected in national data, the most common mental illnesses experienced by people in the HNECC PHN region were depression, anxiety and drug and alcohol misuse. The rate of people experiencing psychological distress and chronic mental and behavioural disorders was higher across the HNECC PHN region compared to NSW and Australia. The levels of high psychological distress were higher for males, whilst levels of very high psychological distress were higher for females.

Data showed that those people experiencing mental illness were more likely to also have a range of chronic health problems. People experiencing moderate to severe mental illness, including episodic and chronic mental illness, and those experiencing other health and social complexities, were identified by stakeholders as having high needs across all local government areas.

The mental health needs of Aboriginal and Torres Strait Islander peoples were consistently high across the HNECC PHN region. In NSW, the prevalence of psychological distress was nearly three times higher in Aboriginal people than in non-Indigenous people. The impact of intergenerational trauma for Aboriginal and Torres Strait Islander peoples, including the impact on family functioning, drug and alcohol use and domestic violence was identified as contributing to these high needs.

Young people aged 12 – 25 years, and males aged 25 - 65 years were identified as having high mental health needs. These views align with NSW data that show the greatest disease burden for mental illness is between the ages of 15 and 45 years for both genders. Common across these age groups were factors associated with family dysfunction, social and geographical isolation, drug and alcohol use, and for young people the impact of bullying. Factors such as grief and loss, adjustment to life in aged care facilities, and social and geographic isolation were factors contributing to the high needs of males aged over 80 years and of people residing in aged care facilities.

The needs of lesbian, gay, bisexual, transgender, intersex and questioning people were identified as high with associated factors including stigma, discrimination, and community and service awareness and respect.

Suicide Prevention Needs

The premature mortality rate from suicide and self-inflicted injuries in the HNECC PHN region was higher compared to NSW and similar to the Australian rate. The highest numbers of suicides in the region was in the ages between 25 and 55 years, with males accounting for four out of five deaths. The rate of hospitalisation due to intentional self-harm was consistently higher for the HNECC PHN region compared to NSW, with higher rates among females than males.

Rates of hospitalisation due to intentional self-harm were much higher in the 15-24 years age group compared with other ages. Hospitalisations resulting from intentional self-harm for Aboriginal people in NSW were much higher than for non-Indigenous people.

Needs relating to suicide were perceived to be high, especially in rural areas with social and geographic isolation as significant contributing factors. The suicide related needs of young people aged 12 – 25 years, and males aged 25 - 45 years were identified as high. The needs of these groups were associated with social and geographic isolation, relationship breakdown and for younger people bullying at school and through social media. Males aged over 80 years were identified as a priority group for suicide prevention with data indicating increased suicide rates in this cohort.

Service Needs

The findings of this needs assessment have identified services gaps and barriers to access for people experiencing mental illness and suicidal ideation across all communities.

Overnight hospitalisations for mental illness in the HNECC PHN region vary across the region but occur at a rate higher than the Australian average. This occurred for anxiety and stress disorders, bipolar

and mood disorders, depressive disorders and for drug and alcohol use. The hospitalisation rate for schizophrenia and delusional disorders was lower than the Australian rate.

Prescribing rates for medication to treat mood disorders, anxiety and for psychotic symptoms vary across the HNECC PHN region, however rates in many communities are in the highest deciles for prescribing in Australia. Reasons for this vary but may be related to a range of community and social factors, service access and prescribing practices of GPs and psychiatrists.

Distribution of primary mental health care service providers (GPs, allied health providers) and the patient provider ratio varied across the HNECC PHN region irrespective of rurality. Similarly, there was significant variation in the patient to provider ratio for psychiatry and psychology services, with lower rates more likely in rural areas.

Services for people experiencing moderate to severe chronic mental illness, including those with other complex problems, were identified by key stakeholders as the priority service need across all communities. In line with the service data, access to psychiatrists and psychologists across the region, especially in rural areas, was a high need with costs due to gap payments for these clinicians, a significant barrier to care. Access to psychiatrists was identified as a high need for adults, especially in rural areas, and for children and young people across the HNECC PHN region. Transport in urban and rural areas was a significant barrier to care, with public transport limited or unavailable in many communities.

The lack of early intervention approaches and services was identified as a high service need, especially for young people. Specific early intervention services such as those for early psychosis was identified as a particular need. More broadly the need for early intervention approaches across all services with the aim of preventing hospital admissions was recognised. However, services currently apply the opposite approach with people experiencing deteriorating mental illness having limited access to services that could intervene to prevent admission to acute services.

Consistent with findings at a national level, the current mental health service system is perceived as not supporting integrated and collaborative care. This severely impacts on the quality of, and access to, care. With significant changes in services over the last decade there is a perception of instability in the service system, further contributing to the perceptions of access problems. This also limits the capacity of community members and service providers to navigate the mental health system. Integrated planning across the mental health system was identified as a priority to address these service needs.

With general practice playing a central role in mental health care, the capacity of this key service to provide care for people with mental illness was a high priority service need. Specific areas of capacity which needed strengthening included training for GPs in mental health with a focus on skills, knowledge and attitudes towards mental illness across the age group; and improving the capacity of general practice to provide care through practice nurses and allied health staff. Associated with these priorities was the need to strengthen the capacity of services to recruit and retain allied health staff to provide care in general practice and in community services.

The need to strengthen the capacity of community based social support services to provide care for people with severe mental illness and other complexities, was recognised as a priority. This need required strengthening of the approaches to quality and governance across all health and social services; and ensuring staff in these services have the knowledge and skills to provide support to people experiencing mental illness. It also requires staff to understand their scope of practice and for services to have clear protocols and pathways in place for escalating those with deteriorating mental illness to clinical care.

The availability of mental health promotion and prevention services was a key service gap. In particular, the need to ensure evidence-based and systematic approaches to mental health promotion and prevention was a priority.

Support for families and carers of people living with mental illness was a high need. This was about providing direct support, but more importantly recognising and respecting the key role that families and carers play in caring for people experiencing mental illness, and involving them in decision making about care.

The service needs identified for suicide prevention were related to ensuring those people at risk were identified across the service system, with support services in place when and where they were needed. The fact that many people who attempt or complete suicide have little or no contact with services prior to the event, warrants greater attention on risk factors across the service system and across the community. Supporting community and service based approaches to suicide prevention is a high priority. Whilst some communities have developed post suicide intervention strategies and services, there is a high need to strengthen these post-vention strategies.

Recommendations

Priority Groups

Priority Groups

1. In developing regional plans recognition should be given to:
 - a. Priority population groups identified in this needs assessment:
 - i. Aboriginal and Torres Strait Islander people
 - ii. Young people aged 12 – 25 years
 - iii. Males aged 25 - 65 years
 - iv. Males aged over 80 years
 - v. Older people residing in aged care facilities
 - vi. Members of the LGBTIQ community
 - b. Priority groups in relation to mental illness identified in this needs assessment:
 - i. People experiencing chronic and episodic moderate to severe mental illness
 - ii. People experiencing chronic and episodic moderate to severe mental illness and other health and social problems
 - iii. People experiencing early psychosis
 - c. Priority groups in relation to suicide prevention identified in this needs assessment:
 - i. Aboriginal and Torres Strait Islander people
 - ii. Young people aged 12 – 25 years
 - iii. Males aged 25 - 65 years
 - iv. Males aged over 80 years
 - v. People with previous suicide attempts
2. HNECC should ensure that services commissioned by HNECC demonstrate the appropriate targeting of these priority groups and report on activity and outcomes in relation to these priorities.

Addressing Factors Associated with Mental Illness and Suicide

3. In order to provide holistic care and to support early intervention, the factors associated with mental health and suicide reported in this needs assessment need to be identified in regional plans, service plans and in client health care plans with strategies to address factors including:
 - a. Stigma associated with help seeking
 - b. Social and geographic isolation
 - c. Trauma (including intergenerational trauma)
 - d. Cultural safety
4. All services commissioned by HNECC should demonstrate that they are culturally safe and have implemented cultural safety strategies to support access and care for Aboriginal and Torres Strait Islander peoples
5. In line with the RACGP standards for general practices, HNECC should build the capacity of general practices to provide respectful and culturally appropriate care
6. Supported by capacity building strategies, services commissioned by HNECC should ensure compliance with the National Mental Health Standards “Diversity Responsiveness” by accounting for the cultural and social diversity of consumers and meeting their needs and those of their carers and community throughout all phases of care including for:
 - a. Aboriginal and Torres Strait Islander people
 - b. Culturally and Linguistically Diverse (CALD) people;
 - c. Those with different religious and spiritual beliefs

- d. People with differences in gender and sexual orientation
 - e. People with physical and intellectual disability
 - f. People across ages and socio-economic status
7. HNECC and services providers should monitor and manage the significant barrier to accessing services presented by the cost of services, and ensure services for mental health and suicide prevention are provided in communities where gap payment is not a condition of service
 8. Options for addressing the significant barrier of transport to specialised services should be explored in the regional plans
 9. Strategies to support national campaigns addressing stigma at a local level should be explored by HNECC and other services across the service system
 10. Strategies to overcome stigma barriers encountered by people experiencing mental illness when accessing community transport need to be implemented

Frameworks and Models of Care

11. The HNECC stepped care framework, which reflects evidence and national and state mental health policies should form the basis of service models and should inform regional plans
12. Decisions on commissioning of services should reflect the principles outlined in this report for addressing mental health and suicide prevention
13. Early intervention is a priority for improving mental health outcomes and is applicable across:
 - a. All stages of life
 - b. All mental illness categories
14. The hub and spoke model, which supports integrated care between main referral sites (hubs) and those in outlying communities (spokes) should form the basis of service delivery for mental health care
15. From the perspective of HNECC, consideration should be given to applying the hub and spoke model in service planning and commissioning with alignment against LHD clusters, where this fits with program objectives
16. The population health needs of communities should guide the planning and delivery of services across the mental health system
17. Mental health prevention and promotion, and suicide prevention should reflect evidence based frameworks with an emphasis on strategies which are broader than education and training
18. Mental health promotion and prevention, and suicide prevention strategies should be implemented across sectors including:
 - a. Youth specific services
 - b. Education and training sectors
 - c. Community and sporting groups
 - d. Workplaces
 - e. Aged care facilities
 - f. General health system
19. The capacity of communities to implement evidence-based post-vention strategies needs strengthening

General Practice

20. The capacity of general practice to play a central role in mental health care needs to be supported through:

- a. Supporting multi-disciplinary teams including mental health nurses to work in general practice improve patient access and outcomes
 - b. Education and training of GPs particularly in relation to evidence based guidelines and stigma
 - c. Access to specialist advice for GPs when needed
 - d. Support for GPs in developing and monitoring mental health care plans
 - e. Access to allied health staff in local communities to support clinical care and case management
21. HNECC should advocate for simplifying the credentialing processes for mental health nurses to work in general practice
22. The stability of the mental health support service system and the associated pathways to care should be a priority to support the central role of GPs in mental health care
23. Direct twenty-four-hour access to psychiatrists for GPs in rural towns and other communities where there are no acute facilities should be provided

Service Gaps

24. Strategies to address the gap in services for people experiencing chronic and episodic moderate to severe mental illness including those with other health and social problems is a priority
25. To address the priority gap for people experiencing chronic and episodic moderate to severe mental illness there is a need to:
- a. Reduce waiting times and cost barriers for psychiatry across communities
 - b. Improve patient and service provider experience of the mental health line
 - c. Provide greater access to experienced psychologists across communities
 - d. Apply assertive and proactive case management and follow-up
 - e. Reorient services to keep people out of acute settings rather than the current system which channels people to the acute setting due to a lack of services
 - f. Ensure patient and service provider experience is routinely measured and monitored
26. Services for early psychosis should be accessible across communities
27. Services to support families and carers should be accessible and promoted across communities
28. Organisations that provide support services to people with mental illness should demonstrate their capacity to access clinical care for clients when symptoms are escalating. This could occur through partnerships, consortia or in-house access to clinicians and requires mechanisms for escalating clients experiencing a worsening of symptoms

Quality and Effectiveness

29. All services should be required to demonstrate an approach to quality through the development, implementation, monitoring and evaluation of:
- a. Service improvement plans
 - b. Clinical governance frameworks
 - c. Case review policies and procedures
 - d. Clinical supervision
30. Commissioning of services by HNECC should reflect the need for an approach to quality, requiring services to demonstrate this commitment as an element of key performance indicators

31. In ensuring an approach to quality, commissioning of services should consider the service model, and discipline and experience of staff
32. The capacity of services to develop and implement an approach to quality should be strengthened with the aim of developing a consistent approach with tailoring to service types
33. Services should ensure a commitment to measurement and reporting of activity and outcomes in line with the quadruple aims of health care (patient experience, clinician experience, population health outcomes and efficiency)
34. The development of outcomes which are consistent across like services and evidence-based, tailored to services, measured efficiently and able to be used for service improvement and client care should be resourced and implemented

Workforce

35. A focus on building the capacity of mental health service staff to increase the impact of mental health services should be a key feature of regional plans
36. Services should be required to demonstrate that professional development and supervision is accessible to staff, particularly for psychologists
37. Recruitment and retention strategies for allied health staff in services should be implemented in line with a hub and spoke model

Planning and Commissioning

38. In partnership with HNECC, the development of regional plans for mental health and for suicide prevention should involve and be supported by:
 - a. Chief Executives of Central Coast and Hunter New England Local Health Districts, their Directors of Mental Health and their cluster managers
 - b. Service Managers of other clinical and support services
 - c. Private providers including medical specialists, GPs and allied health
39. As part of the regional planning process all participating providers and organisations should demonstrate willingness to reform service models to meet community needs.

Introduction

Mental health is a fundamental component of health and wellbeing, enabling people to realise their potential, cope with the normal stresses of life, work productively, and contribute to their communities⁴. Mental illness is a significant contributor to the burden of illness in Australia, with one in five people experiencing a mental illness in a given year⁵. However, the systems for promoting mental health, preventing mental illness and suicide, and providing care for those experiencing mental illness require significant reform⁶. The National Mental Health Commission identified the importance of care through the primary health care sector and general practice and emphasised the importance of Primary Health Networks in realising opportunities to better provide care to meet community needs⁶.

This Mental Health and Suicide Prevention Needs Assessment has been undertaken as a key element in the role of Hunter New England and Central Coast Primary Health Network (HNECC) in leading mental health and suicide prevention planning and integration at a regional level. It aligns with the Government Response to the Review of Mental Health Programs and Services by focusing on needs across the mental health system.

Burden of Disease

Burden of disease is a modelling technique used to quantify the loss of health and wellbeing of a population due to illness, disability, injury and premature mortality. The summary measure *disability-adjusted life years* (DALY) quantifies the years of healthy life lost as a result of disease and injury by combining *years of life lost* (YLL) or *fatal burden* as a result of premature mortality; and *years lived with disability* (YLD) or *non-fatal burden* as a result of living with injury or illness⁷.

In 2011, in Australia, mental illness and substance misuse accounted for almost 12% of the total burden of disease and was the leading cause of non-fatal burden, accounting for almost one-quarter (24%) of all YLD.

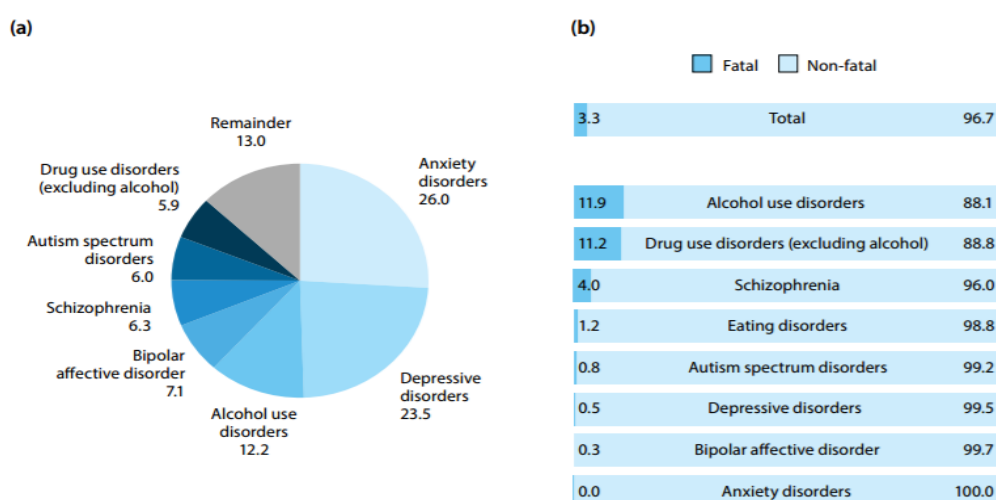


Figure 1: Mental and substance use disorders burden (DALY) by disease: proportion of disease group total (a) and proportion due to fatal and non-fatal outcomes (b), 2011 (%)⁸.

As shown in Figure 1(a), anxiety disorders (26%) and depressive disorders (23.5%) accounted for the greatest proportion of the total burden of disease attributed to mental illness and substance misuse⁸. Figure 1(b) shows the proportion of the burden of disease due to fatal and non-fatal outcomes for each disease group.

People living in rural and remote regions have unique demographic, socioeconomic and environmental factors that influence burden of disease, with higher incidence of chronic disease, risky health behaviours and difficulty accessing health services. In 2011, in Australia, there was little variation in the rate of burden from anxiety and depressive disorders by remoteness, but as can be seen in Figure 2, there was a clear trend of an increasing rate of burden with remoteness for suicide (and self-inflicted injuries)⁹.

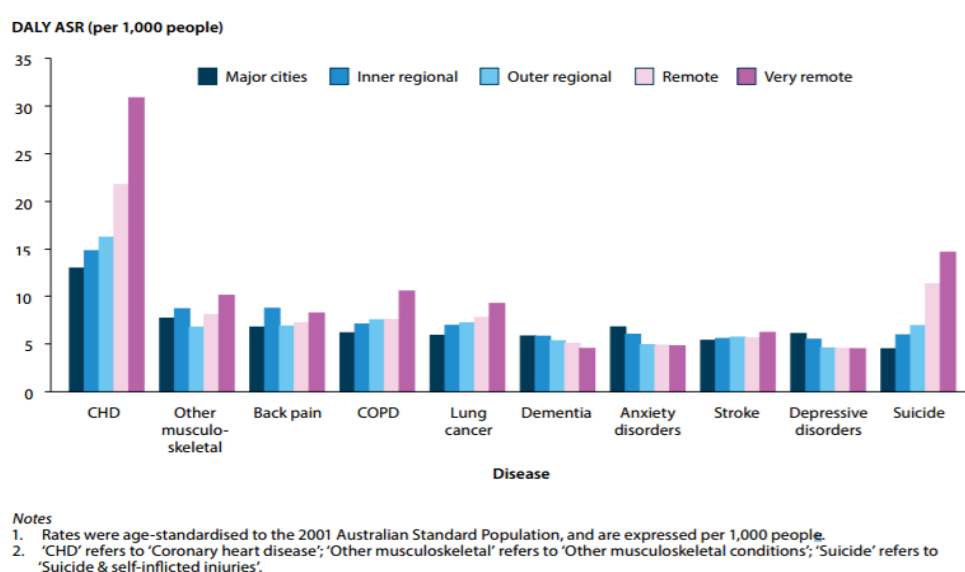


Figure 2: Age-standardised DALY rate (per 1,000 people) of the top 10 diseases, by remoteness, 2011⁹.

In 2011, in NSW, mental health contributed to 11.6% of the total burden of disease and was the leading cause of YLD (23.0%)¹. As can be seen in Figure 3, the greatest burden of disease stemming from mental health for males was amongst those aged 35-39 years (11.1%) and for females was amongst those aged 25-29 years (10.7%)¹.

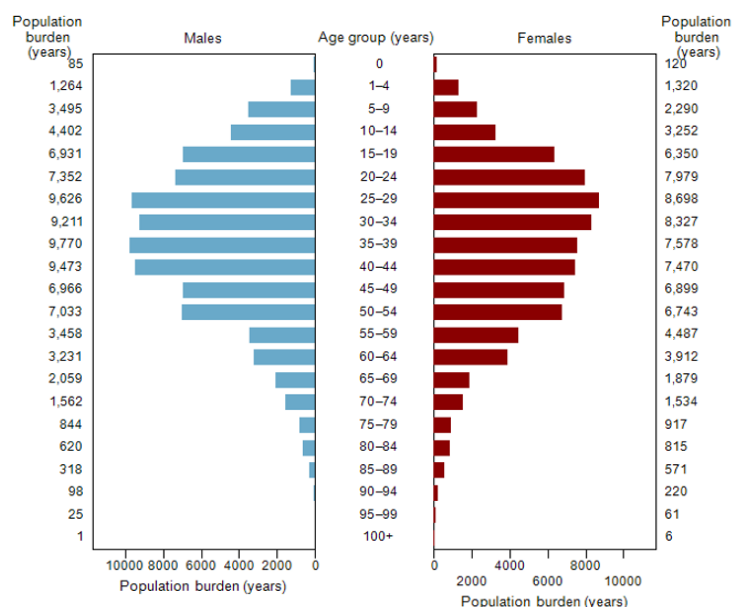


Figure 3: Mental health burden by age group and sex, DALY, NSW, 2011¹.

Mental Health Hospitalisations

Mental health hospitalisations refer to hospitalisations for a wide range of mental health related conditions and behavioural disorders where the patient is admitted to hospital and stays at least one night¹⁰.

In 2014-15, in Australia, there were 223,882 overnight hospitalisations for mental health conditions, which represented 5% of all overnight hospital admissions and 14% of all hospital bed days. PHNs in regional areas had higher rates of mental health hospitalisations (999 per 100,000) than those in metropolitan areas (888 per 100,000), however the rate of mental health bed days was greater in metropolitan areas¹⁰. The two most common mental health conditions requiring hospitalisation were drug and alcohol use; and schizophrenia and delusional disorders, which collectively represented 36% of all mental health overnight hospitalisations and 37% of all mental health bed days¹⁰.

Prevalence of Mental Illness

Psychological Distress

Prevalence of psychological distress is commonly used to gauge the mental health of a population. This is generally measured using the Kessler 10 (K10), which is a 10-item questionnaire that measures levels of depression, anxiety, psychological fatigue and agitation experienced over the past month¹¹. K10 results are grouped into four levels of psychological distress: 'low' (scores of 10-15, indicating little or no psychological distress); 'moderate' (scores of 16-21); 'high' (scores of 22-29); and 'very high' (scores of 30-50 and likely to have a severe mental disorder)³.

In 2014-15, the rate at which the population aged 18 years and over experienced high or very high psychological distress was 11.7 per 100 for Australia and 11.0 per 100 for NSW³.

Chronic Mental and Behavioural Disorders

The prevalence of chronic or long-term mental and behavioural disorders is another common indicator of the mental health of a population. Long-term mental and behavioural disorders are conditions that are present and expected to last for six months or more and include: behavioural or emotional disorders; feeling anxious or nervous; depression; and drug and alcohol dependence³.

In 2011-12, it was estimated that 13.6% of Australians were experiencing chronic mental and behavioural disorders¹². The rate at which females experienced chronic mental and behavioural disorders at this time (15.1 per 100) was higher than that of males (12 per 100). In NSW at this time, the rate at which people experienced mental and behavioural disorders was 13.1 per 100, and was higher for females (14.4 per 100) than males (11.9 per 100) due to a greater prevalence of anxiety disorders^{3, 12}.

Mental Health of Children and Youth

In 2015, nearly one in seven (13.9%) 4-17 year old Australians had experienced a mental disorder in the previous twelve months. Mental disorders were more prevalent in young males (16.3%) than females (11.5%). The most common mental disorder experienced by young Australians was ADHD (7.4%), followed by anxiety disorders (6.9%), major depressive disorder (2.8%) and conduct disorder

(2.1%). In 2013-14, one in five Australians aged 12-17 years reported high (13.3%) or very high (6.6%) levels of psychological distress as measured using the K10¹³.

Psychological distress in secondary students is also assessed using a tool which measures stress levels in the last six months in terms of: feeling unhappy, sad or depressed; feeling nervous, stressed or under pressure; or being in trouble because of their behaviour. In NSW, in 2014, 13.3% of secondary school students reported high levels of psychological distress in the previous six months (9.6% of males, 17.2% of females) based on this tool. Of students aged 12-15 years, 14.9% of females and 9.0% of males reported high psychological distress. Of those aged 16-17 years, 22.2% of females and 10.8% of males reported high psychological distress. As shown in Figure 4, female students were more likely to report feeling unhappy, sad or depressed, and feeling nervous, stressed or under pressure; whilst males were more likely to report being in trouble because of their behaviour¹.

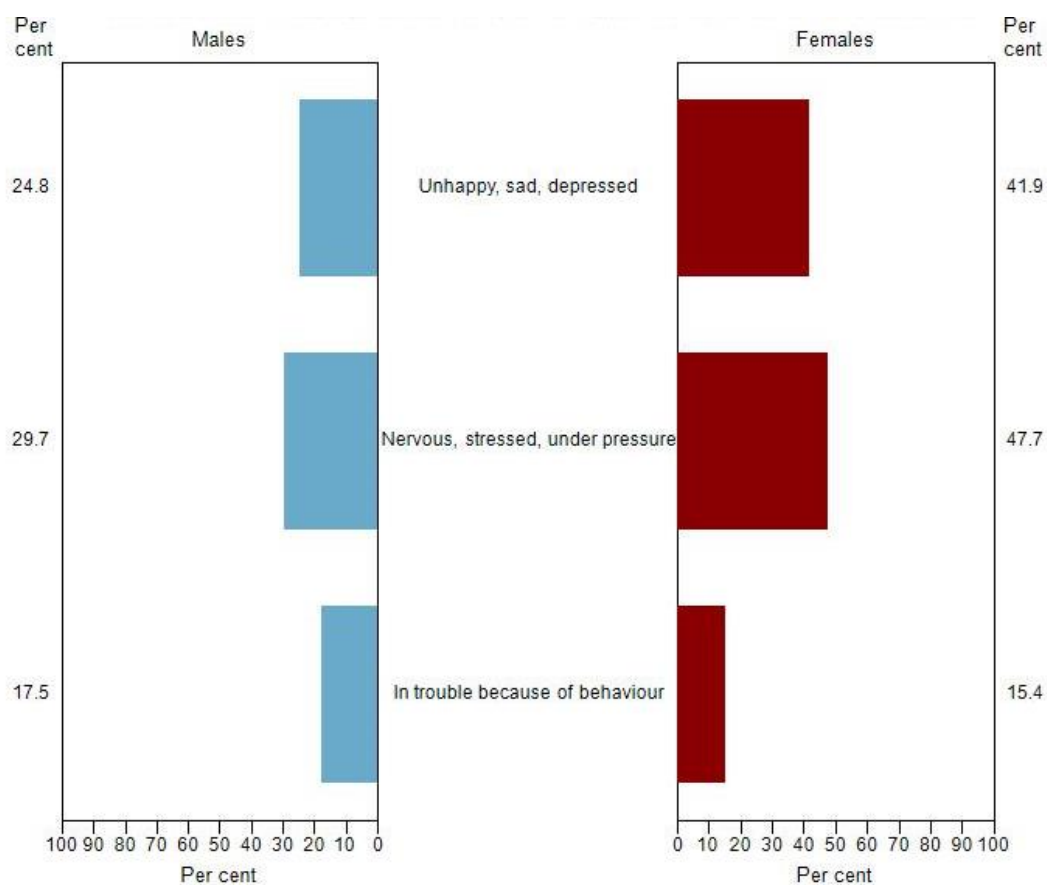


Figure 4: Psychological distress components, secondary school students, NSW, 2014¹.

Mental Health of Aboriginal and Torres Strait Islander People

In 2012-13, 30% of Aboriginal people in Australia reported high or very high psychological distress, 2.7 times higher than for non-Indigenous people. These levels were higher for Aboriginal women (36%) than men (24%). Aboriginal people who experienced greater psychological distress were more likely to smoke daily, have used illicit substances in the past year, and assess their health as fair or poor¹⁴. In 2012-13, it was reported that 48% of Aboriginal people or their relatives had been removed from their natural family. People who had been removed were more likely to experience high or very high psychological distress (35%) than those who had not (29%). This was also seen among those who had relatives removed (34%) compared to those who had not (26%)¹⁴.

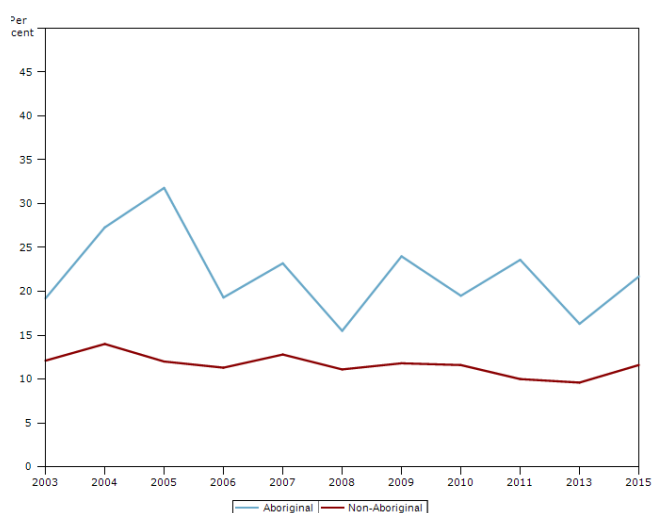


Figure 5: Proportion of people experiencing psychological distress by Aboriginality, persons aged 16 years and over, NSW 2003 to 2015¹.

In 2008-13, mental health disorders accounted for 11% of all disorders managed by GPs for Aboriginal patients (176 per 1,000 encounters), which was 1.3 times higher than for non-Aboriginal Australians. The most common mental health disorders experienced by Aboriginal people and managed by GPs were depression (3.1% of all disorders managed), anxiety (1.2%), tobacco abuse (1.1%) and alcohol abuse (1.0%)¹⁴.

As can be seen in Figure 5, the percentage of Aboriginal people experiencing high or very high psychological distress in NSW has varied over time to 2015, whilst that of non-Indigenous people has remained relatively stable¹.

Mental Health of Culturally and Linguistically Diverse (CALD) People

There are over a quarter of a million people from CALD backgrounds living in Australia who would experience a mental and behavioural disorder in a 12 month period¹⁵. There is a particularly high prevalence of mental and behavioural disorders amongst asylum seekers and refugees. Research indicates that whilst many migrants have good mental health upon arrival, mental and behavioural disorders develop after the first twelve months of residing in Australia, due to the stress of acculturation, unemployment, social and language difficulties¹⁶.

Mental Illness and Comorbidity

Comorbidity is when a person experiences two or more diseases or disorders simultaneously, this is very common in people who experience mental illness, with 94.1% of Australians in 2014-15 who reported experiencing a mental or behavioural condition also experiencing at least one chronic physical or mental health condition. Comorbidity is linked to poorer health outcomes, reduced quality of life and increased health care costs¹⁷.

Chronic physical illness can exacerbate the intensity of mental illness, increase psychological distress and reduce a person's ability to cope with daily life. For example, in NSW, approximately 84% of the population without psychological distress assessed their health as good or better, compared to 54% of those with high psychological distress¹⁸. In 2014-15, 15.8% of Australians reported experiencing comorbid chronic mental illness and physical health conditions; 2.5% of the population reported co-occurring mental illness and one physical health condition; and 13.3% reported mental illness with two or more physical health conditions¹⁷. Mental illness was experienced by 38% of people with COPD (chronic obstructive pulmonary disease), 30% of people with back pain and 29% of people with asthma¹⁹. People experiencing mental illness are also more likely to smoke tobacco than those without, and those experiencing comorbidity have the highest smoking rates across all groups²⁰.

In 2014-15, 1.8 million Australians (8.8% of females and 6.5% of males) experienced two or more mental and behavioural disorders simultaneously. This included people who also reported co-existing physical illness however, with only 0.6% of Australians reporting comorbid mental conditions without co-existing chronic physical illness¹⁷. The most common co-existing mental illnesses were anxiety and depression, as experienced by over one million people (4.4%). Other conditions, although less common had greater likelihood of co-existing: 80% of people with anxiety also experienced panic disorders or panic attacks; 70% of people with post-traumatic stress disorder also experienced depression; and 18.9% of people with phobic anxiety disorders also experienced obsessive-compulsive disorder¹⁷.

Premature Mortality from Suicide and Self-Inflicted Injuries

Between 2010 and 2014, the rate of premature mortality for people aged 0 to 74 years from suicide and self-inflicted injuries was 11.2 per 100,000 in Australia, and 9.4 per 100,000 in NSW³. In 2013, there were 674 deaths by suicide in NSW at a rate of 8.9 per 100,000, of which 73% were males. The suicide rate was highest in males aged 75 years and over (25.9 per 100,000), and more than five times higher than that of their female counterparts (5.0 per 100,000). The suicide rate was higher amongst people living in outer regional and remote areas of NSW (13.8 per 100,000) compared to inner regional areas (10.8 per 100,000) and major cities (8 per 100,000). As shown in Table 1, suicide rates also varied with socioeconomic disadvantage, with the population in the 3rd quintile experiencing the highest suicide rate and those in the least disadvantaged quintile experiencing the lowest rate¹.

Table 1: Suicide Rate by Socioeconomic Status, NSW, 2013¹.

Socioeconomic Status	Rate per 100,000
1 st Quintile (least disadvantaged)	7.0
2 nd Quintile	8.4
3 rd Quintile	9.9
4 th Quintile	9.0
5 th Quintile (most disadvantaged)	9.1

In 2009-2013, in NSW, the suicide rate amongst Aboriginal people was 12.5 per 100,000, much higher than that of non-Indigenous people (8.9 per 100,000). The suicide rate amongst Aboriginal people aged 15 to 24 years was 11.1 per 100,000, compared to 6.9 per 100,000 for their non-Indigenous counterparts¹.

Intentional Self-Harm Hospitalisations

In 2014-15, in NSW, the rate of hospitalisation due to intentional self-harm for all ages was 135.1 per 100,000, or 170.3 per 100,000 for females and 101.1 per 100,000 for males. Hospitalisations amongst the 15-24 year age group by comparison were much higher at 315.9 per 100,000, or 464.4 per 100,000 for females and 175.6 per 100,000 in males¹.

The rate of hospitalisations for intentional self-harm for Aboriginal people was 354.3 per 100,000 (females: 417.9 per 100,000; males: 290.9 per 100,000), substantially higher than the rate for non-Indigenous people. Figure 6 shows the rate of hospitalisations by Aboriginality and sex for people of all ages and for those aged 15-24 years.

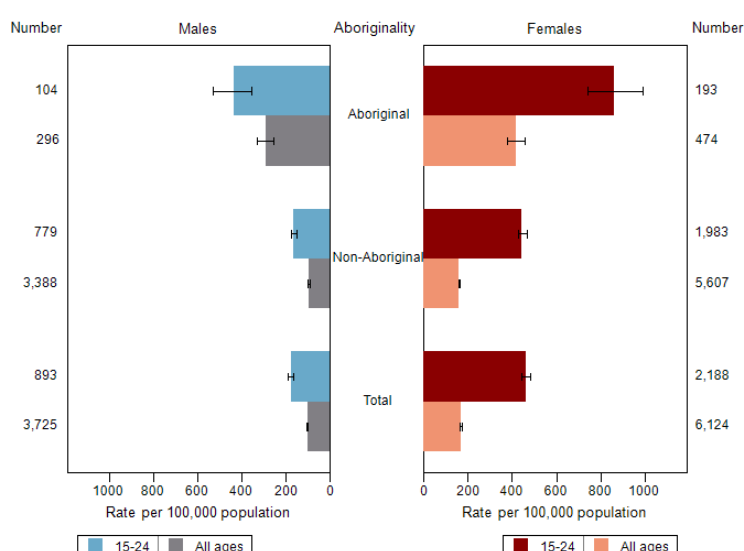


Figure 6: Intentional Self-Harm Hospitalisations by Aboriginality and Sex, Persons of all Ages and 15-24 years, NSW, 2014-15¹.

The rate of hospitalisations for intentional self-harm for Aboriginal people aged 15-24 years was 641.4 per 100,000 (females: 859.4 per 100,000; males: 436.4 per 100,000).

Figure 7 shows the widening of the gap in intentional self-harm hospitalisations between Aboriginal and non-Indigenous people since 2001-02, and the sizeable difference in hospitalisations between males and females regardless of Aboriginal heritage¹.

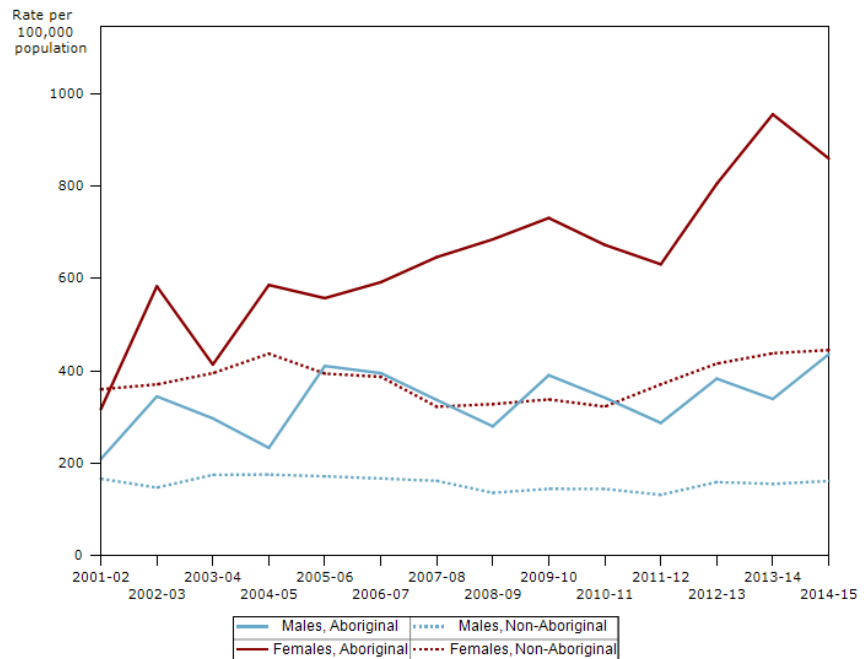


Figure 7: Rates of intentional self-harm hospitalisations for 15-24 year olds, by Aboriginality and sex, NSW, 2001-02 to 2014-15.¹

Evidence Base for Mental Health Care

Collaborative or Integrated Care

In the primary care setting, the collaborative care model is one of the most widely researched and disseminated models for delivering evidence-based mental health services and has been shown to improve outcomes for common mental health disorders across populations²¹⁻²⁴. Compared with traditional mental health care, integrated care offers earlier identification of symptoms of mental illness, greater access to care and improved targeting of symptoms²⁵. A clear integrated model of mental health care is lacking in the mental health service setting however, with the incorporation of a responsive integrated model in community based settings proving a challenge^{26, 27}. It is suggested that a major issue is that many GPs feel that physical health problems are their focus and view the treatment of severe mental health as the role of mental health professionals²⁴. Integrated models of care should include consultation and information sharing between mental health and primary care providers supported by health information technology, as this has been shown to improve patient outcomes, treatment and costs^{21, 28}.

Stepped Care

Empirical evidence and key policy documents emphasise the need for primary, secondary and tertiary mental health services to provide integrated and coordinated care^{6, 29, 30}. The stepped care model for provision of mental health services conceptually outlines the role of different services working together in an integrated way depending on community and client needs. Ideally, this model supports continuity of care through shared information, and professional collaboration and respect across levels of the mental health care system, and across other community services and disciplines. Key to the model is the provision of least intensity services through a series of steps to the highest intensive treatment. The model assumes that patients are routinely monitored and are able to progress through the mental health care system as symptoms escalate or diminish.

The role of the GP is central in the stepped care model³¹ with GPs and other primary care services providing most mental health care in Australia⁵. The GP is often the first point of contact for people experiencing mental illness and is key in ongoing management of their patient's mental and physical health. For people with mild to moderate mental illness, the majority of those experiencing mental illness, the GP provides care and acts as a key link between primary, secondary and tertiary care, especially as complexity increases³¹. Recognition of this central role is reflected in programs such as the Better Access to Psychiatrists, Psychologists and General Practitioners through the Medicare Benefits Schedule (Better Access) initiative, which enables collaborative care between the GP and allied health providers, supported by a mental health care plan and specific item numbers on the Medicare Benefits Schedule.

Hub and Spoke Models

The hub-and-spoke model of health care delivery is commonly used in rural communities, is applicable to mental health care and aligned to a stepped care model. The hub and spoke model promotes integrated care between service providers often in the one organisation in the hubs and spokes³². The hub acts as a referral site for higher level services, to manage care within a geographic boundary³².

Digital Technology

There are a range of options for accessing mental health care and support through the internet. These online tools have been shown to have potential, in particular as an early intervention tool for people experiencing mild to moderate symptoms. In Australia, resources such as ReachOut.com, eHeadspace, The Black Dog Institute, Lifeline, Kidshelpline, Mindspot, MoodGYM, and eCouch are available to support access to mental health information, support and treatment³³.

E-health, the use of the internet and mobile devices, has proven to be less costly and more practical than face-to-face methods and may be effective in complementing face-to-face services and enhancing quality of care^{34, 35}. Many mental health service users have benefited through e-health delivered cognitive behavioural therapy for reducing anxiety and depression, and participating in online forums for social support and web-based interventions for improving health behaviours³⁴. New methods continue to be developed and research shows that e-health is particularly effective for young people aged 16 to 25 years, who use the internet to connect with peers to discuss issues and as source of trusted information³⁵. Videoconferencing can help to overcome travel difficulties especially in rural areas, and web or telephone-based mental health interventions may help to reduce stigma and fear with participants not being noticed accessing help³⁶.

Computer-assisted therapy is an increasingly popular treatment mode, as it allows evidence based therapies to be translated into computer adaptations and provided under therapist guidance to people with limited access to traditional treatment^{37, 38}. This option provides a standardised treatment delivery and decreases training burden and clinical time³⁷. For computerised therapies to be successful therapists must have access to the necessary technology, and have adequate computer literacy and the computer fluency required to use this as a therapeutic tool³⁷. Research indicates that while access to a computer, computer fluency and attitude towards using computerised therapies were generally not an issue, there were concerns that computerised therapy would inhibit rapport and would not necessarily lead to improved outcomes³⁷. Further research however has shown no difference in client engagement and commitment to treatment between computer-delivered and therapist delivered psychological treatments³⁸.

Mobile phones have the potential to enhance psychological services through mobile applications related to emotional health, online support forums through social media, telephone delivered therapies, self-monitoring of symptoms and tracking of physiological responses^{39, 40}. Mobile technology allows clinician's a greater insight into the client's struggles, provides a further opportunity to tailor treatment, and addresses affordability and access issues³⁹. Studies have shown that self-guided psychological treatment delivered via a mobile phone or computer can lead to greater improvement in symptoms of depression, anxiety and stress, and assists people to understand their mental health symptoms through increased emotional self-awareness⁴⁰⁻⁴². Ethical concerns have been raised however, such as: standards of care when a client indicates a risk to self during a video call, email or text; and privacy and security issues⁴³.

Online therapy is a key component of a stepped care approach to mental health care⁴⁴. Online evidence-based treatment which either replaces or enhances face to face treatment therapies has been shown to be effective in reducing mental health symptoms and can overcome certain barriers

to access, such as those faced by rural communities⁴⁵⁻⁴⁷. Supplementing face-to-face treatment with online interventions allows for greater flexibility to tailor treatment, and allows enhanced treatment approaches such as medication management⁴⁵. It is important to tailor this approach to the individual however, with studies finding a significant interaction effect of age with online treatment, with younger people preferring internet-delivered Interpersonal Psychotherapy as a treatment choice for example, and older participants benefiting more from internet-delivered CBT programs⁴⁸. Beyond the traditional psychological therapy options, web-based interventions focusing on topics related to health risk behaviours such as smoking, alcohol consumption, and physical activity along with mindfulness training have also been found to improve wellbeing⁴⁹⁻⁵¹.

School Based Interventions

Mental health interventions in schools can have a significant impact on mental health symptoms; may prevent mental illness from emerging later in life; and are key to creating a continuum of integrated care^{52, 53}. The evidence base supports interventions which teach students skills in emotional regulation such as problem-solving, cognitive appraisal and acceptance, and mindfulness to cope with everyday stressors and reduce or manage mental health symptoms⁵³⁻⁵⁷. Research indicates that effective cognitive-behavioural interventions in schools are those that involve stakeholder partnerships and incorporate clinical education⁵⁸. Major barriers in implementing evidence-based interventions in schools include poor engagement of all levels of staff, stigma, and funding⁵⁹.

Ultra-Brief Interventions

Evidence is emerging for ‘ultra-brief’ and self-help interventions for mild to moderate symptoms of mental illness that can be delivered in the primary care setting without the need for referral to other mental health professionals⁶⁰. This approach allows patients to discuss concerns with their GP, who they may have a better relationship with, as compared to a counsellor with whom they are unfamiliar and aims to reduce waiting times for treatment⁶⁰. Ultra-brief intervention for the management of mild to moderate mental health symptoms is thought to more cost-effectively achieve improved clinical outcomes than current practice, can improve access to treatment, and is consistent with contemporary primary care stepped care approaches that tailor interventions to symptom severity⁶⁰. Research exploring ultra-brief guided self-help intervention in general practice found that it improved patient wellbeing and was well received by clinicians and patients⁶¹. Research has also shown that brief motivational intervention delivered in mental health in-patient settings is feasible and acceptable for staff and patients, and increased engagement in treatment⁶².

Cognitive-Behavioural Prevention

A cognitive-behavioural prevention (CBP) program has been shown to reduce symptoms of depression in youth, and have sustained benefits in preventing depression symptoms for at-risk youth for more than 6 years following the intervention^{63, 64}. Regardless of the type of intervention, research has shown that it is important for clinicians to be youth friendly, approachable, supportive and non-judgmental to ensure continued engagement when working with young people⁶⁵.

Exercise

Research suggests that exercise may be an effective intervention in reducing depression among adults and young people, with the effects equal to or stronger than the effects of cognitive-behavioural therapy or medication⁶⁶. Exercise may act as a diversion from negative thoughts, increase social contact, lead to higher self-efficacy and wellbeing levels, and lead to feelings of improved mood, achievement, and enjoyment^{50, 66-68}. Research suggests that physical activity interventions can be web-based and should incorporate goal setting tools^{50, 69}.

Framework for Mental Health Promotion

In Australia over the last few decades, numerous national and state plans have prioritised the promotion of mental health and wellbeing, the prevention of mental ill-health and early intervention. Mental illness prevention initiatives focus on reducing risk factors and enhancing protective factors⁷⁰. Importantly these initiatives can focus on the period prior to the onset of illness, during an episode of illness or after an episode of illness⁷⁰.

The promotion of mental health and wellbeing aims to enhance social and emotional wellbeing and quality of life and is relevant for all people, communities and settings. Strategies for mental health promotion should reflect the Ottawa Charter for Health Promotion⁷¹ and comprehensively address: public health policy; supportive environments; strengthening communities to take action; developing personal skills; and reorienting services. The need for these to be evidence-based and applied in the context of population health outcomes is emphasised⁷⁰.

Barriers to Accessing Services

The World Health Organisation reports that the key barriers preventing people from accessing mental health services are lack of available resources, difficulties with transport, financial concerns and general inconvenience in accessing services⁷². Attitudinal barriers have been found to be more commonly experienced by people experiencing mild to moderate mental health disorders, whilst structural barriers were encountered more by people experiencing severe mental health disorders⁷³.

Cost and Transportation

Research shows that the most common barrier to treatment is the cost of care particularly for low socioeconomic populations and Aboriginal people⁷⁴⁻⁷⁷. There is also a cost disincentive for services to take on patients with complex needs as billing is the same whether the patient requires treatment for less complicated or more complex needs⁷⁸. The availability of transport is a barrier to engagement in mental health services particularly for low-income individuals, adolescents and frail older people⁷⁹⁻⁸³.

Stigma and Mental Health Literacy

The combination of negative health beliefs, stigma and low mental health literacy amongst the general population presents a substantial barrier to accessing mental health services⁷³. Attitudinal barriers are often formed by negative consequences of past mental health service treatment and fears associated with treatment itself^{76, 77}. Patients may lack knowledge about their disorder, be experiencing social difficulties and be less likely to seek help due to a fear of disclosure and mistrust of the health care system⁸⁴. Fear of seeking help, or of health professionals, has particularly been found amongst single mothers, children and young people^{80, 85, 86}. Mental health service users in general report a fear of being shamed and socially excluded in association with seeking treatment⁸⁷.

Stigma can be either perceived public stigma or self-stigma, and is a substantial barrier to accessing mental health services, partially explaining the high prevalence of untreated mental illness^{72, 73, 80, 88-92}. Stigma is a particular issue in rural areas where people's lives are more visible, for parents taking children to treatment, and for Aboriginal people^{36, 83, 93-95}.

Common reasons for treatment dropout are perceived ineffectiveness of treatment, past negative experiences with treatment, frequent staff changes and negative staff attitudes^{73, 83, 94, 96, 97}. Low perceived need for treatment is a substantial barrier regardless of population group or illness severity, this stems from a lack of recognition of having a mental health disorder or an attitude of self-reliance, which includes a preference for self-help rather than seeking external help for mental health issues^{72-74, 80, 92, 98-102}. Mental health literacy is an individual's knowledge of: mental illness; how to seek mental health information; the availability and effectiveness of treatment; how to access services; and how to undertake self-help. Low mental health literacy is a substantial barrier for the general population, leading to delays or failure to access treatment. There is evidence that a range of interventions can improve mental health literacy, including whole of community campaigns, Mental Health First Aid training, information websites and interventions in educational settings^{72, 76, 85, 103-108}.

Time

Research has shown that time is an important barrier to accessing services^{99, 109, 110}. Flexible options such as e-health, where people can access online or at-home skills-based interventions, may address time-related barriers, with the added benefit of affordability⁹⁹. Research indicates that women feel too busy to see a counsellor, with issues around child care, transport, work and school time constraints, making it difficult for them to access services. Adolescents and members of the workforce also report being unable to access services due to not being able to take time off work^{111, 112}.

Service Characteristics

Research has shown that lack of trust of institutions and a lack of confidence in mental health professionals, including concerns about confidentiality and the quality of services, is a major barrier for people accessing services^{76, 84, 94, 113}. Qualitative studies show that there are successful short-term interventions for mental health disorders but a lack of ongoing care for patients, for example patients experience difficulty accessing psychiatric services when they are not acutely unwell^{78, 113}. Waiting times, difficulties getting a referral and the high demand for mental health services was a recurring theme identified through the research as structural barriers to accessing help^{76, 78, 96, 114}.

There is a lack of integration and collaboration between mental health services which makes it difficult for people experiencing mental illness to navigate the fragmented mental health services¹¹⁵. Research indicates that physicians are less likely to refer patients to mental health services if the process is burdensome, with structural barriers encountered by referring physicians including problems with managed care, lack of trained service providers and poor distribution of mental health specialists^{78, 116}. Mental health education for primary care providers may contribute to improving service integration.

Geographical accessibility has been identified as a barrier to accessing mental health services, particularly in rural areas where substance misuse and mental health services are generally very limited^{83, 117}. A survey of psychiatry services in New Zealand and Australia found services to be inequitably distributed being primarily based in capital cities with limited coverage in regional and rural areas⁸³. Accessing available, appropriate services is a barrier for older people seeking treatment⁸³. There is a lack of specialised services to treat individuals with co-occurring mental health and substance misuse disorders. The clinical demands of primary care providers contribute to difficulty addressing multiple co-morbidities¹¹⁸.

Barriers for Males

Young men are less likely to seek help than women and this trajectory of disengagement with healthcare services, common amongst young men, often continues throughout early and middle adulthood^{72, 85, 119}. It has been suggested that this may be due to males feeling more stigma or shame around seeking help^{72, 120}. The rise in male suicides has been an important factor in highlighting the significance of youth mental health and efforts need to be made to ensure mental health services cater to young men as well as women^{72, 119}. Aboriginal males are also less likely than females to seek help from mental health services and are more likely to contact services when they are acutely unwell^{95, 121}.

Children and Youth

Long wait lists and expensive treatment costs are leading barriers to mental health care for children¹²². Children's reluctance to engage in treatment is an important barrier, where the child refuses to be taken to see a mental health professional or is uncooperative once there^{94, 122}. Promoting parent engagement in the treatment of children's mental health disorders is important for treatment attendance, treatment adherence, active participation in treatment and treatment compliance¹²³. Parental stress is a key barrier to children's treatment participation and includes arranging time to schedule sessions, cost and service accessibility¹¹².

Another common concern is the lack of mental health professional staff to treat children and the perceived shift to prescribing medication to address children's needs, rather than non-pharmacologic approaches⁹⁴. Parents and caregivers have expressed distrust of mental health providers and the mental health system and the absence of a trusting relationship with health professionals was reported as a barrier to accessing treatment for their child⁹⁴. Caregivers also have a fear of children being taken away from them or institutionalised if their children see a mental health professional⁹⁴.

Personal barriers such as embarrassment, and hoping the problem would go away, were considered more problematic to young people with depression than logistical barriers such as transport, difficulties in obtaining an appointment and cost of services¹²⁴. General practitioners are uniquely positioned as gatekeepers for young people who have established relationships with them because they may be more willing to talk to a physician about psychological distress than with a counsellor^{80, 125, 126}. Young people have confidentiality concerns when visiting school-based counsellors and many are unable to identify a trustworthy adult to confide in^{72, 127}. Some young people are more likely to seek help from informal sources such as family and friends⁸⁸. Trust and confidentiality has been identified as a barrier for young people accessing mental health services and includes concerns about breach of confidentiality about the health service provider and fear of stigma and embarrassment should family and peers find out that the young person had sought help⁸⁰.

Young people who identify as being attracted to the same sex or both sexes experience additional barriers to accessing help for mental health concerns. This represents a significant problem as suicidal ideation has been found to be higher among this group⁷². Concerns about confidentiality and privacy may deter young people in this minority group from discussing their sexuality with health care providers, which could be a barrier to accessing health services¹²⁸. Research has shown that among college students at risk for suicide, a lack of financial resources and a lack of time are the main challenges to accessing mental health services⁷². Interviews of parents of adolescents who had died by suicide revealed that lack of transport, affordability of services and uncertainty about where to seek treatment had all been barriers to care for their child⁷².

Rural Communities

Stigma around mental illness is a key barrier to accessing mental health care for people in rural communities owing to the strong social support networks, conservative values and a general lack of privacy⁹³. Access to effective mental health treatment in rural areas is limited, with barriers including provider shortages, transportation difficulties, negative beliefs about the appropriateness of treatment and the stigma surrounding help-seeking⁹³.

Aboriginal and Torres Strait Islander People

Although Aboriginal people access mental health services at a higher rate than the non-Indigenous population, there is likely to be many Aboriginal people who need services but do not access them, with underutilisation largely attributed to cultural inappropriateness¹²¹. Certain practices can cause distress to Aboriginal clients, such as maintaining direct eye contact during conversations and seeing health professionals in a closed environment, and often patients do not understand clinicians¹²¹. The lack of Aboriginal staff in mental health services compounds the barriers to accessing treatment, with greater involvement from Aboriginal communities in services significantly improving initiation and engagement to services¹²¹.

CALD Populations

Utilisation of mental health services is low among non-English speaking people, with vulnerable populations reporting many services as unhelpful, whilst racial discrimination, the lack of consideration of ethnicity and language barriers also obstruct the provision of mental health care^{115, 129, 130}.

Needs Assessment Objectives

This needs assessment aims to identify gaps and opportunities for the efficient commissioning and targeting of primary mental health services according to the following key objectives:

- improve targeting of psychological interventions to most appropriately support people with mild mental illness at the local level through the development and/or commissioning of low intensity mental health services;
- support region-specific, cross sectoral approaches to early intervention for children and young people with, or at risk of developing, mental illness (including those with severe mental illness who are being managed in primary care) and implementation of an equitable and integrated approach to primary mental health services for this population group;
- address service gaps in the provision of psychological therapies for people in under-served and/or hard to reach populations, including rural and remote populations, making optimal use of the available service infrastructure and workforce;
- support clinical care coordination for people with severe and complex mental illness who are being managed in primary care, including through the phased implementation of primary mental health care packages and the use of mental health nurses;
- encourage and promote a regional approach to suicide prevention, including community based activities and liaising with Local Health Districts (LHDs) and other providers to ensure appropriate follow-up and support arrangements are in place at a regional level for individuals after a suicide attempt and for other people at high risk of suicide; and
- enhance and better integrate Aboriginal and Torres Strait Islander mental health services at a local level facilitating a joined up approach with other closely connected services including social and emotional wellbeing, suicide prevention and alcohol and other drug services.

Ultimately this needs assessment will inform the development of regional mental health and suicide prevention plans to guide and support an improved and integrated mental health system. It will also support decisions regarding targeting of resources by HNECC in mental health and suicide prevention.

Our Approach for Assessing Needs

For this needs assessment HNECC undertook the analysis of available quantitative data for the region, and completed the literature review of service models and barriers to accessing mental health care. An independent consultant undertook the qualitative component of the needs assessment including interviewing and surveying key stakeholders across the region. Data triangulation and the development of the report was a joint undertaking between HNECC and the independent consultant.

Quantitative Data

National, state and local quantitative information was gathered from various publicly available sources including: Australian Institute of Health and Welfare (AIHW), Australian Bureau of Statistics (ABS), Public Health Information Development Unit (PHIDU), Centre for Epidemiology and Evidence, Australian Indigenous HealthInfoNet and the Commonwealth Department of Health. Internally held local level general practice data, collected using the PenCAT tool, was also used. This information was used to build a profile of the HNECC PHN region, including: demographics; mental health and suicide status and contributing factors; and mental health service usage, access and availability.

Literature reviews were conducted to explore and identify models of care and barriers to accessing services for mental health. PsychInfo, Cochrane, PubMed and Science Direct databases were used to source full text peer reviewed journal articles published between 2010 and 2017. Over 4,000 articles were gathered from both searches, with over 100 relevant articles identified and used to inform this report.

Qualitative Data

Three separate methods were used for the qualitative component of the needs assessment: key stakeholder interviews; an online forum; and surveys for completion by key stakeholders.

Key Stakeholder Interviews

Across all LGAs in the HNECC PHN region, interviews were conducted with key stakeholders including: consumers, carers and community members; service providers from mental health and other community services; and GPs and other medical specialists.

Interview Sample

The sample for the interviews was derived from multiple sources: those who had registered with HNECC's PeopleBank (an online communication and consultation tool); service providers on HNECC's database; and HNECC's Clinical Councils and Community Advisory Committees. A snowballing technique was used to identify additional stakeholders in each local government area (LGA). For this snowballing process, at first contact stakeholders were asked about their willingness to participate in an interview and to provide details of other colleagues or community members who may be interested in contributing to the needs assessment. The names of these people were added to the consultation database and were then contacted, informed about the needs assessment and asked to provide names of additional contacts. This process was repeated until no new names were provided. Key stakeholders were also asked to inform colleagues, clients and community members about the consultations. Media releases about the needs assessment were distributed in each LGA.

A time for an open interview was allocated in each LGA, which was open to any community members or service providers to attend. Separate times were also allocated for key stakeholders as required. Stakeholders were emailed by HNECC to inform them of the dates and times for interviews with

options to contact the consultancy team for interviews at individual times. Prior to attendance in each LGA a reminder email was sent to all stakeholders about the times and dates for the interviews. Interviews were face-to-face or by telephone if participants were unavailable on the day. One-on-one and group interviews were conducted depending on the preference of stakeholders.

Interview Questions

The interview questions were developed to reflect the needs assessment objectives, and the evidence base for mental health and suicide prevention needs and associated factors. Interview questions covered domains including: mental health and suicide needs; factors associated with mental health and suicide; service access and gaps; and strategies for improving mental health and suicide prevention in communities. Questions were open ended and included prompts for responses where necessary.

Thematic Analysis

Interviews were recorded and information about each stakeholder was collected. A modified thematic analysis was applied to identify common themes across communities and the entire HNECC PHN region. Key themes related to needs and associated factors, service gaps and strategies for improving outcomes related to mental health and suicide were identified.

Participants in Key Stakeholder Interviews

Participants in key stakeholder interviews by gender and location are shown in Figure 8, with 294 stakeholders participating in the interviews across 22 LGAs.

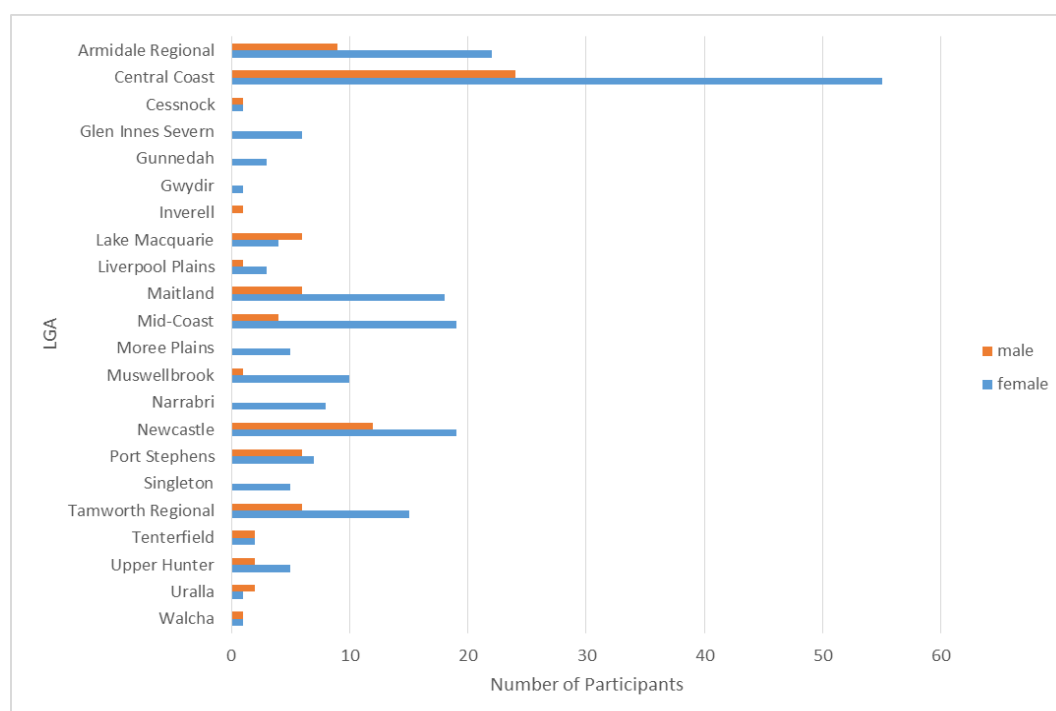


Figure 8: Participants in key stakeholder interviews by location and gender

There were no participants from the Dungog LGA. The majority (71%) of the participants were female and six of the LGAs had no males participating in the interviews. Stakeholders were interviewed across all LGAs with the greatest number of participants from the Central Coast LGA (n=79).

The category of each participant was recorded at the time of interview. Figure 9 shows the number of participants in each of the key stakeholder categories.

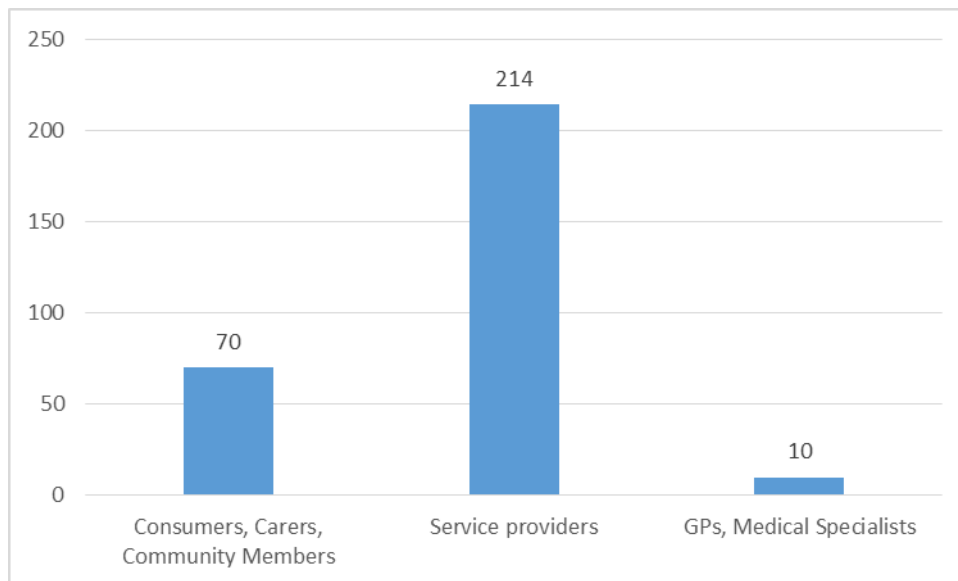


Figure 9: Participants in key stakeholder interviews by category

The majority (73%) of key stakeholders were service providers, with 24% being consumers, carers and community members, of which 28 participants were consumers, ten were carers for someone experiencing a mental illness and the remaining 32 were community members with an interest in mental health.

Online Forum

Further opportunity for contributing to the needs assessment was provided through an online forum hosted by HNECC's PeopleBank, resulting in three contributions that were analysed in line with the key stakeholder interviews.

Key Stakeholder Survey

Separate surveys were provided for the three categories of stakeholders: consumers, carers, and community members; service providers; and GPs.

Survey Questions

The survey items, tailored to each stakeholder category, were guided by the needs assessment objectives, evidence regarding mental health and suicide needs and by the thematic analysis of initial interviews with key stakeholders. The survey questions were grouped into domains related to mental health and suicide prevention needs and associated factors, service access and gaps in services. Sociodemographic items were included to enable a description of each sample. Items were tick boxes or 5 point Likert scale questions with opportunity in each domain to provide additional feedback. The surveys were pilot tested to check for logic and to assess completion time, with amendments made before the survey was published online through HNECC's PeopleBank.

Survey Sample

For the consumer, carer, community member and service provider surveys, a link was sent to all stakeholders on the original key stakeholder consultation database, and to interview participants. People registered on HNECC's Peoplebank were also offered the opportunity to complete the survey. HNECC's GP database was used to email the survey link to GPs. Surveys were open for three and a half weeks and participants were sent two reminder emails about completing the survey.

Survey Analysis

Simple statistical analysis of the survey results was undertaken for each stakeholder group and where relevant, comparisons were made across stakeholder groups.

Survey Participants

Participation in the surveys is shown for consumers, carers and community members and for service providers. Ten GPs completed the GP specific survey, which was an insufficient number to provide meaningful analysis. However, seven participants in the service provider survey identified as being a GP or medical specialist and were included in the data analysis for this survey.

Consumers, carers and community member survey

For consumers, carers and community members, participation is shown by age and gender and by LGA (Figure 10). A total of 301 participants completed the survey. As shown in Figure 10, the majority (80%) of participants were female at birth with 44% of males and females in the 35-54 years age categories. Of all participants 4% identified as being Aboriginal, Torres Strait Islander or Aboriginal and Torres Strait Islander. The majority of participants (97%) identified as being straight or heterosexual with 3% identifying as being lesbian, gay or homosexual, bisexual, queer or a different identity.

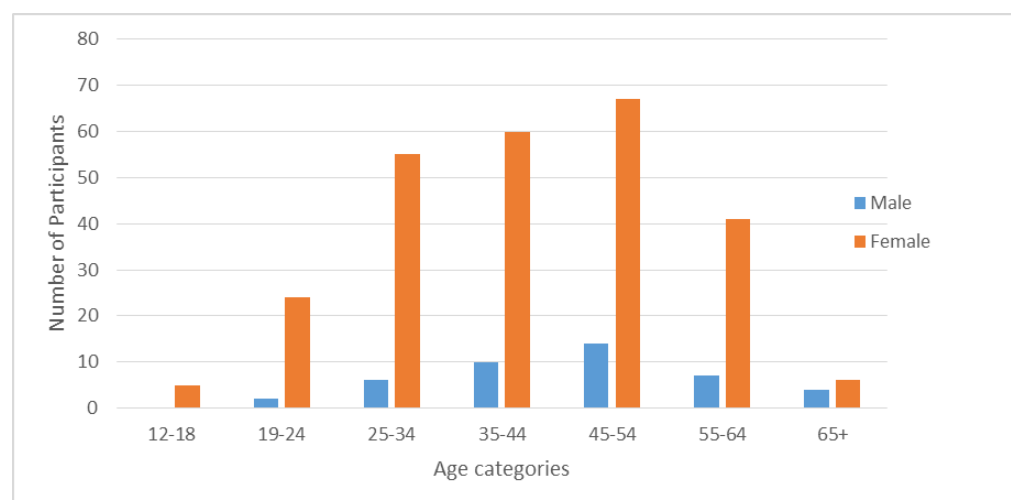


Figure 10: Consumers, carers and community members survey participation by age and gender

The LGA in which the consumers, carers and community members participating in this survey lived is shown in Figure 11. The majority were from the Muswellbrook and Upper Hunter LGAs, accounting for 68% of participants. There was strong community advocacy in these two LGAs to participate in the needs assessment. There were five LGAs where there was no participation in this survey by consumers, carers and community members including Gunnedah, Liverpool Plains, Moree, Tenterfield and Walcha.

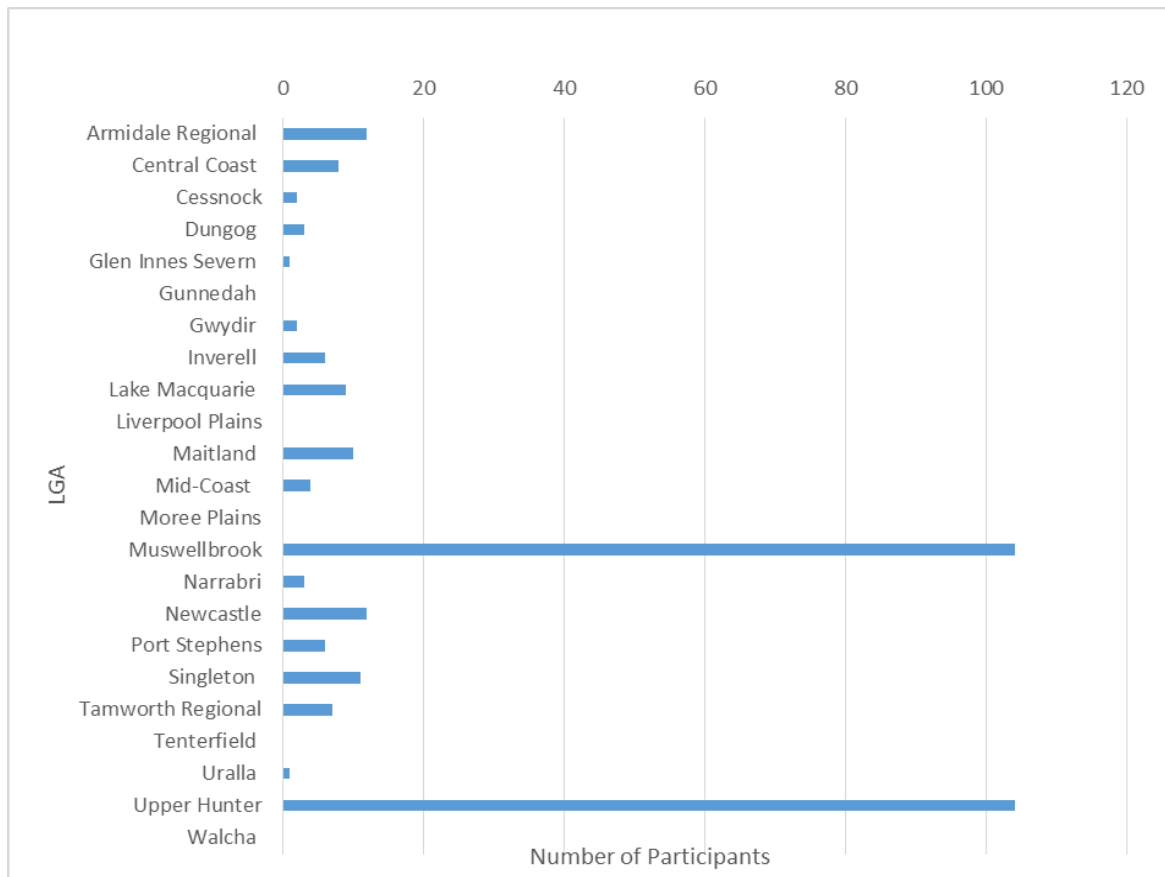


Figure 11: Consumers, carers and community member survey participation by location

Participants identified whether they were: a consumer, client, or patient of mental health services; a carer of someone who had accessed or been referred to mental health services; friend or relative of someone who had accessed or been referred to mental health services; or a community member with an interest in mental health (Figure 12). Of all participants, the majority were either consumers, clients or patients of mental health services (34%) or community members with an interest in mental health (35%).

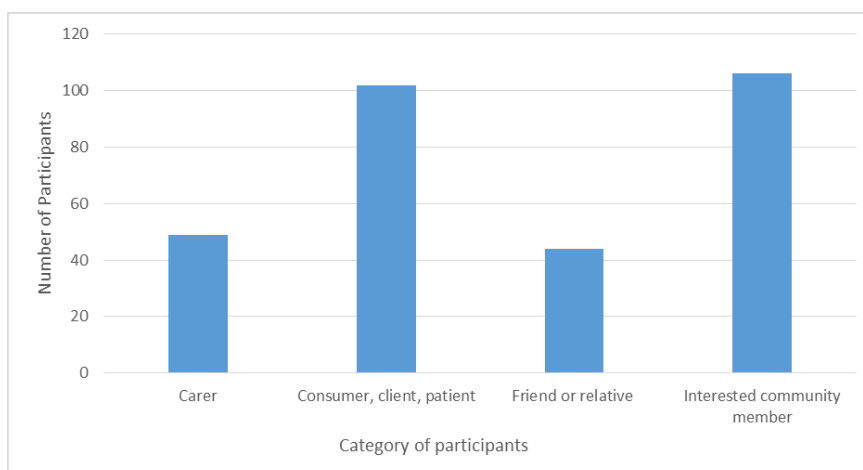


Figure 12: Consumers, carers and community members survey participation by category

Of the participants who identified as being a consumer, client or patient of mental health services, 90% (n=102) had received care in the last 12 months from a mental health service and 65% had

received care from more than one service. Of the 102, 28% had received mental health care from three or more services. The most commonly reported service used by consumers, clients or patients was a GP. The majority (76%) of consumers, clients or patients of mental health services received care in their local LGA only.

Service provider survey

For the service provider survey, there were 179 participants, of which nine identified as being Aboriginal, Torres Strait Islander or Aboriginal and Torres Strait Islander. The main service provision roles of participants in the service provider survey are shown in Figure 13. Most of the participants were either psychologists (n=36) or welfare or support workers (n=30). Roles identified in the 'other' category included police, dieticians, teachers in student wellbeing, and liaison officers in education.

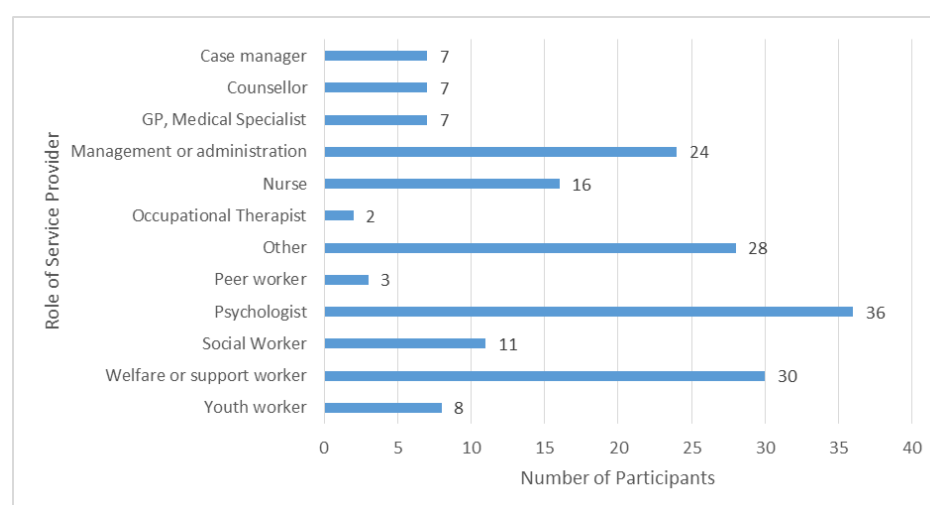


Figure 13: Main Service Provision Role –Service Provider Survey

As shown in Figure 14, participants in the service provider survey provided services across all LGAs in the HNECC PHN region. Of all service providers, 57% provided services in their local LGA only, 9% provided services in two LGAs and 11% provided services in five or more LGAs.

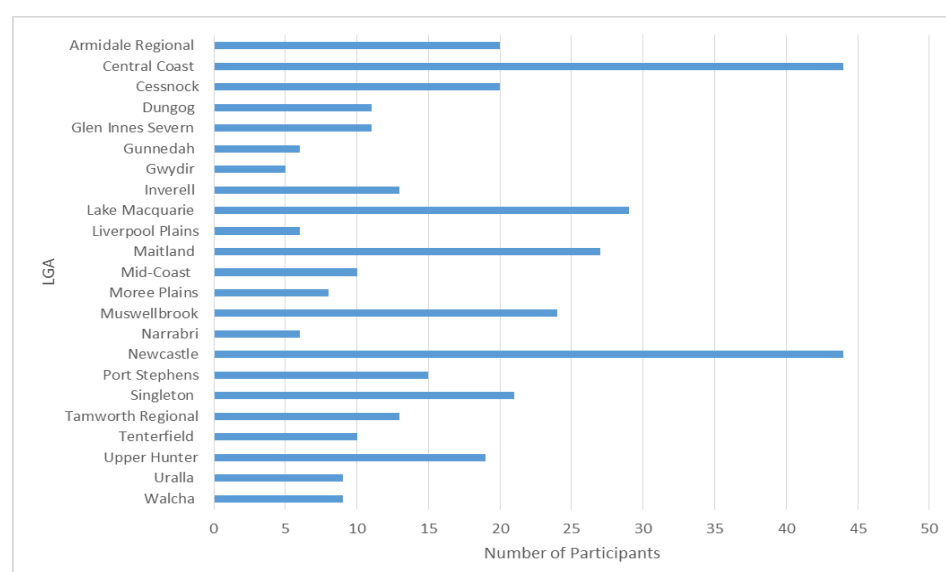


Figure 14: Service Provider Survey, Participation by Location where Services were Provided

Data Triangulation and Validation

Processes of triangulation of data resulting from the quantitative and qualitative methods followed by a validation process were used to identify priorities and confirm key findings.

Data Triangulation

The methods used multiple data sources to determine needs across communities with triangulation of these data used to test the consistency of findings and to determine variations. The triangulation process involved members of the HNECC and the consultancy team reviewing and comparing the results of the data analysis from the quantitative and qualitative methods. High priority needs identified by the quantitative data analysis were compared with those from the qualitative data results in each of the domains. Where differences in needs were identified, the data were reviewed and where variation remained these were reported as conflicting results.

The results of the data triangulation contributed to the identification of priority needs for mental health and for suicide prevention in the HNECC PHN region.

Validation of Needs

An additional step in the methods for the needs assessment involved validation of the priority needs for mental health and for suicide prevention. The results of the data triangulation process identified priorities in relation to six key domains:

- mental health
- suicide prevention
- mental health services
- suicide prevention services
- barriers to service access
- workforce

The triangulation of data guided the identification of specific needs within each of these domains. These specific needs formed the basis of an additional survey which aimed to determine if the identified priority needs aligned to the views of the members of HNECC's Clinical Councils and Community Advisory Committees.

Validation Survey Sample

Members of HNECC's Clinical Councils and Community Advisory Committees were asked to complete the online validation survey, with participants indicating their level of agreement with each of the identified needs. Twenty-four members of these 6 Councils and Committees completed the validation survey, with Figure 15 showing the participation.

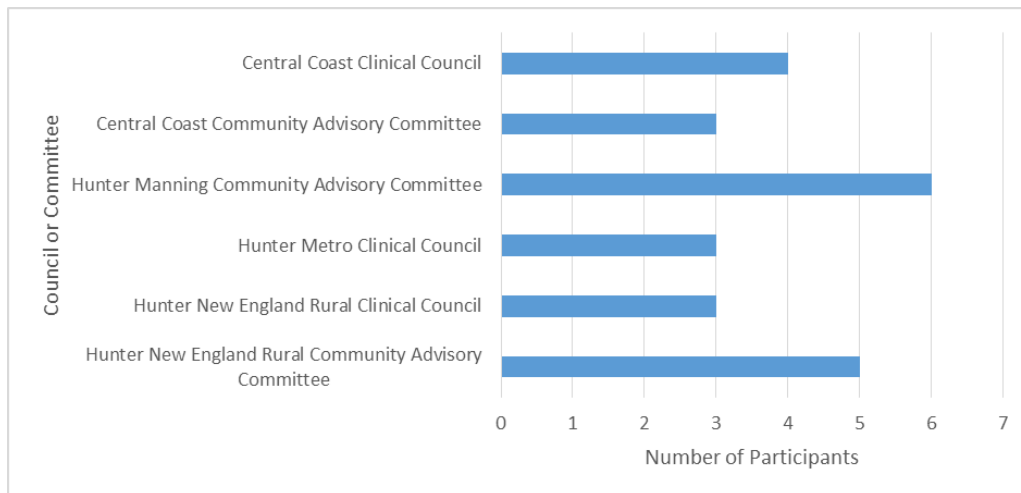


Figure 15: Participation in the Validation Survey, by Council or Committee

HNECC PHN Region

Geography

The Hunter New England and Central Coast (HNECC) PHN is the second largest PHN in New South Wales, covering 133,812 km², reaching from just north of Sydney, across the north west of NSW, to the Queensland border. It incorporates 23 LGAs (Figure 16) and is serviced by Hunter New England Local Health District (HNE LHD) and Central Coast Local Health District (CC LHD). According to the Australian Statistical Geography Standard – Remoteness Structure, and as shown in Table 2 the HNECC PHN region consists of major cities, inner regional, outer regional and a small proportion of remote areas.

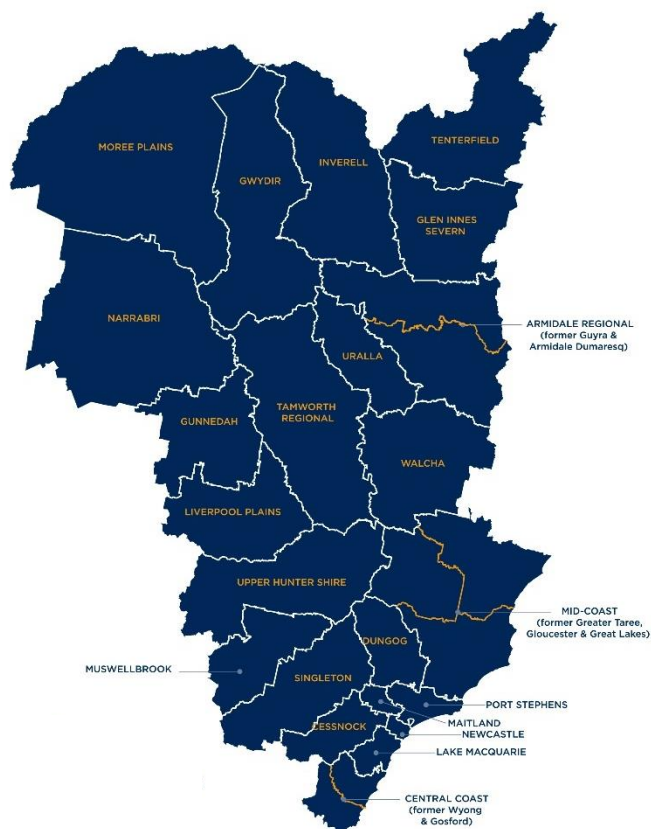


Figure 16: Hunter New England and Central Coast (HNECC) PHN Region

Note: Prior to May 2016, the HNECC PHN region covered 27 LGAs, however Wyong and Gosford LGAs were then merged to create Central Coast LGA; Armidale Dumaresq and Guyra LGAs were merged into Armidale Regional LGA; and Gloucester, Greater Taree and Great Lakes LGAs were merged into Mid-Coast LGA. This document provides information based on the current 23 LGAs where possible, but often publicly available data are only available for the historical 27 LGAs.

Table 2: Remoteness Areas ratio by LGA, HNECC PHN region, 2001¹³¹.

	Armidale Dumaresq	Cessnock	Dungog	Glen Innes Severn	Gloucester	Gosford	Great Lakes	Greater Taree	Gunnedah	Guyra	Gwydir	Inverell	Lake Macquarie	Liverpool Plains	Maitland	Moree Plains	Muswellbrook	Narrabri	Newcastle	Port Stephens	Singleton	Tamworth Regional	Tenterfield - part a	Upper Hunter Shire	Uralla	Walcha	Wyong
Major city		0.3				1							1		1				1	0.3							1
Inner regional	0.9	0.7	0.9		0.8		1	1						0.2			1			0.7	1	0.8		0.6			
Outer Regional	0.1		0.1	1	0.2				1	1	1	1		0.8		0.9		0.9				0.2	1	0.4	1	1	
Remote																0.1		0.1									

Estimated Resident Population (ERP)

In 2015, the Estimated Resident Population (ERP) for the HNECC PHN region was 1,243,756 people. The LGAs in the HNECC PHN region with the highest ERP were Lake Macquarie (204,166), Gosford (173,138), Newcastle (161,225) and Wyong (159,981), and those with the lowest were Walcha (3,064), Guyra (4,551), Gwydir (5,068) and Gloucester (5,160)³.

0-14 years

In 2015, the proportion of people aged 0-14 years in the HNECC PHN region was 18.8% (NSW 18.7%; Australia 18.8%), this proportion was highest in Narrabri (22%), Moree Plains (22%) and Muswellbrook (21.7%) LGAs, and lowest in Great Lakes (14.7%), Tenterfield (16.5%) and Newcastle (16.8%)³.

15-24 years

In 2015, the proportion of people aged 15-24 years in the HNECC PHN region was 12.7% (NSW 13%; Australia 13.2%), this proportion was highest in Armidale Dumaresq (20.6%), Newcastle (14.8%) and Singleton (14.5%) LGAs, and lowest in Great Lakes (8.1%), Gwydir (8.2%) and Gloucester (8.3%)³.

25-44 years

In 2015, the proportion of people aged 25-44 years in the HNECC PHN region was 24% (NSW 28%; Australia 28.3%), this proportion was highest in Newcastle (28.8%), Muswellbrook (28.7%) and Singleton (28.3%) LGAs, and lowest in Great Lakes (15.6%), Gloucester (17.1%) and Tenterfield (18%)³.

45-64 years

In 2015, the proportion of people aged 45-64 years in the HNECC PHN region was 25.6% (NSW 24.6%; Australia 24.6%), this proportion was highest in Tenterfield (30.8%), Dungog (30.3%) and Uralla (30.2%) LGAs, and lowest in Armidale Dumaresq (23.4%), Muswellbrook (23.7%) and Newcastle (23.9%)³.

65+ years

In 2015, the proportion of people aged 65 years+ in the HNECC PHN region was 18.9% (NSW 15.7%; Australia 15%), this proportion was highest in Great Lakes (33.5%), Gloucester (28.4%) and Tenterfield (26.3%) LGAs, and lowest in Singleton (11.3%), Muswellbrook (11.5%) and Maitland (13.4%)³.

Aboriginal and Torres Strait Islander Population

In 2015, the Aboriginal and Torres Strait Islander ERP for the HNECC PHN region was 63,900 or 5.1%, compared to 3.1% nationally³. Figure 17 shows the Aboriginal population as a proportion of the total population by LGA, with the highest proportion of Aboriginal people living in the northern parts of the region, including: Moree Plains; Gunnedah; Narrabri; and Liverpool Plains. The largest numbers of Aboriginal people however, are found in the metropolitan areas and regional centres, including: Lake Macquarie; Wyong; Tamworth; and Newcastle LGAs³. The Aboriginal population has a considerably younger age profile than the non-Indigenous population, with 57.4% of the Aboriginal population younger than 24 years of age, compared to 30.9% of the non-Indigenous population¹. This is attributed to higher rates of fertility, and the fact that¹⁴ life expectancy for the Aboriginal population is around 10 years less than the non-Indigenous population, primarily due to a higher prevalence of health risk factors and chronic disease^{132, 133}.

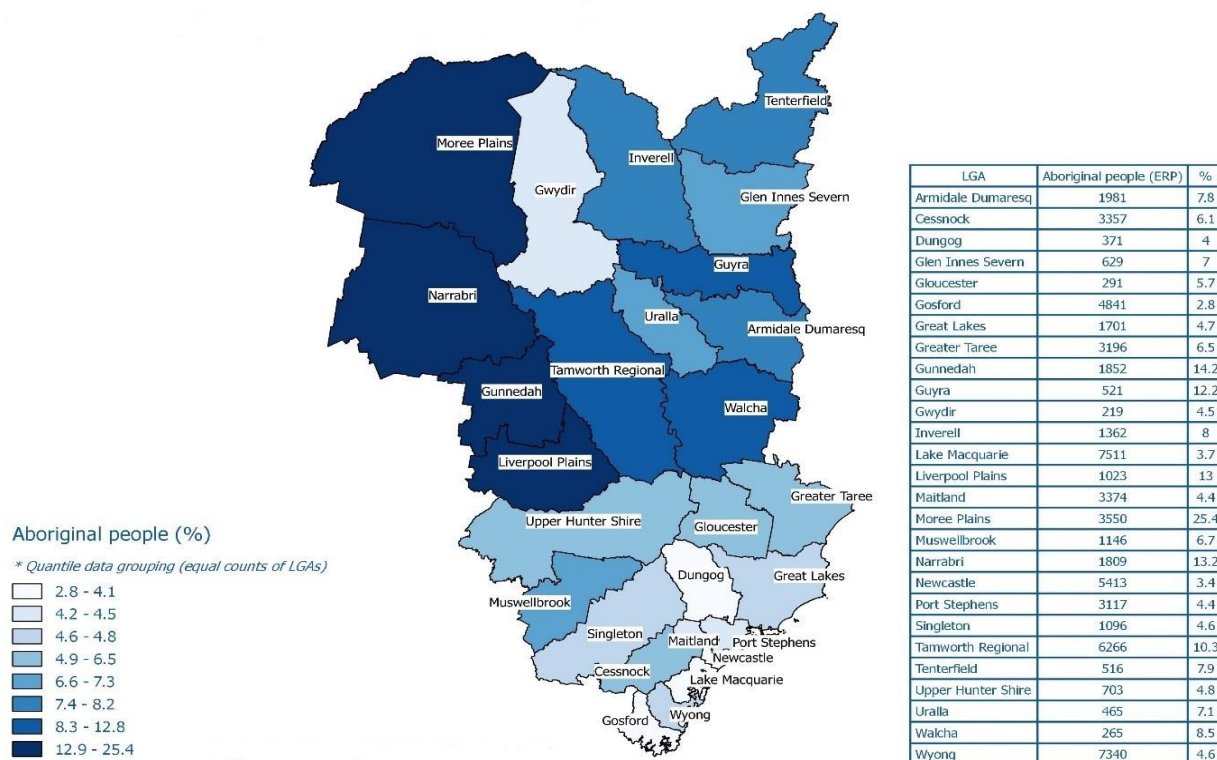


Figure 17: Aboriginal population as a percentage of the total population (2015 ERP), by LGA, HNECC PHN region³.

Culturally and Linguistically Diverse (CALD) Population

In 2011, 84.4% of residents of the HNECC PHN region were born in Australia, which was higher than the average for NSW (68.6%) and Australia (69.8%). Those who were born in predominantly non-English speaking (NES) countries account for 4.5% of the HNECC PHN population, much lower than the proportion for NSW (18.6%) and Australia (15.7%). LGAs with the highest proportions of NES residents were Newcastle (7.8%), Armidale Dumaresq (6.9%) and Gosford (5.9%), and the lowest were Guyra (1.3%), Gwydir (1.3%) and Dungog (1.4%). People born overseas reporting poor proficiency in English accounted for 0.4% of the HNECC PHN region's population compared to 3.4% for NSW and 2.6% for Australia³. Table 3 shows the top 10 countries of origin or birthplace of people from NES countries residing within the HNECC PHN region in 2011.

Table 3: Top 10 country of origin (birthplace) for people from NES countries, HNECC PHN region, 2011³.

Country	Number
Germany	4,401
Philippines	3,747
China*	3,004
India	2,679
Italy	2,513
Malaysia	1,546
Greece	1,060
Sri Lanka	657
Vietnam	635
Lebanon	324

*excluding special administrative regions of Hong Kong & Macau, and Taiwan

Population Projections

Between 2011 and 2036, the HNECC PHN region is expected to experience a 23% growth in population to over 1.4 million people. As can be seen in Table 4, whilst some LGAs are expected to grow substantially, such as Maitland, Port Stephens and Cessnock, others will experience a decline, including Gwydir, Moree Plains, Walcha, Glen Innes Severn and Narrabri¹³⁴.

Table 4: Projected Growth by LGA, 2011-2036, HNECC PHN Region.

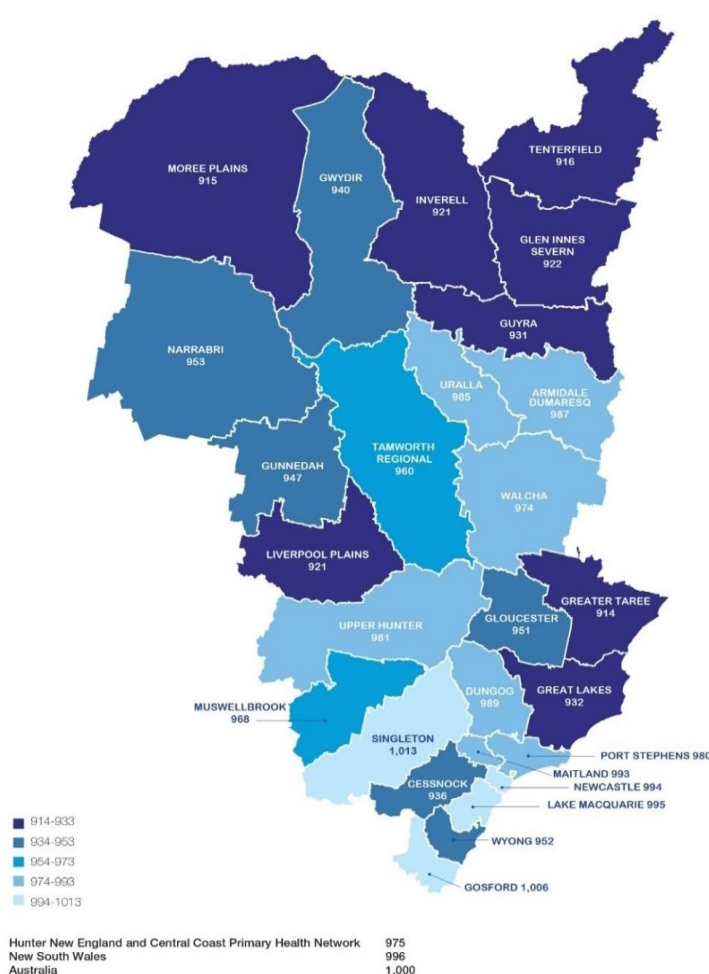
LGA	Projected Growth 2011-2036	LGA	Projected Growth 2011-2036
Maitland	50%	Gunnedah	8.7%
Port Stephens	37.9%	Mid-Coast	8.4%
Cessnock	32%	Uralla	5.1%
Armidale Regional	30.1%	Dungog	4.9%
Central Coast	28.6%	Tenterfield	2.3%
Newcastle	27.5%	Liverpool Plains	1.8%
Muswellbrook	24.4%	Narrabri	-7.6%
Tamworth Regional	22%	Glen Innes Severn	-11.8%
Singleton	21.6%	Walcha	-16.2%
Inverell	16.4%	Moree Plains	-20.9%
Lake Macquarie	15.2%	Gwydir	-21.8%
Upper Hunter Shire	13.9%	HNECC PHN Region	23%

Social Determinants of Health

The social determinants of health play a vital role in determining the physical and mental health of individuals and communities. An individual's mental health and many common mental illnesses are influenced by various social, economic, and physical environments operating at different stages of life¹³⁵. As well, risk factors for many common mental illnesses are associated with social inequalities, with greater inequality associated with higher risk of illness¹³⁵.

Socio-Economic Indexes for Areas (SEIFA)

There is strong evidence from Australia and other developed countries that low socioeconomic status has a direct correlation with poor health, higher incidence of risky health behaviours and reduction in access to health care services^{136, 137}. The Socio-Economic Indexes for Areas (SEIFA) is a set of measures of relative socioeconomic disadvantage and advantage, calculated using variables such as household income, education, employment, occupation and housing for varying levels of geography¹³⁸. The SEIFA Index of Relative Socio-economic Disadvantage (IRSD) has a base of 1,000 for Australia, where scores above 1,000 indicate relative lack of disadvantage and those below 1,000 indicate relatively greater disadvantage¹³⁹.



LGA	IRSD
Armidale Dumaresq	987
Cessnock	936
Glen Innes Severn	922
Gloucester	951
Gosford	1,006
Great Lakes	932
Greater Taree	914
Gunnedah	947
Guyra	931
Gwydir	940
Inverell	921
Lake Macquarie	995
Liverpool Plains	921
Maitland	993
Moree Plains	915
Muswellbrook	968
Narrabri	953
Newcastle	994
Port Stephens	980
Singleton	1,013
Tamworth Regional	960
Tenterfield	915
Upper Hunter Shire	981
Uralla	985
Walcha	974
Wyang	952

Figure 18: SEIFA Index of Socio-Economic Disadvantage by LGA, HNECC PHN region, 2011¹⁴⁰.

As can be seen in Figure 18, LGAs with the greatest level of relative disadvantage in the HNECC PHN region were Greater Taree (914), Moree Plains (915) and Tenterfield (915), which were much lower than the average for New South Wales (996) and Australia (1,000). LGAs with the lowest level of relative disadvantage were Singleton (1,013), Gosford (1,006) and Lake Macquarie (995)¹⁴⁰.

Indigenous Relative Socioeconomic Outcomes Index (IRSEO)

The SEIFA indices do not adequately reflect the distribution of socioeconomic outcomes for the Aboriginal population¹⁴¹. The Indigenous Relative Socioeconomic Outcomes (IRSEO) index is a specific indicator calculated separately for the Aboriginal population in each Indigenous Region and Indigenous Area. The Index ranges from 1 to 100, where 1 represents the most relatively advantaged and 100 represents the most relatively disadvantaged¹⁴¹.

Figure 19 presents IRSEO index values by Indigenous area for the HNECC PHN region. Consistent with national results, Aboriginal populations in city areas and large regional towns have better socioeconomic outcomes than their rural and remote counterparts. Indigenous Areas with the highest IRSEO index in the HNECC PHN region are Tenterfield-Jubullum Village (83), Moree Plains (82), and Guyra-Tingha (80), which are considerably greater than the NSW (41) and Australian indices (46). The lowest IRSEO index Indigenous Areas are Newcastle (15), Gosford (16), and Upper Hunter (19)¹⁴².

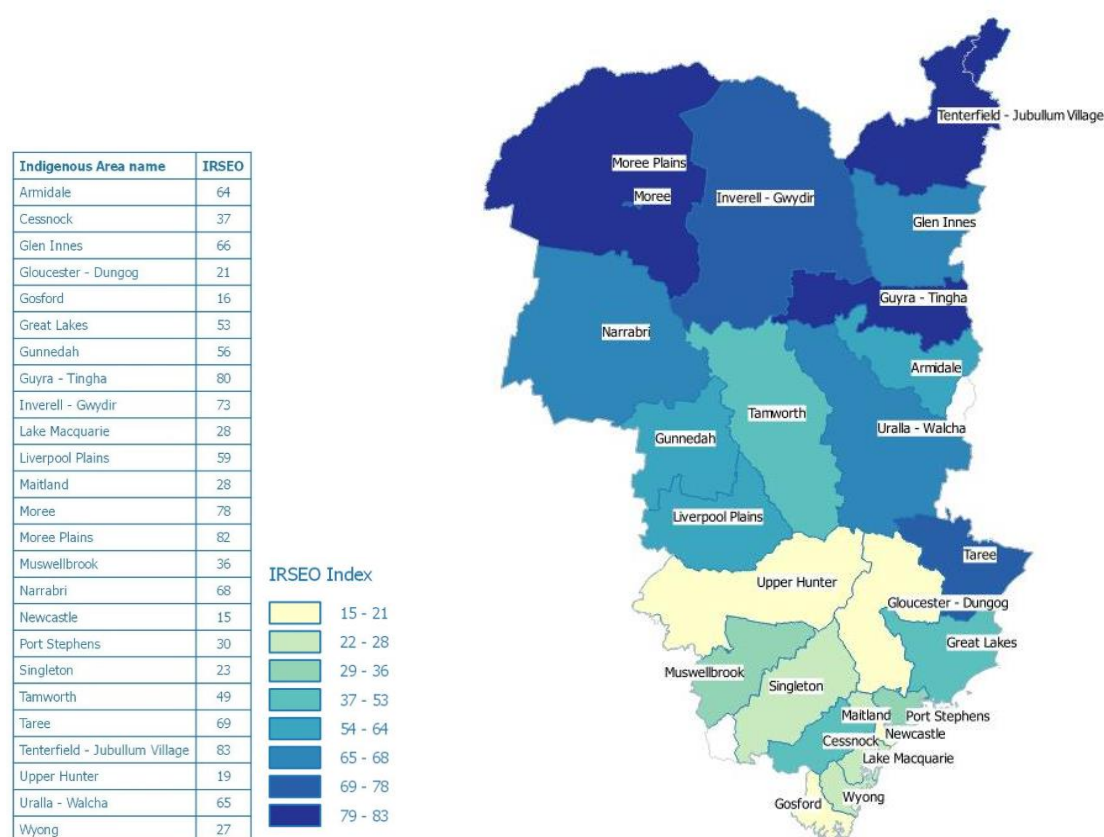


Figure 19: Indigenous Relative Socioeconomic Outcomes Index (IRSEO), by Indigenous Area HNECC PHN region, 2011¹⁴².

Education

Greater levels of education are linked to improved health outcomes through increased health literacy, and enhanced income and employment prospects leading to higher socioeconomic status¹⁴³.

In 2011, in the HNECC PHN region, the rate of people who left school at year 10 or below, or did not go to school (47.3 per 100), was higher than the Australian (34.3 per 100) and NSW (37.6 per 100) rates, ranking the HNECC PHN with the third highest rate amongst all PHNs across Australia. LGAs with the highest rates were Cessnock (57.3 per 100), Muswellbrook (55.4 per 100) and Singleton (54.2 per 100), and the lowest were Armidale Dumaresq (34.3 per 100), Gosford (40.3 per 100) and Newcastle (41.7 per 100)³.

In 2011, in the HNECC PHN region, the percentage of 16 year olds participating in full-time secondary education (77.3%) was lower than the Australian (79.1%) and NSW (80.1%) percentages. The LGAs with the least participation in secondary school were Moree Plains (61.1%), Narrabri (68%) and Walcha (68.8%), and those with the greatest were Uralla (87.3%), Glen Innes Severn (84.3%) and Gosford (81.8%)³.

In 2016, in the HNECC PHN region, the percentage of school leavers participating in higher education (18.6%) was lower than the Australian (33.6%) and NSW (33.1%) percentages, ranking the HNECC PHN region among the lowest (25 out of 31) of all PHNs across Australia. The LGAs with the greatest participation in higher education were Gosford (26.6%), Newcastle (23.5%) and Lake Macquarie (22.3%), and the lowest were Gunnedah (6.6%), Moree Plains (8%) and Uralla (16.4%)³.

Aboriginal and Torres Strait Islander Population

In 2011, the percentage of Aboriginal people participating in full-time secondary school at 16 years of age in NSW was 67.6%. In the HNECC PHN region, LGAs with the highest rates of participation were Guyra (100%), Muswellbrook (90.9%), Gosford (77.3%) and Narrabri (77.3%), and the lowest were Liverpool Plains (47.8%), Moree Plains (48.5%) and Newcastle (52.3%)¹⁴⁴.

Culturally and Linguistically Diverse (CALD) Population

As shown in Table 5, in 2011, in SA4s across the HNECC PHN region, the proportion of young people of CALD backgrounds aged 12-17 years and 18-24 years enrolled in full or part time education was consistently higher than their Australian born peers¹⁴⁵.

Table 5: Proportion of young people enrolled in full or part time education, HNECC PHN Region, by SA4, 2011¹⁴⁵.

SA4	12-17 years		18-24 years	
	Australian Born	CALD Born	Australian Born	CALD Born
Central Coast	93%	97%	37%	50%
Hunter Valley exc. Newcastle	92%	98%	31%	38%
Mid North Coast	93.2%	95.9%	28.5%	40%
Newcastle & Lake Macquarie	93%	95%	44%	76%
New England & North West	92%	99%	34%	70%

Income

For most households, income is the most important resource, as it allows individuals and families to meet their living costs and their living standards¹⁴⁶. Apart from improving an individual's socioeconomic position, a higher income also provides greater access to services and resources that lead to health benefits⁵.

In 2016, as shown in Table 6, the median *weekly personal income* for all households was \$662 for Australia and \$664 for NSW¹⁴⁷. In the HNECC PHN region, this ranged from \$454 in Tenterfield to \$684 in Singleton LGA. The median *weekly family income* for all households was \$1,734 for Australia and \$1,780 for NSW. In the HNECC PHN region this ranged from \$1,015 in Tenterfield to \$1,981 in Singleton LGA. The median *weekly household income* for all households was \$1,438 for Australia and \$1,486 for NSW. In the HNECC PHN region, this ranged from \$767 in Tenterfield to \$1,682 in Singleton LGA¹⁴⁷.

In 2014, in the HNECC PHN region, the rate of people aged 18 years and over who had government support as their main source of income in the last 2 years (35.0 per 100) was higher than the Australian (27.1 per 100) and NSW (27.9 per 100) rates. LGAs with the highest rates were Greater Taree (43.0 per 100), Great Lakes (42.8 per 100), Glen Innes Severn (41.4 per 100) and Tenterfield (41.4 per 100), and the lowest were Walcha (24.5 per 100), Singleton (24.9 per 100) and Upper Hunter Shire (27.7 per 100)³.

Children and Youth

In 2016, within the HNECC PHN region, the proportion of children under 16 years in low income welfare dependent families was 27.1%, higher than the Australian (22.5%) and NSW (22.3%) averages. The LGAs with the highest proportion of children in low income welfare-dependent families were Tenterfield (42.2%), Greater Taree (40.6%) and Inverell (40.3%), and the lowest were Upper Hunter Shire (18.7%), Gosford (20.7%) and Newcastle (21.4%)³. Of people aged 16 to 24 years in the HNECC PHN region, 5.3% were receiving an unemployment benefit, higher than the Australian (3.5%) and NSW (3.0%) averages. The LGAs where this was the highest were Glen Innes Severn (9.9%), Greater Taree (9.9%) and Moree Plains (9.8%), whilst the lowest were Walcha (3.2%), Gosford (3.5%) and Armidale Dumaresq (3.9%)³.

Table 6: Median Weekly Income, by LGA, HNECC PHN Region, 2016.

LGA	Median Weekly Income		
	Personal	Family	Household
Armidale Regional	561	1,465	1,173
Central Coast	600	1,560	1,258
Cessnock	540	1,414	1,177
Dungog	578	1,474	1,226
Glen Innes Severn	478	1,111	838
Gunnedah	618	1,586	1,253
Gwydir	489	1,178	910
Inverell	509	1,181	950
Lake Macquarie	609	1,610	1,313
Liverpool Plains	533	1,287	1,032
Maitland	644	1,664	1,415
Mid-Coast	476	1,108	887
Moree Plains	669	1,480	1,240
Muswellbrook	640	1,665	1,346
Narrabri	632	1,531	1,242
Newcastle	660	1,778	1,368
Port Stephens	571	1,431	1,180
Singleton	684	1,981	1,682
Tamworth Regional	633	1,446	1,180
Tenterfield	454	1,015	767
Upper Hunter Shire	630	1,589	1,242
Uralla	552	1,342	1,058
Walcha	577	1,329	1,054
NSW	664	1,780	1,486
Australia	662	1,734	1,438

Employment

Employment is a key factor influencing health, social and emotional wellbeing, and standards of living¹⁴⁸. Employment contributes to higher self-esteem, positive self-identity, increased social interaction and personal development¹⁴⁹.

In 2016, in the HNECC PHN region, 6.9% of the potential labour force was unemployed, which was higher than the NSW (5.4%) and Australian (5.9%) averages. Unemployment was highest in Glen Innes Severn (11.6%), Tenterfield (10.5%) and Inverell (10%) LGAs, and lowest in Upper Hunter Shire (4.6%), Dungog (4.7%) and Singleton (4.8%)³.

Aboriginal and Torres Strait Islander Population

In 2012-13, in Australia, just under half (47%) of Aboriginal people aged 15-64 years were employed, with an unemployment rate that was more than four times higher than that of non-Indigenous people¹⁵⁰.

In 2011, in NSW, 17% of the potential Aboriginal labour force was unemployed. In the HNECC PHN region, unemployment was greatest amongst Aboriginal people living in Tenterfield (33.3%), Guyra (33.3%), and Glen Innes Severn (30.8%) LGAs, and lowest for those in Dungog (5.4%), Singleton (9.7%) and Upper Hunter Shire (9.7%) LGAs¹⁴⁴.

Culturally and Linguistically Diverse (CALD) Population

In 2011, in Australia, 71.6% of Australian born youth aged 18-24 years were employed, compared to 55.9% of CALD born youth. In NSW, a similar trend was observed, with 69.5% of Australian born youth and 54.6% of CALD born youth employed¹⁴⁵.

As shown in Table 7, in 2011, in the HNECC PHN region, employment was consistently higher in Australian born youth as compared to their CALD born counterparts¹⁴⁵.

Table 7: % Employment amongst Australian born and CALD born youth aged 18-24 years, by SA4, 2011¹⁴⁵.

SA4	Australian Born	CALD Born
Central Coast	70.2%	55.9%
Hunter Valley exc. Newcastle	74%	58.1%
Mid North Coast	60.5%	48%
Newcastle & Lake Macquarie	72%	33%
New England & North West	63%	29%

Internet Access

Internet access is important as it facilitates access to a wide range of information, goods and services and provides a means of communication with other individuals and communities¹⁵¹.

In 2016, as shown in Table 8, the proportion of households that had internet access was 83.2% for Australia and 82.5% for NSW¹⁵². In the HNECC PHN region, LGAs with the highest proportion of dwelling with access to an internet connection were Maitland (82.1%), Singleton (81.4%) and Lake Macquarie (81.3%), and the lowest were Gwydir (64.1%), Moree Plains (66.3%) and Tenterfield (66.9%). The proportion of households with no internet access was 14.1% for Australia and 14.7% for NSW. In the HNECC PHN region, LGAs with the highest proportion of households without internet access were Gwydir (31.9%), Tenterfield (29.5%) and Glen Innes Severn (28.7%), and the lowest were Maitland (15.4%), Singleton (16.3%) and Central Coast (16.4%)¹⁵².

In 2014-15, in Australia, 86% of all households had internet access, and of the 14% of Australian households without internet access, this was due to no need (63%), lack of confidence or knowledge (22%), and cost (16%)¹⁵¹. For households with children under 15 years 97% had access to the internet, compared to 82% of households without children. The most common reason for households with children not accessing the internet was cost (43%). Young people aged 15-17 years were the highest proportion of internet users (99%) and reported the highest average number of hours per week spent on the internet (18 hours per week)¹⁵¹.

Table 8: Household Internet Access, by LGA, HNECC PHN Region, 2016.

LGA	Dwelling Internet Connectivity	
	Access (%)	No Access (%)
Armidale Regional	78.9	18.5
Central Coast	80.6	16.4
Cessnock	75.9	21.1
Dungog	77.3	20.4
Glen Innes Severn	67.9	28.7
Gunnedah	70.6	26.2
Gwydir	64.1	31.9
Inverell	68.8	27.2
Lake Macquarie	81.3	16.4
Liverpool Plains	69.5	28.0
Maitland	82.1	15.4
Mid-Coast	74.0	22.8
Moree Plains	66.3	28.4
Muswellbrook	76.5	20.2
Narrabri	69.9	26.3
Newcastle	80.9	16.5
Port Stephens	80.2	16.6
Singleton	81.4	16.3
Tamworth Regional	74.9	21.7
Tenterfield	66.9	29.5
Upper Hunter Shire	73.8	23.3
Uralla	75.7	21.4
Walcha	67.8	28.4
NSW	82.5	14.7
Australia	83.2	14.1

Mental Health

Mental health is defined by the World Health Organisation (WHO) as “a state of wellbeing in which every individual realises his or her own potential, can cope with the normal stresses of life, can work productively and is able to make contribution to her or his community”⁴. A mental illness impacts on an individual’s thoughts, behaviour, feelings and interactions with others. Many factors can contribute to and exacerbate mental illness, including: long term and acute levels of stress; biological factors; consumption of alcohol and other drugs; cognitive patterns such as negative thoughts and associated low self-esteem; social factors such as family breakdowns, financial problems, isolation or violence; and community stressors¹⁵³.

Psychological Distress

In 2014-15, in the HNECC PHN region, the rate at which people aged 18 years and over experienced high or very high psychological distress¹¹ was higher than the NSW (11.0 per 100) and Australian (11.7 per 100) averages at 12.2 per 100³. In 2013-2015, in the HNECC PHN region, high psychological distress was more common in males (7.7 per 100) than in females (6.0 per 100), whilst very high psychological distress was more common in females (5.6 per 100) than males (2.9 per 100)¹.

Figure 20 shows the rate at which people aged 18 years and over experienced high or very high psychological distress in 2014-15 by LGA. This was greatest in Cessnock (15.2 per 100), Wyong (13.8 per 100) and Muswellbrook (13.7 per 100) LGAs, and lowest in Walcha (7.1 per 100), Guyra (8.2 per 100) and Uralla (8.4 per 100)³.

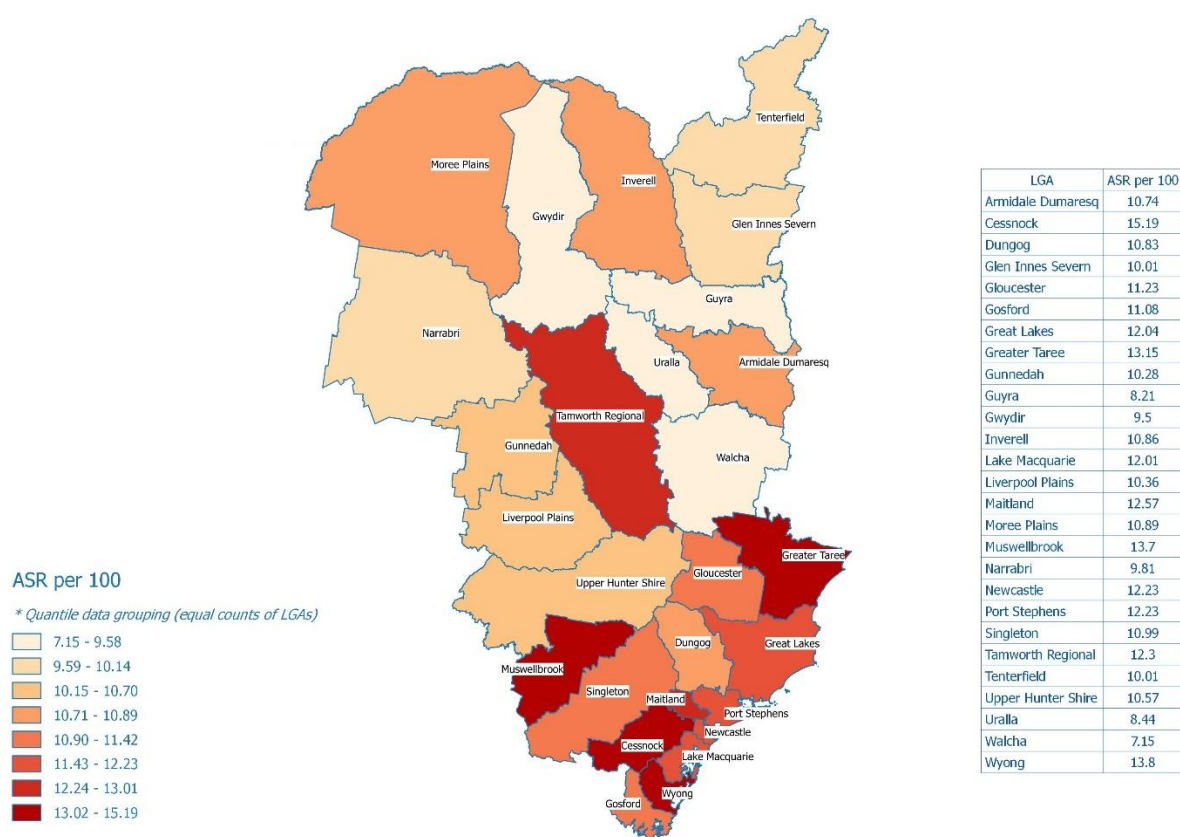


Figure 20: Estimated population, aged 18 years and over, experiencing high or very high psychological distress based on the K10, by LGA, HNECC PHN region, 2014-15³.

Chronic Mental and Behavioural Disorders

In 2011-12, the rate at which people experienced chronic mental and behavioural disorders within the HNECC PHN region was 14.4 per 100, higher than the Australian (13.6 per 100) and NSW (13.1 per 100) rates. This rate was higher for females in the HNECC PHN region than males (15.6 per 100 and 13.2 per 100 respectively). As shown in Figure 21, LGAs with the highest rate of people experiencing chronic mental and behavioural disorders were Great Lakes (16.3 per 100), Greater Taree (16.2 per 100) and Wyong (15.6 per 100), and the lowest were Walcha (12.1 per 100), Singleton (12.3 per 100) and Upper Hunter Shire (12.8 per 100)³.

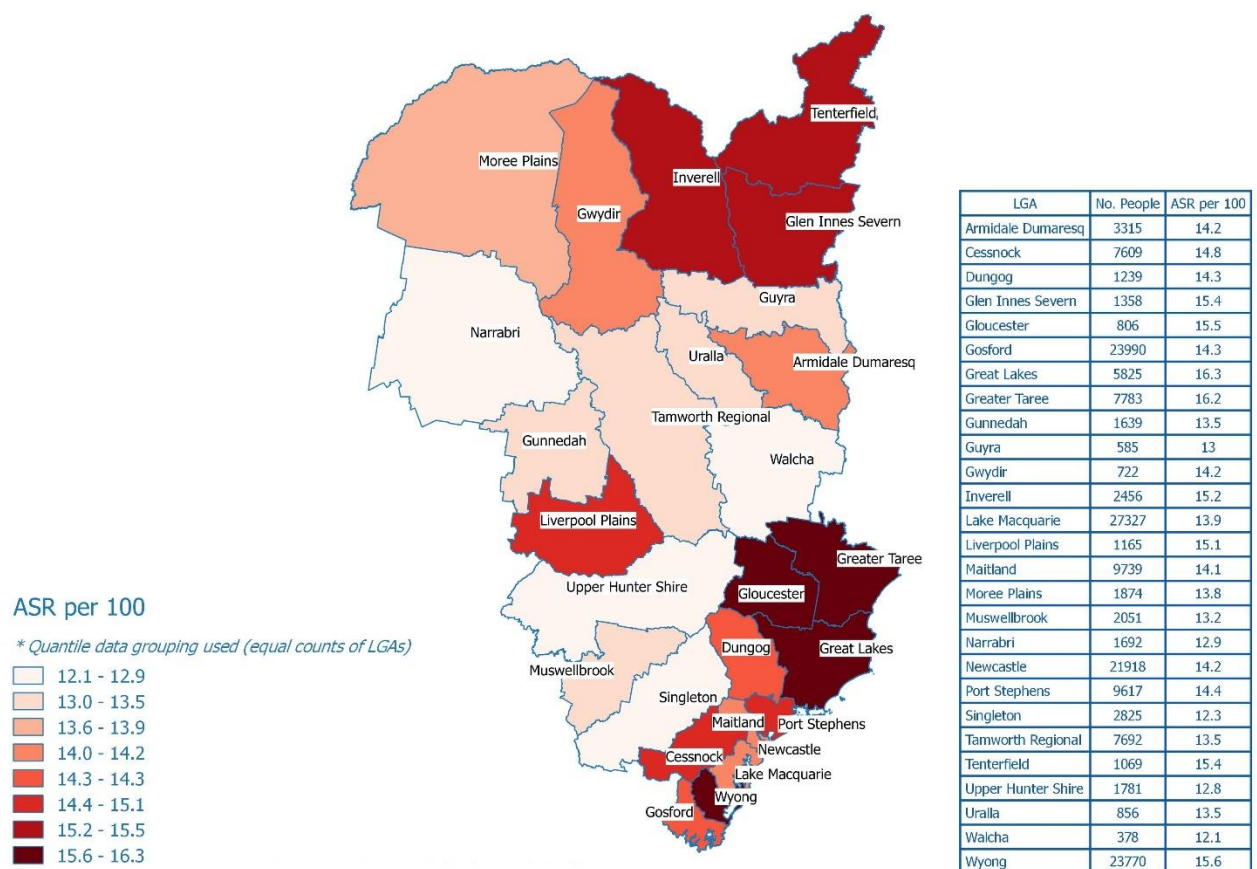


Figure 21: People experiencing chronic mental and behavioural disorders, by LGA, HNECC PHN Region, 2011-12³.

Mental Illness and Comorbidity

Data from general practices across the HNECC PHN region^a indicated that patients with a record of a mental health diagnosis^b were: 2.5 times more likely to have an asthma diagnosis on record; 3.3 times more likely to have a COPD diagnosis on record; and 2.4 times more likely to have a diabetes diagnosis on record. Further to this, 24.4% of patients (N=138,794) with a mental health diagnosis recorded also had a record of at least one other mental health diagnosis. Patients with a record of a mental health diagnosis were 1.14 times as likely to be alcohol drinkers and 8.75 times as likely to have a record of a drug abuse disorder as those without. Analysis by type of mental disorder showed that a record of a drug abuse disorder was 15.8 times as likely amongst patients with a schizophrenia diagnosis recorded; 11.2 times as likely amongst patients with a bipolar disorder recorded; 5.9 times as likely amongst patients with a depression diagnosis recorded; 5.7 times as likely amongst patients with an anxiety disorder recorded; and 1.85 times as likely amongst patients with a postnatal depression diagnosis recorded.

^a Approximately 809,500 patients of 175 general practices.

^b Mental health diagnoses included anxiety, depression, bipolar disorder, schizophrenia and postnatal depression.

Perceptions of Mental Health Needs

Factors Associated with Positive Mental Health

Most interview participants recognised the strengths within their communities which support mental health. The sense of community connectedness in rural communities was particularly strong, and was often demonstrated in times of crisis such as natural disasters. Harnessing the connection that occurs in these times was seen as a way of supporting the mental health of the community.

Results from the survey aligned with interview participants' perceptions about community strengths. Figure 22 shows the proportion of service providers and consumers, carers and community members who agreed or strongly agreed with statements about factors that promote good mental health. Overall the proportion of service providers that agreed or strongly agreed with each of these statements was higher than that of consumers, carers and community members. Family support was the factor with which the highest proportion of participants in both survey samples agreed (92%; 87%).

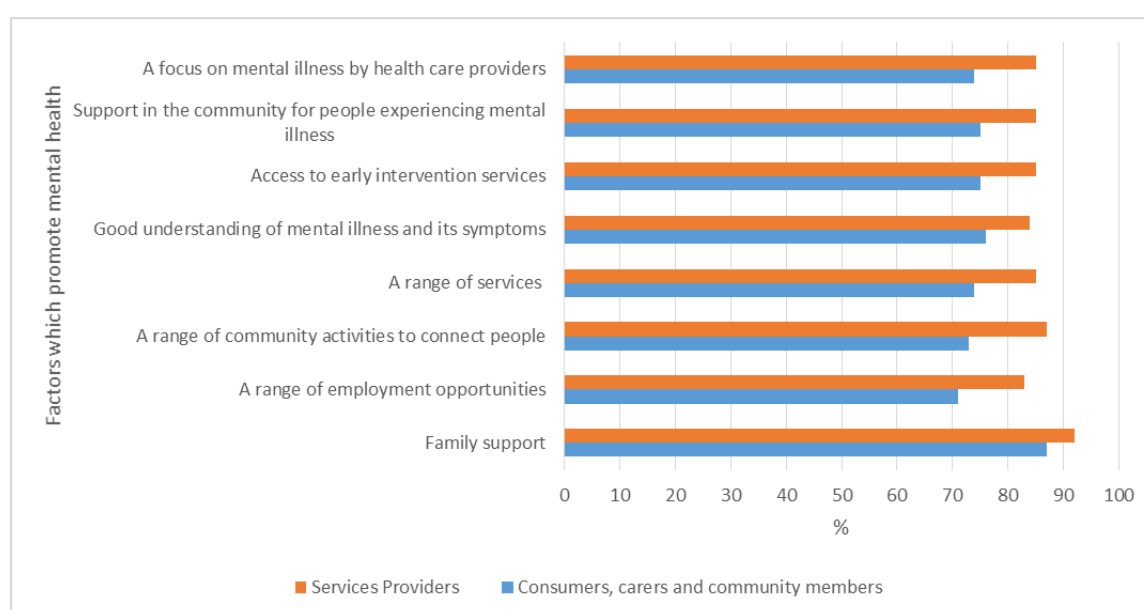


Figure 22: Proportion of service providers and consumers, carers and community members agreeing with factors which promote good mental health

Priority Mental Health Needs

Population Groups

Across all communities, population groups identified through the interview process as most at risk for experiencing mental illness were: young people in the 12-25 year age category; males especially between 25 years and 65 years of age; and older males.

Aboriginal and Torres Strait Islander peoples were perceived as having high needs in relation to mental health, with participants highlighting the impact of intergenerational trauma on their communities and the associated impact on mental health. Intergenerational trauma was thought to contribute to a range of other health and social problems including drug and alcohol use, family dysfunction and domestic violence.

The mental health needs of older people were frequently mentioned as increasing in accordance with the ageing population. Service providers indicated that older people who were socially isolated, especially after the death of a partner, had high mental health needs. The mental health needs of older people in aged care facilities were identified as significant. Factors associated with the needs of

older people included: grief and loss after the death of partner; adjustment to life in aged care facilities; loss of local community connection when the facility was located distantly to their previous home; and social and sometimes geographic isolation from family.

There was a common perception across all stakeholders that the mental health needs of children and young people appear to be increasing. There were concerns regarding eating disorders and self-harm amongst young people in all communities. It was perceived that behavioural disorders in children and young people such as attention deficit hyperactivity disorder (ADHD) and autism spectrum disorders (ASD) were increasing and were contributing to mental illness.

The needs of the LGBTIQ community were identified as significant by interview participants. Factors including stigma, discrimination, and community and service awareness and attitudes were associated with higher levels of mental health problems for this community.

All Council or Committee members who participated in the validation process agreed or strongly agreed with young people aged 12 - 25 years being a priority population group for mental health. In terms of the other priority groups for mental health, there was a high level of agreement with these being males aged 25 - 65 years, Aboriginal and Torres Strait Islander peoples, older people residing in aged care facilities and members of the Lesbian, Gay, Bisexual, Transgender, Intersex and Questioning (LGBTIQ) community. While there was also high level of agreement for males aged over 80 years being a priority population group, there was one participant who disagreed.

Types of Mental Illness

Aligned with evidence from the ANSMHWB¹⁵⁴, the majority of interview participants reported mental illnesses such as depression, anxiety and drug and alcohol use as the most common in their communities. However, most participants indicated that people experiencing the less common mental illnesses such as bipolar disorder, schizophrenia, other psychotic illnesses and personality disorders had high needs.

Interview participants also recognised that people experiencing severe mental illness, regardless of the type of illness, were a high needs group including those with other complex health and social problems.

Interview participants identified that the needs of people with severe mental illness, particularly those with complex health and social problems, were not being met in their local communities. It was perceived that services for these people used to be provided by state mental health services. However there was a common and strong perception that these services were no longer available.

People experiencing severe mental illness and in particular those with complex health and social problems were identified as having the highest level of unmet needs.

My [relative] has severe depression. This has been going on for years. It affects every aspect of our lives and our families' lives. But there seems few services that can cope with [relative]. Six sessions or maybe 12 does not help when it this bad. They just keep giving more medication....but it doesn't address the underlying cause

Carer

The needs of people with personality disorders were identified as high by interview participants. It was commonly reported that people with personality disorders had high levels of unmet needs with many services, particularly those in rural areas, struggling to provide services for this group.

Another high need group identified by interview participants was people with eating disorders, and in particular young women, with few services in most areas providing care and support.

Factors Associated with Mental Health Needs

In all communities, it was perceived that mental health problems were experienced at similar levels to other communities. However, specific factors in some communities were reported as influencing the levels of mental illness, for example, in many of the rural communities and in some of the urban communities with high levels of socioeconomic disadvantage there was a perception of higher levels of mental illness. There was an interplay of factors in these communities that contributed to mental illness including: high levels of unemployment; family dysfunction; domestic violence; drug and alcohol use; social and geographic isolation; costs of services; and lack of transport to services.

The results of the community and service provider surveys supported the perceptions of interview participants. Figure 23 shows the proportion of service providers and consumers, carers and community members who agreed or strongly agreed with statements about factors that contribute to mental illness. Factors such as drug and alcohol use (96%), family breakdown (96%) lack of community connectedness (96%) and unemployment (93%) were viewed by a high proportion of service providers as contributing to mental illness.

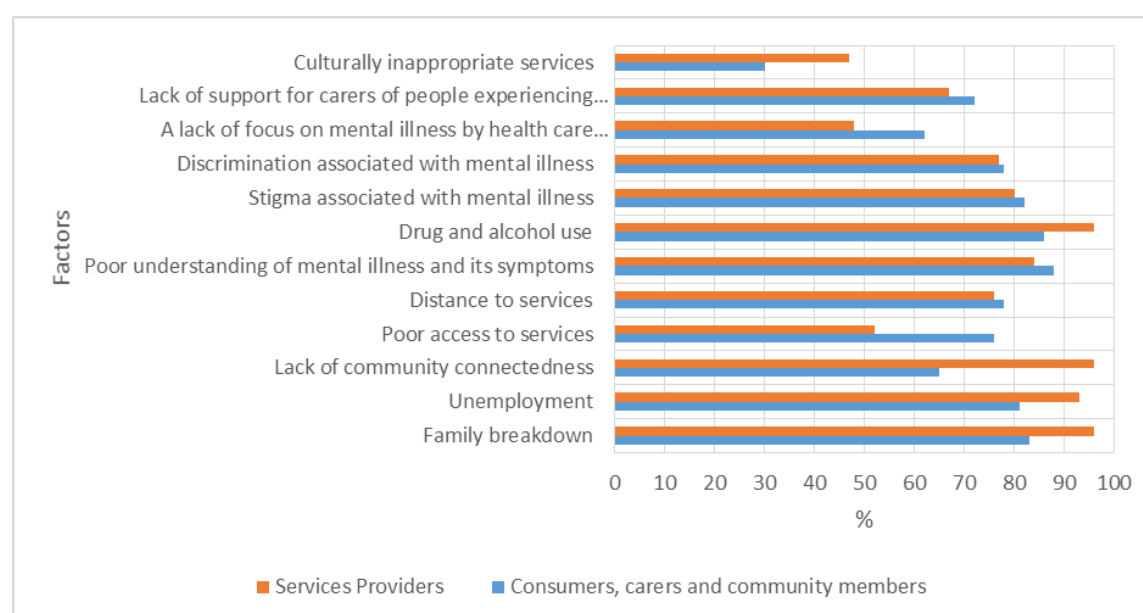


Figure 23: Proportion of service providers and consumers, carers and community members agreeing with factors contributing to mental illness

For consumers, carers and community members the factors with the highest proportion agreeing or strongly agreeing as contributing to mental illness were: poor understanding of mental illness and its symptoms (88%); drug and alcohol use (86%); family breakdown (83%); stigma about mental illness (82%) and unemployment (81%) While there were lower proportions of participants who reported agreement with the contribution of culturally inappropriate services to mental illness, 39% of service

providers and 57% of consumers, carers and community members were unsure about this contributing factor.

Factors identified by stakeholders as being associated with mental illness in young people included: family dysfunction; lack of hope for future employment; lower high school retention rates in some communities; bullying at home, in schools, in sporting teams and cultural groups, particularly through social media; and social isolation.

Suicide Prevention

Premature Mortality from Suicide and Self-Inflicted Injuries

Data provided by the National Coronial Information System indicated that between 2000 and 2013 in the HNECC PHN region, there were 1,337 deaths recorded as intentional self-harm fatalities, of which 1,088 (81.4%) were males, and 249 (18.6%) were females. Of these deaths, 1,164 (87.1%) were non-Indigenous people, 38 (2.8%) were Aboriginal people, and 135 (10.1%) were deaths where Indigenous status was *unlikely to be known*². The vast majority of deaths (1,165 or 87.1%) were of people born in Australia, 1.5% (20 deaths) were of people born in the United Kingdom, and 1% (13 deaths) were of people born in New Zealand².

Further data on suicide in the HNECC PHN region over this period is presented in Table 10 which shows the frequency of suicides occurring in the HNECC PHN region by year over this time. Table 9 present data on the number of suicides occurring in the HNECC PHN region by age range, with the majority of deaths occurring in people aged between 25 and 54 years, and the highest number in the 40 – 44 year age group (169 or 12.6%)².

Table 10: Intentional Self-Harm Fatalities by Year of Notification, HNECC PHN Region².

Year of Notification	Frequency	%
2000*	60	4.5
2001	146	10.9
2002	115	8.6
2003	103	7.7
2004	93	7
2005	81	6.1
2006	114	8.5
2007	93	7
2008	88	6.6
2009	106	7.9
2010	83	6.2
2011	74	5.5
2012	126	9.4
2013*	55	4.1

*Only 6 months of data included for this year

Table 9: Intentional Self-Harm Fatalities by Age Range, HNECC PHN Region, 2000-2013².

Age Range	Frequency	%
0 - 14	3	0.2
15 - 19	52	3.9
20 - 24	75	5.6
25 - 29	118	8.8
30 - 34	144	10.8
35 - 39	152	11.4
40 - 44	169	12.6
45 - 49	146	10.9
50 - 54	127	9.5
55 - 59	75	5.6
60 - 64	78	5.8
65 - 69	50	3.7
70 - 74	51	3.8
75 - 79	45	3.4
80 - 84	27	2
85 - 89	19	1.4
90+	6	0.4
Total	1,337	100

Table 11 contains information about the mechanism of injury, with asphyxiation by hanging accounting for 634 (47.4%) of intentional self-harm fatalities, followed by asphyxiation by carbon monoxide (12.7%), and drug toxicity (12.6%)².

Table 11: Intentional Self-Harm Fatalities by Mechanism of Fatal Injury, HNECC PHN Region, 2000-2013².

Mechanism of Fatal Injury	Frequency	%
Asphyxiation (Hanging)	634	47.4
Asphyxiation (Carbon Monoxide)	170	12.7
Drug Toxicity (Substance for Human Use)	168	12.6
Shot by Weapon	130	9.7
Falling/Stumbling/Jumping/Pushing	46	3.4
Drug Toxicity (Substance not for Human Use)	28	2.1
Cutting/Slashing/Stabbing	27	2
Drowning	24	1.8
Train-Related	23	1.7
Vehicle Incident	22	1.6
Asphyxiation (Plastic Bag)	20	1.5
Fire-Related	16	1.2
Asphyxiation (Other)	13	1
Electrocution	8	0.6
Other	8	0.6
Total	1,337	100

As shown in Table 12, 546 (40.8%) of suicides were deaths of people who were employed, 366 (27.4%) were retired people or pensioners and 235 (17.6%) were unemployed².

As shown in Table 13, premature mortality from suicide and self-inflicted injuries within the HNECC PHN region for people aged 0-74 years in 2010-2014 was 11.3 per 100,000 and proportions were highest in the LGAs of Tenterfield, Narrabri and Cessnock; and lowest in Armidale Dumaresq, Inverell and Singleton³.

Table 12: Intentional Self-Harm Fatalities by Employment Status, HNECC PHN Region, 2000-2013².

Employment Status	Frequency	%
Employed	546	40.8
Retired/Pensioner	366	27.4
Unemployed	235	17.6
Student	42	3.1
Home Duties	32	2.4
Prisoner	3	0.2
Other	2	0.2
Unlikely to be Known	111	8.3
Total	1,337	100

Table 13: Premature mortality from suicide and self-inflicted injuries, 0-74 years, 2010-2014, HNECC PHN Region, by LGA³.

Region	Annual Rate per 100,000	Region	Annual Rate per 100,000
HNECC PHN Region	11.3	Liverpool Plains	..
Armidale Dumaresq	4.7	Maitland	10.7
Cessnock	15.3	Moree Plains	12.0
Dungog	14.8	Muswellbrook	9.2
Glen Innes Severn	..	Narrabri	15.8
Gloucester	..	Newcastle	10.5
Gosford	11.9	Port Stephens	14.0
Great Lakes	11.8	Singleton	8.0
Greater Taree	11.3	Tamworth Regional	12.2
Gunnedah	..	Tenterfield	35.2
Guyra	..	Upper Hunter Shire	14.0
Gwydir	..	Uralla	..
Inverell	7.8	Walcha	..
Lake Macquarie	10.0	Wyong	11.7

Note: Due to small numbers, data has not been provided in some LGAs

Perceptions of Suicide Prevention Needs

Suicide was a significant concern for interview participants across all communities. Young people, men between 25 and 45 years of age, and men aged over 80 years were reported as the population groups most commonly experiencing suicidal ideation or completing suicide.

It was perceived that suicide in rural communities was a particular concern, often in association with social and geographic isolation and relationship breakdown. The impact on the family and community was significant with concern about suicide clusters in a number of communities.

Factors Associated with Suicide Needs

The most common factors identified by interview participants as associated with suicide, included: social and geographic isolation; relationship breakdown; and for younger people, bullying at school and through social media. Service providers also indicated that many people who had attempted or completed suicide were not connected to services prior to the suicide attempt.

Participants in the consumer, carer and community member survey indicated their level of agreement with factors associated with suicide in their community. Figure 24 shows the proportion of participants that agreed or strongly agreed with factors contributing to suicide in their communities.

Factors with which a high proportion of people agreed or strongly agreed as contributing to suicide included: poor understanding of suicide and its prevalence (83%); drug and alcohol use (82%); and family breakdown (76%). Fifty-nine percent of participants were unsure of the contribution that culturally inappropriate services made to suicide.

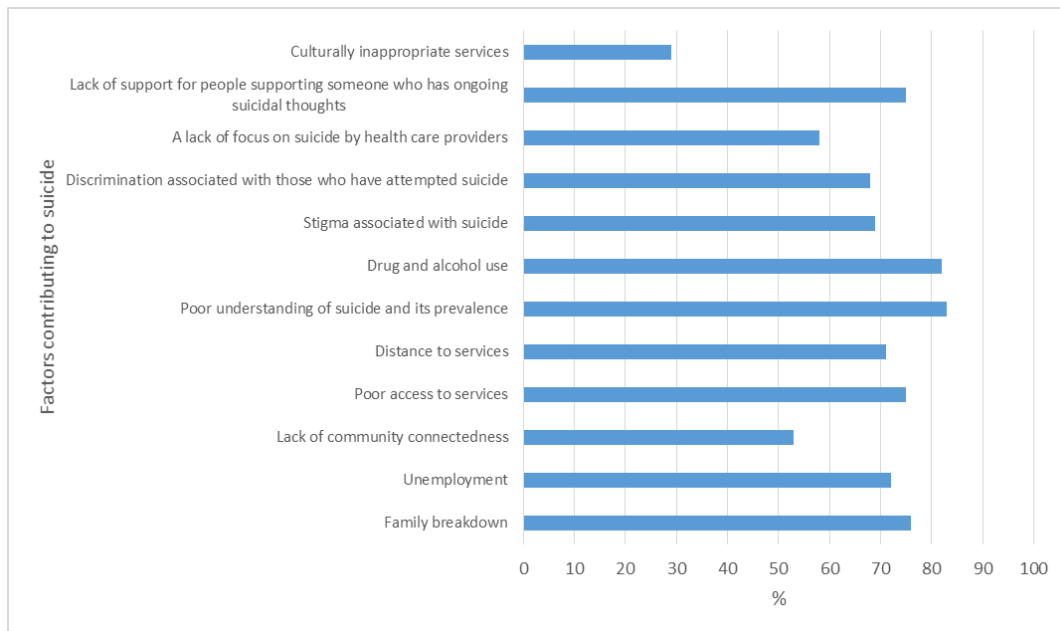


Figure 24: Proportion of consumers, carers and community members agreeing with factors contributing to suicide

The majority of participants in the validation survey agreed or strongly agreed with the priority population groups for suicide prevention being: young people aged 12 – 25 years; males aged 25 - 45 years; and people living in rural areas. One participant disagreed with males aged over 80 years being a priority population group for suicide prevention

Mental Health Services

Primary Mental Health Care

Providing mental health services in primary healthcare involves: diagnosis and treatment for people with common mental disorders; preventing mental disorders; and applying key psychosocial and behavioural science skills¹⁵⁵. Ideally primary mental health services complement tertiary and secondary level mental health services. These more specialist services manage acute episodes of mental illness but do not provide a solution for people with chronic disorders who end up in the admission–discharge–admission (revolving door syndrome) unless backed up by comprehensive primary healthcare and community services¹⁵⁵.

The effectiveness of primary mental health care is dependent on integration with more specialist services. Within primary mental health care there are a number of challenges to integration including:

- training of staff in detection and treatment of common mental disorders
- overcoming attitudinal barriers to providing care for people with mental disorders
- time barriers of GPs and other primary health care workers
- effective and current referral systems between primary, secondary and tertiary care
- clinical supervision for primary mental health care staff
- adequate working conditions for staff¹⁵⁵

Non-pharmacological interventions such as cognitive and behavioural therapies aim to manage and treat mental illness and associated symptoms¹⁵³. There is a range of primary mental health care services provided throughout the HNECC PHN region and there is much local level variability in the availability and uptake of these different services.

MBS Subsidised Mental Health Services

The Medicare Benefits Scheme (MBS) includes Medicare-subsidised mental health-related services provided by GPs, psychiatrists, psychologists and other allied health professionals (including some social workers, mental health nurses, occupational therapists and Aboriginal health workers¹⁵⁶).

GP Mental Health Services

Services provided under the MBS by GPs can include preparation or review of a mental health treatment plan, management of a patient's mental health condition and focussed psychological strategies. As can be seen in Table 14, in 2015-16, in the HNECC PHN region, GPs provided 189,176 mental health services through the MBS to 109,622 patients¹⁵⁷.

The average number of patients receiving a GP mental health service in the HNECC PHN region was 8,811 per 100,000, with considerable local variability, ranging from 2,821 per 100,000 in Moree-Narrabri SA3 to 10,991 in Lake Macquarie-East SA3¹⁵⁷.

The average number of service provided under this initiative in the HNECC PHN region was 15,204 per 100,000 and ranged from 4,779 per 100,000 in Moree-Narrabri SA3 to 19,194 per 100,000 in Lake Macquarie-East SA3¹⁵⁷.

Table 14: MBS GP Mental Health Services, by SA3, HNECC PHN Region, 2015-16¹⁵⁷.

SA3	MBS GP Mental Health Services 2015-16				
	Patients		Services		Services / Patient
	Total	Rate / 100,000	Total	Rate / 100,000	
Armidaale	2,301	6,102	3,196	8,475	1.4
Gosford	17,803	10,236	31,005	17,826	1.7
Great Lakes	3,109	9,770	5,235	16,451	1.7
Inverell-Tenterfield	1,781	4,536	2,623	6,680	1.5
Lake Macquarie-East	13,793	10,991	24,088	19,194	1.7
Lake Macquarie-West	5,513	7,213	10,209	13,357	1.9
Lower Hunter	7,864	8,811	14,360	16,089	1.8
Maitland	6,789	9,273	11,558	15,787	1.7
Moree-Narrabri	762	2,821	1,291	4,779	1.7
Newcastle	18,424	10,901	31,559	18,672	1.7
Port Stephens	6,074	8,309	10,451	14,297	1.7
Tamworth-Gunnedah	4,555	5,500	6,803	8,214	1.5
Taree-Gloucester	4,915	9,067	8,010	14,777	1.6
Upper Hunter	2,289	7,210	3,739	11,777	1.6
Wyong	15,502	9,738	25,064	15,745	1.6
HNECC PHN	109,622	8,811	189,176	15,204	1.7

Allied Mental Health Services

Services provided under MBS by allied health professionals includes psychological therapy and focussed psychological strategies. As can be seen in Table 15, in 2015-16, in the HNECC PHN region, Allied Mental Health Providers provided 235,632 services to 57,293 patients through the MBS¹⁵⁷.

The average number of patients receiving Allied Mental Health services under the MBS in the HNECC PHN region was 4,605 per 100,000 and ranged from 581 per 100,000 in Moree-Narrabri SA3 to 8,461 per 100,000 in Newcastle SA3¹⁵⁷.

The average number of services delivered under this initiative in the HNECC PHN region was 18,938 per 100,000, with considerable variability notable at a local SA3 level, from 1,969 per 100,000 in Moree-Narrabri to 35,269 in Newcastle¹⁵⁷.

The average number of allied mental health services received by each patient in the HNECC PHN region was 4.1, and this ranged from 3.4 in Moree-Narrabri SA3 to 4.4. in Upper Hunter SA3¹⁵⁷.

Table 15: MBS Allied Mental Health Services by SA3, HNECC PHN Region, 2015-16¹⁵⁷.

SA3	MBS Allied Mental Health Services 2015-16				
	Patients		Services		Services / Patient
	Total	Rate / 100,000	Total	Rate / 100,000	
Armidale	1,347	3,572	5,457	14,471	4.05
Gosford	10,826	6,224	46,140	26,528	4.3
Great Lakes	1,321	4,151	4,995	15,697	3.8
Inverell-Tenterfield	796	2,027	2,856	7,274	3.6
Lake Macquarie-East	6,285	5,008	23,382	18,631	3.7
Lake Macquarie-West	2,021	2,644	8,049	10,531	4
Lower Hunter	1,579	1,769	5,817	6,518	3.7
Maitland	5,013	6,847	18,689	25,527	3.7
Moree-Narrabri	157	581	532	1,969	3.4
Newcastle	14,301	8,461	59,611	35,269	4.2
Port Stephens	2,763	3,780	10,465	14,316	3.8
Tamworth-Gunnedah	2,178	2,630	8,103	9,783	3.7
Taree-Gloucester	3,237	5,972	12,230	22,563	3.8
Upper Hunter	797	2,510	3,533	11,128	4.4
Wyong	6,637	4,169	25,773	16,190	3.9
HNECC PHN	57,293	4,605	235,632	18,938	4.1

Psychiatry and Clinical Psychology Services

Information on mental health service delivery under the MBS by specific discipline is available at a local level for 2014-15. In 2014-15, in the HNECC PHN region, a total of 493,054 patients received 1,637,337 psychiatry services through the MBS. The number of patients receiving a psychiatric service in the HNECC PHN region was 1,335 per 100,000, with a range of 355 per 100,000 in Moree-Narrabri SA3 to 2,186 per 100,000 in Taree-Gloucester SA3 as shown in Table 16. The number of psychiatry services delivered under MBS in the HNECC PHN region was 6,495 per 100,000, which at a local level ranged from 2,040 per 100,000 in Moree-Narrabri SA3 to 9,161 per 100,000 in Newcastle SA3¹⁵⁷.

Table 16: MBS Psychiatry Services by SA3, HNECC PHN, 2014-15¹⁵⁷.

SA3	MBS Psychiatry Services 2014-15							
	Patients				Services			
	Female	Male	Total	Rate / 100,000	Female	Male	Total	Rate / 100,000
Armidale	170	123	293	777	790	485	1,275	3,381
Gosford	1,340	1,272	2,612	1,502	8,977	6,142	15,119	8,693
Great Lakes	322	300	622	1,955	1,383	1,117	2,500	7,856
Inverell-Tenterfield	143	163	306	779	679	553	1,232	3,138
Lake Macquarie-East	986	903	1,889	1,505	5,750	3,790	9,540	7,602
Lake Macquarie-West	565	507	1,072	1,403	3,243	1,971	5,214	6,822
Lower Hunter	479	429	908	1,017	2,555	1,520	4,075	4,566
Maitland	510	456	966	1,319	2,912	2,033	4,945	6,754
Moree-Narrabri	47	49	96	355	415	136	551	2,040
Newcastle	1,538	1,433	2,971	1,758	9,376	6,108	15,484	9,161
Port Stephens	460	396	856	1,171	2,362	1,503	3,865	5,287
Tamworth-Gunnedah	323	299	622	751	1,575	1,006	2,581	3,116
Taree-Gloucester	598	587	1,185	2,186	2,567	1,917	4,484	8,272
Upper Hunter	121	124	245	772	552	421	973	3,065
Wyong	991	976	1,967	1,236	4,868	3,976	8,844	5,556
HNECC PHN	8,593	8,017	16,610	1,335	48,004	32,678	80,682	6,485

In the HNECC PHN region, in 2014-15, 494,956 patients received 1,644,546 clinical psychology services under the MBS (Table 17). The average number of patients for the region was 1,433 per 100,000, which at a local SA3 level ranged from 267 per 100,000 in Moree-Narrabri to 2,044 per 100,000 in Newcastle as shown in Table 17. The average number of clinical psychology services delivered under the MBS in the region was 5,719 per 100,000, and ranged from 907 per 100,000 in Moree-Narrabri SA3 to 8,251 per 100,000 in Newcastle SA3¹⁵⁷.

Table 17: MBS Clinical Psychology Services by SA3, HNECC PHN Region, 2014-15¹⁵⁷.

SA3	MBS Clinical Psychology Services 2014-15							
	Patients				Services			
	Female	Male	Total	Rate / 100,000	Female	Male	Total	Rate / 100,000
Armidale	408	194	602	1,596	1,843	783	2,626	6,963
Gosford	1,822	1,044	2,866	1,648	7,949	4,414	12,363	7,108
Great Lakes	331	225	556	1,747	1,274	732	2,006	6,304
Inverell-Tenterfield	216	184	400	1,019	842	776	1,618	4,121
Lake Macquarie-East	1,503	953	2,456	1,957	6,337	3,625	9,962	7,938
Lake Macquarie-West	788	479	1,267	1,658	3,263	1,869	5,132	6,715
Lower Hunter	646	501	1,147	1,285	2,465	1,764	4,229	4,738
Maitland	681	412	1,093	1,493	2,515	1,410	3,925	5,361
Moree-Narrabri	47	25	72	267	163	82	245	907
Newcastle	2,126	1,329	3,455	2,044	8,936	5,010	13,946	8,251
Port Stephens	605	387	992	1,357	2,374	1,281	3,655	5,000
Tamworth-Gunnedah	153	85	238	287	601	297	898	1,084
Taree-Gloucester	621	457	1,078	1,989	2,322	1,774	4,096	7,556
Upper Hunter	110	103	213	671	457	447	904	2,847
Wyong	806	593	1,399	879	3,258	2,97	5,555	3,490
HNECC PHN	10,863	6,971	17,834	1,433	44,599	24,264	71,160	5,719

HNECC Commissioned Services

HNECC has commissioned primary mental health care services across the region. These services and the providers at the time of this needs assessment are outlined in Appendix A. These services are mainly targeted at people experiencing mild to moderate mental ill-health.

Access to Allied Psychological Services (ATAPS) Program

The Access to Allied Psychological Services (ATAPS) program was introduced by the Australian Government in July 2001 in response to low treatment rates for common mental health disorders. The focus of ATAPS was on facilitating access to free or low cost evidence based treatment for population groups that experienced difficulty accessing primary mental health care, such as those who were unable to afford private or Medicare-subsidised mental health services¹⁵⁸.

Figure 25 shows the increase in uptake of the ATAPS program in the HNECC PHN region from 2011-12 when 3,380 clients received 13,112 services, to 2013-14 when 6,482 clients received 25,640 services¹⁵⁸.

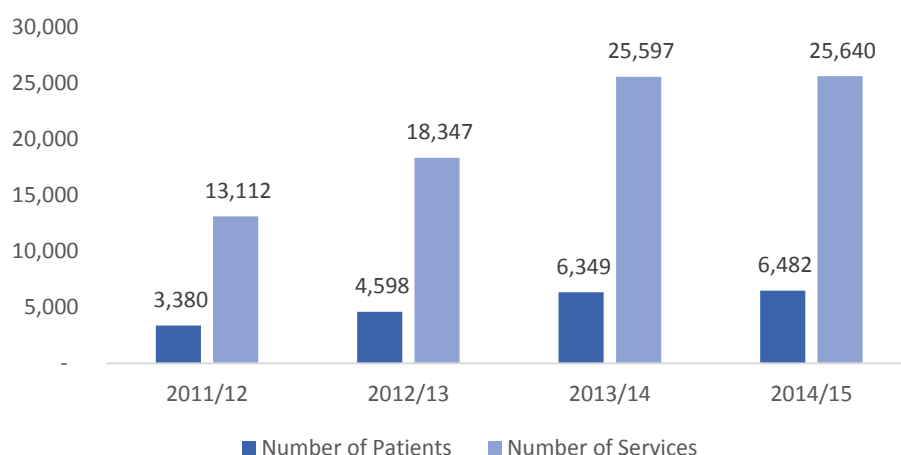


Figure 25: Number of ATAPS clients and number of ATAPS services delivered, HNECC PHN 2011-12 to 2014-15¹⁵⁸.

Mental Health Nurse Incentive Program (MHNIP)

The Mental Health Nurse Incentive Program (MHNIP) commenced in 2007-08, with the introduction of payments incentivising organisations to engage mental health nurses to assist in the provision of coordinated clinical care for people with a severe mental illness. Figure 26 shows the number of patients and number of services delivered under MHNIP between 2011-12 and 2014-15 in the HNECC PHN region¹⁵⁸.

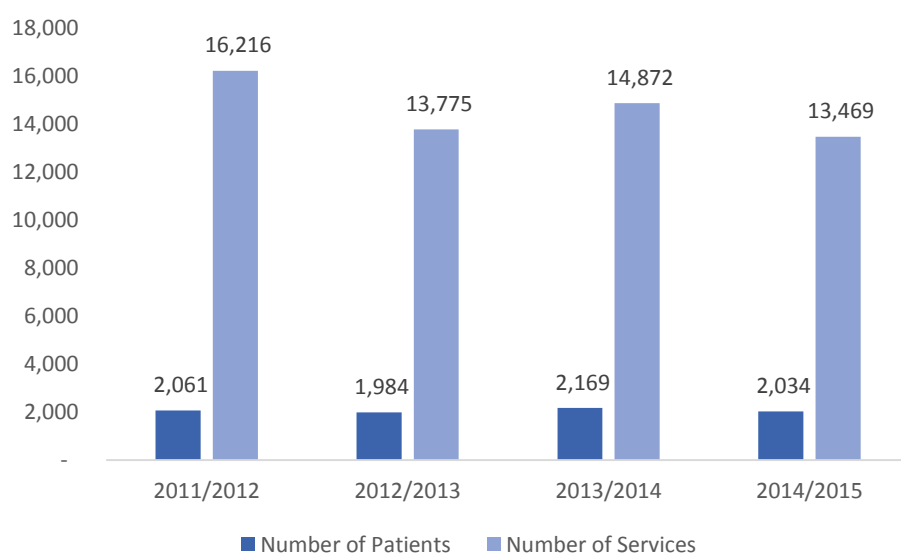


Figure 26: Number of MHNIP patients and number of MHNIP services delivered, HNECC PHN region, 2011-12 to 2014-15¹⁵⁸.

Headspace

Headspace is the National Youth Mental Health Foundation program providing early intervention mental health services to 12-25 year olds, along with assistance in promoting young peoples' wellbeing. This covers four core areas: mental health, physical health, work and study support and

alcohol and other drug services. Headspace centres in the HNECC PHN region are located at Gosford, Lake Haven, Maitland, Newcastle and Tamworth.

Table 18 shows the total number of services and clients for each Headspace centre and the totals for the HNECC PHN region between 2015 and 2017. Between July 2016 and March 2017, 57.91% of Headspace clients in the HNECC PHN region identified as female (4,138), 40.37% identified as male (2,885) and 1.72% identified as other (123). This was comparable to the respective Australian averages of 60.66%, 37.49%, and 1.85%.

Table 18: Headspace Centre Service Activity Summary, HNECC PHN Region, 2015-2017.

	Gosford		Lake Haven		Maitland		Newcastle		Tamworth		HNECC PHN	
	Services	Clients	Services	Clients	Services	Clients	Services	Clients	Services	Clients	Services	Clients
2015	7,995	1,507	149	105	5,369	1,205	4,309	989	4,002	742	21,824	4,547
2016	7,462	1,484	1,757	565	6,434	1,432	4,170	1,009	3,775	713	23,598	5,194
2017*	5,121	1,291	1,741	579	4,654	1,191	3,279	883	3,108	627	17,903	4,571

*2017 includes data for Q1 to Q3 only.

As can be seen in Table 19 the majority of services provided by Headspace centres across the HNECC PHN region are addressing mental health, followed by engagement and assessment, and physical or sexual health. This is similar to the trend observed at a national level.

Table 19: Nature of Service Provided by Headspace, HNECC PHN Region and Australia, Q1-Q3 2016/17.

Nature of Service	HNECC PHN Region	Australia
Mental health	71.22%	68.74%
Engagement & assessment	20.36%	22.44%
Physical / sexual health	4.80%	3.50%
Alcohol and/or drug specific intervention	1.17%	1.14%
General assistance	1.06%	1.43%
Family-based intervention	0.95%	0.84%
Vocational	0.44%	1.38%
Other	0%	0.53%

Table 20 presents the age profile of young people accessing Headspace centres within the HNECC PHN region. The greatest proportion of clients were aged 15-17 years, followed by 12-14 years, and 18-20 years.

Table 20: Age Profile of Headspace clients, HNECC PHN Region, Q1-Q3, 2016/17.

	<12yr	12-14yr	15-17yr	18-20yr	21-23yr	24-25yr	>25yr
Number	8	1717	2453	1712	1059	334	35
%	0.11	23.46	33.52	23.39	14.47	4.56	0.48

Table 21 shows the number and proportion of Headspace clients who fall within specific population groups, including Aboriginal and Torres Strait Islander, CALD and LGBTIQ. Within the HNECC PHN region, the proportion of young Aboriginal and Torres Strait Islander people accessing Headspace is higher than the Australian average, while the proportion of CALD clients is lower and the proportion of young people identifying as LGBTIQ is similar.

Table 21: Profile of Headspace clients by population group, Q1-Q3 2016/17.

Population Group	Gosford		Lake Haven		Maitland		Newcastle		Tamworth		HNECC PHN		Australia	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Indigenous	232	11	141	18	344	17	114	9	246	23	1,077	15	7411	8
Non-Indigenous	1,863	89	641	82	1,633	83	1,106	91	822	77	6,065	85	85,903	92
CALD	99	5	20	3	40	2	52	4	23	2	234	3	8,705	9
Non-CALD	1,996	95	762	97	1,937	98	1,166	96	1,045	98	6,906	97	84,515	91
LGBTIQ	426	22	114	15	293	16	313	27	186	19	1,332	20	19,039	22
Non-LGBTIQ	1,524	78	625	85	1,522	84	850	73	809	81	5,330	80	67,956	78

State Based Mental Health Services

The state based mental health services delivered by Local Health Districts, are provided for children, young people and adults with severe and acute mental health needs, with access through EDs operating in any hospital or through the Mental Health Helpline. Mental health acute inpatient facilities for adults operate in the Central Coast (Gosford and Wyong), Newcastle, Maitland, Mid-Coast (Taree), Tamworth Regional and Armidale Regional LGAs. Community based mental health services operate in every LGA in the HNECC PHN region. The mental health line is a 1800 number providing 24-hour telephone service operating seven days a week across NSW. Staffed by mental health clinicians, this service offers triage, assessment and referral to a service if a person is deemed to fit within the service criteria.

For those people (children, young people and adults) experiencing chronic mental illness but not acutely unwell, services are provided by GPs, allied health professionals and support services in various community settings.

Other Australian Government Services

The Australian Government currently funds a number of other mental health support services. These are in addition to the services provided by GPs and under programs such as Better Access, which are supported by specific MBS items.

In the Hunter, Central Coast and New England regions, Partners in Recovery (PIR) aims to provide coordinated support for people with severe and persistent mental illness and complex needs. In these locations PIR is auspiced by Hunter Primary Care (Newcastle), Central Coast Primary Care (Central Coast) and Flourish Australia (New England and North West) as the lead agencies and delivered in partnership with a consortia of other agencies including LHD Mental Health Services, NGOs and training organisations. The PIR funding is currently transitioning to the NDIS.

The Australian and NSW governments fund a range of other services that provide support to clients with mental illness including welfare, training and employment services.

Mental Health Hospitalisations

In 2014-15, in the HNECC PHN region, there were 13,315 mental health overnight hospitalisations at a rate of 1,108 per 100,000, which was similar to the rate for 2013-14 (1,084 per 100,000) and higher than the Australian rate (944 per 100,000). These hospitalisations led to 195,611 mental health bed days. Specialised care accounted for 63% of overnight hospitalisations and 79.8% of bed days. 20.6% of hospitalisations and 26.5% of bed days were in private hospitals¹⁰.

As shown in Table 22, in 2014-15, at a local level, the rate of total mental health overnight hospitalisations was higher than the Australian average in all SA3s. Those with rates above the average for the HNECC PHN region included: Moree-Narrabri; Wyong; Taree-Gloucester; Newcastle; Gosford; Great Lakes; and Inverell-Tenterfield¹⁰. Table 22 also provides the bed day rate by SA3 for total mental health hospitalisations, which shows considerable variability across the HNECC PHN region. Whilst Lake Macquarie-West SA3 recorded one of the lowest hospitalisation rates, the associated bed day rate was the highest in the region at 22,044 per 100,000; this was followed by Newcastle at 21,677 per 100,000. By comparison, the rate for Inverell-Tenterfield was 9,113 per 100,000¹⁰.

Table 22: Mental health overnight hospitalisations, rate per 100,000, HNECC PHN region, by SA3, 2014-15¹⁰.

Local area (SA3)	2013-14	2014-15	0	1,000	2,000	3,000	No. hosps. ^a	Bed day rate ^b
National rate	911	944					223,882	13,141
Moree-Narrabri (NSW)	1,126	1,271					325	15,980
Wyong (NSW)	1,196	1,213					1,858	16,008
Taree-Gloucester (NSW)	1,220	1,197					567	15,809
Newcastle (NSW)	1,235	1,188					2,015	21,677
Gosford (NSW)	1,096	1,178					2,057	15,122
Great Lakes (NSW)	1,062	1,150					343	14,462
Inverell-Tenterfield (NSW)	988	1,144					419	9,113
Armidale (NSW)	1,164	1,069					387	11,213
Tamworth-Gunnedah (NSW)	1,089	1,065					830	11,808
Upper Hunter (NSW)	888	1,051					324	10,637
Lower Hunter (NSW)	945	1,046					877	12,353
Lake Macquarie-East (NSW)	973	1,012					1,229	15,494
Maitland (NSW)	972	1,009					710	14,865
Lake Macquarie-West (NSW)	1,014	988					720	22,044
Port Stephens (NSW)	1,055	962					658	13,458

Anxiety and Stress Disorders Hospitalisations

In 2014-15, in the HNECC PHN region, the rate of anxiety and stress disorder hospitalisations was 182 per 100,000, this was similar to the 2013-14 rate (195 per 100,000) and higher than the Australian rate (142 per 100,000). The associated bed day rate was 1,506 per 100,000 (Australia: 1,239 per 100,000)¹⁰.

In 2014-15, at a local level, the rate of anxiety and stress disorder hospitalisations was higher than the Australian average in all SA3s except Lake Macquarie-West (see Appendix C for further details). The highest rates were reported in Upper Hunter (266 per 100,000), Inverell-Tenterfield (263 per 100,000) and Armidale (222 per 100,000); and the lowest rates were in Lake-Macquarie-West (139 per 100,000), Lake Macquarie-East (161 per 100,000) and Newcastle (168 per 100,000). The rate of associated bed days ranged from 2,224 per 100,000 in Moree-Narrabri to 1,122 per 100,000 in Tamworth-Gunnedah¹⁰.

Depressive Episode Hospitalisations

In 2014-15, in the HNECC PHN region, the rate of depressive episode hospitalisations was 150 per 100,000, similar to the 2013-14 rate (145 per 100,000) and higher than the Australian rate (118 per 100,000). The rate of bed days stemming from these hospitalisations was 2,109 per 100,000 (Australia: 1,678 per 100,000)¹⁰.

In 2014-15, at a local level, the rate of depressive episode hospitalisations was higher than the Australian average in three quarters of the SA3s, with the highest rates in Moree-Narrabri (237 per 100,000), Inverell-Tenterfield (194 per 100,000) and Gosford (181 per 100,000); and the lowest rates in Taree-Gloucester (61 per 100,000), Great Lakes (108 per 100,000) and Lower Hunter (115 per 100,000), see Appendix C for further details. The rate of associated bed days ranged from 2,827 per 100,000 in Newcastle to 608 per 100,000 in Taree-Gloucester¹⁰.

Schizophrenia and Delusional Disorders Hospitalisations

In 2014-15, in the HNECC PHN region, the rate of schizophrenia and delusional disorder hospitalisations was 143 per 100,000, similar to 2013-14 (138 per 100,000), and lower than the Australian rate (164 per 100,000). The bed day rate (3,236 per 100,000) was also lower than the Australian rate (3,615 per 100,000)¹⁰.

In 2014-15, at a local level, the rate of schizophrenia and delusional disorder hospitalisations was higher than the Australian average in Moree-Narrabri (247 per 100,000), Taree-Gloucester (228 per 100,000), Armidale (192 per 100,000), Tamworth-Gunnedah (176 per 100,000), Inverell-Tenterfield (176 per 100,000) and Newcastle (171 per 100,000). Lowest rates were recorded in Lower Hunter (99 per 100,000) and Upper Hunter (111 per 100,000) SA3s, see Appendix C for further details. Bed day rates ranged between Newcastle (4,353 per 100,000), Moree-Narrabri (4,098 per 100,000) and Upper Hunter (2,115 per 100,000)¹⁰.

Bipolar and Mood Disorders Hospitalisations

In 2014-15, in the HNECC PHN region, the rate of bipolar and mood disorder hospitalisations was 111 per 100,000, similar to the 2013-14 rate (112 per 100,000) and slightly higher than the Australian rate (101 per 100,000). The bed day rate was 2,205 per 100,000 (Australia: 1,781 per 100,000)¹⁰.

In 2014-15, at a local level, the rate of bipolar and mood disorder hospitalisations was higher than the Australian average in Great Lakes (178 per 100,000), Taree-Gloucester (164 per 100,000), Newcastle (147 per 100,000), Lake Macquarie-East (139 per 100,000), Lake Macquarie-West (136 per 100,000) and Inverell-Tenterfield (114 per 100,000) SA3s. The SA3s with the lowest rates were Armidale (75 per 100,000), Moree-Narrabri (77 per 100,000) and Tamworth-Gunnedah (85 per 100,000), see Appendix C for further details. There was substantial variability in the bed day rate for these hospitalisations across the HNECC PHN region, with high rates in Newcastle (3,263 per 100,000) and Lake Macquarie-West (2,960 per 100,000) and low rates in Tamworth-Gunnedah (908 per 100,000), Moree-Narrabri (1,048 per 100,000) and Armidale (1,061 per 100,000)¹⁰.

Drug and Alcohol Use Hospitalisations

In 2014-15, in the HNECC PHN region, the rate of drug and alcohol use hospitalisations was 267 per 100,000, similar to the 2013-14 rate (260 per 100,000) and substantially higher than the Australian rate (180 per 100,000). The bed day rate was 2,007 per 100,000 (Australia: 1,369 per 100,000)¹⁰.

In 2014-15, at a local level, the rate of drug and alcohol use hospitalisations was higher than the Australian average in all SA3s, with the highest rates in Wyong (381 per 100,000 - almost twice the

Australian average), Moree-Narrabri (339 per 100,000), Gosford (337 per 100,000) and Great Lakes (319 per 100,000), and the lowest rates in Tamworth-Gunnedah (183 per 100,000) and Maitland (190 per 100,000), see Appendix C for further details. The associated bed day rate ranged from 3,595 per 100,000 in Great Lakes to 981 per 100,000 in Armidale¹⁰.

Aboriginal and Torres Strait Islander Population

In 2011-12 to 2012-13, in NSW, the hospitalisation rate for mental health conditions was 23 per 1,000 for Aboriginal people, 1.7 times higher than the rate for non-Indigenous people, with a rate difference of 11 per 1,000. Between 2004-05 and 2012-13, in NSW, the hospitalisation rate for mental health conditions for Aboriginal people increased from 25 to 29 per 1,000, and the rate difference between Aboriginal people and non-Indigenous people decreased by 5%¹⁵⁹.

Intentional Self-Harm Hospitalisations

Rates of intentional self-harm hospitalisations in the HNECC PHN region are consistently higher than the NSW average. As shown in Figure 27, in 2014-15, the rate of intentional self-harm hospitalisations in the HNECC PHN region was 171 per 100,000, or 214.9 per 100,000 for females and 128.7 per 100,000 for males. For people aged 15-24 years, the hospitalisation rate was 391.4 per 100,000 (females: 545.1 per 100,000; males: 246.6 per 100,000)¹.

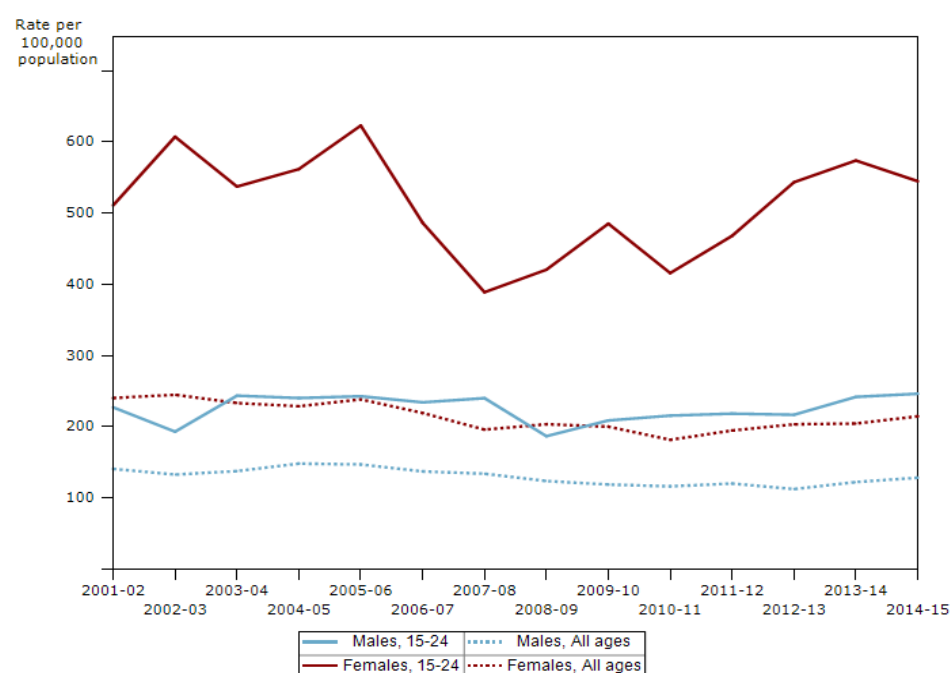


Figure 27: Intentional self-harm hospitalisations by sex, persons of all ages and 15-24 years, HNECC PHN region, 2001-02 to 2014-15¹

Table 23 shows the rate of intentional self-harm hospitalisations by LGA for the HNECC PHN region between 2013-14 and 2014-15. The average rate was higher than the NSW rate in 22 out of the 27 LGAs and the rates were consistently higher for females than males across all LGAs.

Table 23: Rate of intentional self-harm hospitalisations by LGA, HNECC PHN region and NSW, 2013-14 to 2014-15¹.

LGA	Rate per 100,000			LGA	Rate per 100,000		
	Males	Females	Persons		Males	Females	Persons
Armidale Dumaresq	122.9	212	147.2	Maitland	138.7	189.9	163.2
Cessnock	113.9	235	175.5	Moree Plains	122	141.4	99.7
Dungog	127.9	210.2	161.1	Muswellbrook	92.8	195.5	140.8
Glen Innes Severn	159.1	334.5	248.4	Narrabri	124.4	177.5	156
Gloucester	139.5	237.8	182.3	Newcastle	163.9	288.8	224.8
Gosford	93	147.3	120	Port Stephens	124.6	234.7	178.3
Great Lakes	182.2	247.5	221.2	Singleton	95.9	180.4	121.7
Greater Taree	156.5	292.5	227.5	Tamworth Regional	152.3	238.3	198.4
Gunnedah	103.5	138.7	85.2	Tenterfield	167	309	220
Guyra	154.6	262.9	205	Upper Hunter	112.5	198.3	149.7
Gwydir	142.1	206	159.2	Uralla	143.2	223.8	171.5
Inverell	172.2	251.4	224.7	Walcha	139.2	245.6	181.4
Lake Macquarie	131.1	242.5	186	Wyong	129.3	145.2	136.6
Liverpool Plains	110.8	163.6	110.8	NSW	95.9	167.2	131

LGAs with the highest rates of intentional self-harm hospitalisations were Glen Innes Severn (248.4 per 100,000), Greater Taree (227.5 per 100,000) and Newcastle (224.8 per 100,000), which were all substantially higher than the NSW rate (131 per 100,000). LGAs with the lowest rates of intentional self-harm hospitalisations were Gunnedah (85.2 per 100,000), Moree Plains (99.7 per 100,000) and Liverpool Plains (110.8 per 100,000)¹.

Prescription of Psychotropic Medication

In Australia, the dispensing of psychotropic medication has increased over recent years and continues to play an important role in the management of mental illness and associated symptoms¹⁵³. In 2013-14, in Australia, almost 15 million PBS prescriptions for antidepressants were dispensed to people aged 18-64 years, 400,000 to children and young adults, and more than 6.5 million to people aged 65 years and over¹⁵³.

Antidepressant Medication

In 2013-14, in the HNECC PHN region, antidepressants were prescribed to people aged 17 years or under at a rate that ranged from 6,025 per 100,000 in Moree-Narrabri to 16,844 per 100,000 in Great Lakes (Australia: 7,989 per 100,000), see Appendix B for further information. 11 out of the 15 SA3s ranked in the two highest deciles for antidepressant prescribing behaviour Australia-wide. The Australian Commission on Safety and Quality in Healthcare (ACSQH) suggest that variation could stem from differences in:

- the proportion of children who are at risk of depression and anxiety;
- cost and supply barriers to accessing optimal treatment pathways, including psychosocial interventions;
- prescribing practices, training, knowledge and attitudes of clinicians;
- decision-making criteria of patients and clinicians about the need for antidepressant medicines;
- the affordability and accessibility of mental health services suitable for young people, including psychosocial interventions in regional locations; and
- the location of youth correction centres in areas of higher dispensing¹⁵³.

For people aged 18 to 64 years, the antidepressant prescription rate ranged from 93,522 per 100,000 in Moree-Narrabri to 149,214 per 100,000 in Taree-Gloucester (Australia: 101,239 per 100,000), see Appendix B for further information. 11 out of the 15 SA3s ranked in the two highest deciles for Australia-wide. Variation could be attributed to differences in:

- the prevalence of risk factors for depression in different areas;
- access to optimal alternate treatment pathways, including psychosocial interventions;
- access to medical and mental health services in regional and remote locations, and within disadvantaged communities;
- clinicians' assumptions that individuals want pharmacological assistance;
- prescribing practices, training, knowledge and attitudes of clinicians; and
- decision-making criteria of patients and clinicians about the need for antidepressant medicines¹⁵³.

For people aged 65 years or older the antidepressant prescription rate ranged from 175,212 per 100,000 in Armidale to 248,578 per 100,000 in Maitland (Australia: 196,574 per 100,000), with Wyong and Lake-Macquarie-East also ranking in the two highest deciles Australia-wide, see Appendix B for further information. Variation could be linked to differences in:

- disadvantaged communities with a higher risk of depression and lack of access to optimal alternate non-medication treatment pathways;

- access to optimal alternate treatment pathways, including psychosocial services in regional and remote locations and within disadvantaged communities, a barrier further compounded by age;
- preferences and knowledge about the appropriate treatment for depression, including the role of social and psychological interventions; older people are less likely than their younger counterparts to access these available services;
- access to services for physical illness and declining function, which are major contributors to depression in older people;
- prescribing practices, training, knowledge and attitudes of clinicians;
- the density of aged-care facilities; and
- variations in prevalence of other conditions for which some antidepressants are used, for example, neuropathic pain and urinary incontinence¹⁵³.

Antipsychotic Medication

In 2013-14, in the HNECC PHN region, antipsychotic medication was prescribed to people aged 17 years or under at a rate that ranged from 1,440 per 100,000 in Upper Hunter to 5,698 per 100,000 in Taree-Gloucester (Australia: 2,070 per 100,000), see Appendix B for further information. 11 out of the 15 SA3s ranked in the highest two deciles for this prescribing behaviour Australia-wide. The ACSQH suggest that variation could stem from differences in:

- prescribing practices across different states and territories and potentially between primary health providers and specialists;
- access to psychosocial interventions;
- the incidence and prevalence of psychosis related to illicit drug use;
- practitioner, consumer and family willingness to accept medication assistance;
- health system factors, including availability of mental health services and access to psychiatric and psychological services;
- location of youth correction centres in areas of higher dispensing; and
- private prescriptions, which are not included in this data¹⁵³.

For people aged 18 to 64 years, the antipsychotic prescription rate ranged from 11,939 per 100,000 in Upper Hunter to 32,532 per 100,000 in Taree-Gloucester (Australia: 159,176 per 100,000), with 7 out of the 15 SA3s ranking in the two highest deciles in this category. See Appendix B for further information. Variation could be attributed to differences in:

- prescription practices, which may vary between states and territories, primary health providers and specialists;
- the prevalence of mental health conditions such as schizophrenia, which may be higher in disadvantaged communities;
- access to psychiatric and psychological services;
- location of correctional facilities in areas of higher dispensing; and
- private prescriptions, which are not included in this data¹⁵³.

The antipsychotic prescription rate for people aged 65 years or over ranged from 19,059 per 100,000 in Tamworth-Gunnedah to 30,675 per 100,000 in Newcastle (Australia: 27,043 per 100,000) which was in the highest two deciles Australia-wide, see Appendix B for further information¹⁵³. Variation could be linked to differences in:

- prescribing practices, training, knowledge and attitudes of clinicians;
- the use of antipsychotic medicines outside the guideline recommendations, such as to treat behavioural disturbances in older people;
- multiple repeat dispensing, which could influence recorded dispensing rates at the local area level;
- the density of aged-care facilities; and
- private prescriptions, which are not included in this data¹⁵³.

Anxiolytic Medication

In 2013-14, in the HNECC PHN region, anxiolytic medication was prescribed to people aged between 18 and 64 years at a rate that ranged from 9,349 per 100,000 in Upper Hunter to 27,628 in Great Lakes (Australia: 17,201 per 100,000) which was in the highest two deciles Australia-wide, see Appendix B for further information. The ACSQH suggest that variation could be attributed to differences in:

- the risk of anxiety and depression, which is higher in disadvantaged communities;
- access to optimal alternate non-pharmacological treatment pathways;
- prescribing practices, including short courses of treatment and planning to discontinue medication, which can prevent long-term dependence; and
- private prescriptions, which are not included in this data¹⁵³.

The rate for prescription of anxiolytic medication to people aged 65 years or over ranged from 13,190 per 100,000 in Upper Hunter to 37,190 per 100,000 in Wyong (Australia: 37,695 per 100,000)¹⁵³. Variation could be linked to differences in:

- the density of aged-care facilities and disadvantaged communities;
- older people's referrals for psychological therapies;
- access to psychological treatment pathways – a barrier that is compounded among older people;
- individual clinicians' prescribing practices;
- community awareness regarding prevention, self-management and non-medication treatments for anxiety; and
- private prescriptions, which are not included in this data¹⁵³.

Perceptions of Mental Health Service Needs

The analysis of key stakeholder interviews was informed by the conceptual frameworks for mental health models of care.

Mental Health Service Gaps

In the Australian Government's Response to Contributing Lives, Thriving Communities - Review of Mental Health Programs and Services¹⁶⁰ the stepped care model was emphasised to summarise the system changes needed to strengthen mental health care and in particular primary mental health care clinical service delivery. In the context of this needs assessment the stepped care model was used to identify specific service gaps as illustrated in Figure 28.

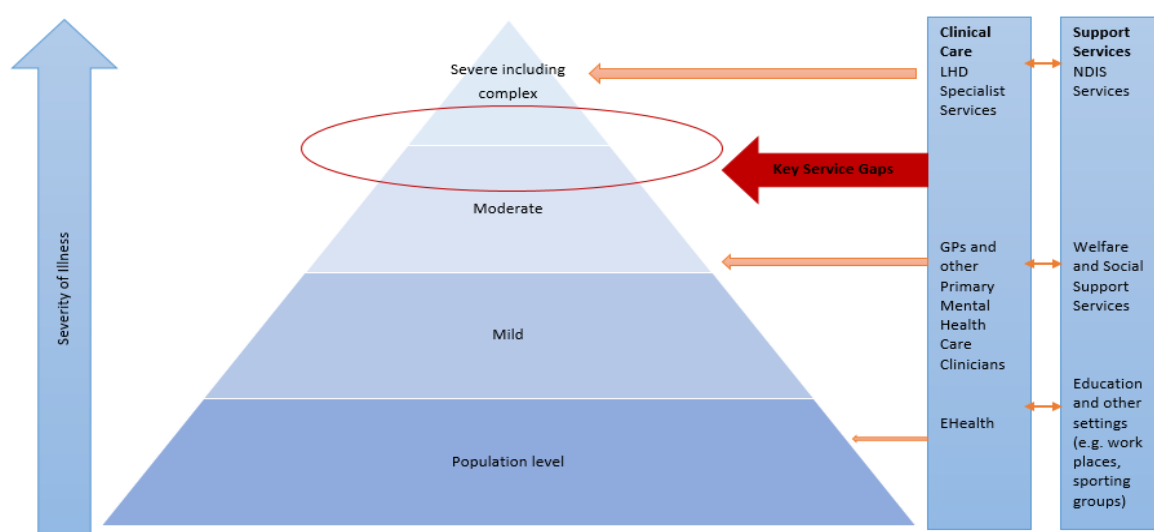


Figure 28: Identified service gaps in the HNECC PHN region in the context of the stepped care model

Based on the findings of this review, the key service gaps in the HNECC PHN region relate to those people experiencing moderate to severe mental illness including those with complex needs. In particular, clinical care for people experiencing severe mental illness is not available. Providing care for these people is stretching the capacity of primary care, whilst specialist services in the LHD are only being provided for people who are acutely unwell.

An overwhelming finding of this needs assessment was that it was perceived that the mental health system is failing as a result of this gap. Instead of preventing people entering the acute system, it is in effect channelling people to acute services due to a lack of clinical care. People experiencing moderate to severe mental illness, including those with complex needs, are becoming increasingly unwell and their symptoms are often escalating to the stage where they need admission. This was perceived by most participants as costly, ineffective and low quality care. It was also perceived that this gap cannot be addressed unless there is commitment to planning across the system and a reorientation of the system to prevent these potentially avoidable hospital admissions.

The thematic analysis identified a number of categories of mental health service gaps, which although interrelated, for the purpose of this report are reported separately.

Age and Population Groups

The first category of mental health service gaps related to age groups. Services for children and young people up to 18 years of age was a gap identified across all local government areas. It was perceived that the demand for services for children and young people was increasing, with reports of increasing mental illness and self-harming in this cohort. The services provided by the state based child and adolescent mental health services (CAMHS) were acknowledged as a key service. However, access to these acute and community based services was reportedly limited to people experiencing severe mental illness. For children and young people under 18 years of age requiring hospital admission the only inpatient services were provided at Nexus, in the John Hunter Children's Hospital. For those people residing outside of the Newcastle area this required travel, including from distant LGAs such as in the New England North West area.

The community based CAMHS services were provided for children and young people under 18 years with severe mental illness in most LGAs with staff either locally based or travelling to the community on certain days. However, access was perceived as limited.

Services for children and young people with mild to moderate mental illness were provided in communities by a mix of services including GPs, allied health providers with accreditation to work with this population group, and Headspace in a limited number of communities for those between 12 and 25 years of age. Other services included psychologists, social workers and school counsellors employed by schools and a number of non-government organisations such as youth services. However, these services were not available in every community. In particular, access to psychologists who were accredited and/or willing to provide services to children and young people was perceived to be limited in most LGAs.

The model of Headspace for young people aged between 12 and 25 years is commonly cited by stakeholders across the HNECC PHN region as offering potential as an ideal model for mental health care applicable to all age groups, with the perception that it provides a range of primary health care and social services in one site to support access for young people. However, Headspace provides services for those with mild to moderate mental health problems, not for people with high moderate to severe mental illness.

Headspace mostly relies on provision of medical care by GPs. Despite expectations to the contrary by community members, Headspace services in the HNECC PHN region do not provide direct access to psychiatric care. This is achieved through partnerships with private psychiatrists or those in state based mental health services.

The model provided by Headspace is widely supported by stakeholders to the extent that in most communities across the HNECC PHN region there is the expectation that a Headspace is required. This does not always coincide with an understanding of the ability to recruit, retain and fund staff for such a service. There was also a common but erroneous view that there was immediate access to psychiatric services in Headspace with a strong focus on early psychosis.

The other age group where service gaps were identified was people over 65 years of age, including those living in the community and those in aged care facilities. Specialist Mental Health Service for Older People (SMHSOP) were the state based service for this age group, with inpatient units in the Central Coast LGA (Gosford and Wyong), Newcastle LGA, Lake Macquarie LGA (specialist service at

Morisset) and community based services in all LGAs except for Liverpool Plains where access was from Tamworth.

Services for older people were recognised as a growing need with the ageing population. In addition, older people are unable to access support services through the NDIS due to the age limit of 18-65 years. Older people experiencing mental illness cannot seek support through the NDIS and need to seek services through myagedcare. Access to services through a GP is available as part of a chronic care plan but is limited to a maximum of five services per patient each calendar year, including services such as podiatry and physiotherapy. It was perceived that older patients chose services such as podiatry and physiotherapy over addressing their mental health needs. Residents of aged care facilities are ineligible for services under the Better Access mental health program. These issues were perceived as significant service gaps for older people.

Types of Mental Illness

The most common service gap reported by stakeholders was for people experiencing moderate to severe mental illness, both episodic and chronic, including those with other complex health and social problems such as physical illness, drug and alcohol misuse, access to sustained housing, unemployment and difficulties in daily living.

Given the lack of services for people with severe mental illness and complex health and social problems, often there was reliance on primary care to provide the necessary care. It was perceived by clients, carers and service providers including GPs that this was beyond the capacity of primary care, especially in instances where a person's symptoms were escalating. This was perceived to result in poor outcomes for consumers, family, carers, and the community, and frustration for clinicians.

Services for people experiencing moderate to severe mental illness, both episodic and chronic including those with other complex health and social problems is a critical service gap.

My [relative] has schizophrenia... he has a range of other problems. I know when he is getting sicker. But it seems that most times he is not sick enough to get admitted to [name of hospital]. No one listens to me that I can tell the signs. And there is nowhere else to turn to get treatment for him. And so I am left to deal with it and he just gets to the point where he is so sick he might be admitted for a very short time and then it all starts again.....

Carer

There was also a common and strong perception by carers that there is a lack of recognition of their role in the care they provide for family members and friends. While this was often explained to them by service providers as relating to confidentiality, it was suggested that their involvement in care was likely to result in better outcomes for the patient and for themselves. Some service providers, especially those in the LHD mental health services recognised there was a need to strengthen the involvement of carers in care planning for patients especially those experiencing severe and complex mental illness.

Services for people experiencing Borderline Personality Disorder were often identified as an important service gap. Many community based service providers indicated they felt ill-equipped to provide the

type and intensity of services needed by these consumers, and that they required more sessions than were provided under the Medicare rebate scheme. The Centre for Psychotherapy in Newcastle offers an outpatient based service for clients, but this was accessible for clients in the Hunter region only and a waiting list of up to 6 months was reported.

For people experiencing mental illness and concurrent drug and alcohol problems, services were perceived as limited. Many service providers indicated that they were providing care and support for many clients with co-existing drug and alcohol problems who were not accessing services for substance misuse.

Services for clients experiencing eating disorders were also identified as a key service gap, especially for young women. In particular, in rural communities key stakeholders identified a lack of hospital and community based services for people experiencing eating disorders. It was perceived that the capacity of GPs and allied health providers to provide care for people with eating disorders was limited. For people in rural areas, travel to services in Newcastle, Sydney and Brisbane was reported for children and young people with eating disorders.

Survey participants were asked to report how often the needs of people in their community experiencing specific mental illness were met, these results are shown in Figure 29. For most mental illnesses, there were differences in perceptions between participant groups with consumers, carers and community members more likely to report that needs were unmet than service providers. For example, for depression and anxiety a higher proportion of consumers, carers and community members reported needs as being never or rarely met (depression 25%, anxiety 29%) compared to service providers (depression 5%, anxiety 7%). This also occurred with other mental illnesses, except for personality disorder where reporting of unmet needs was more closely aligned, with close to one third of consumers, carers and community members (33%) and service providers (34%) reporting that needs of people in this cohort were rarely met.

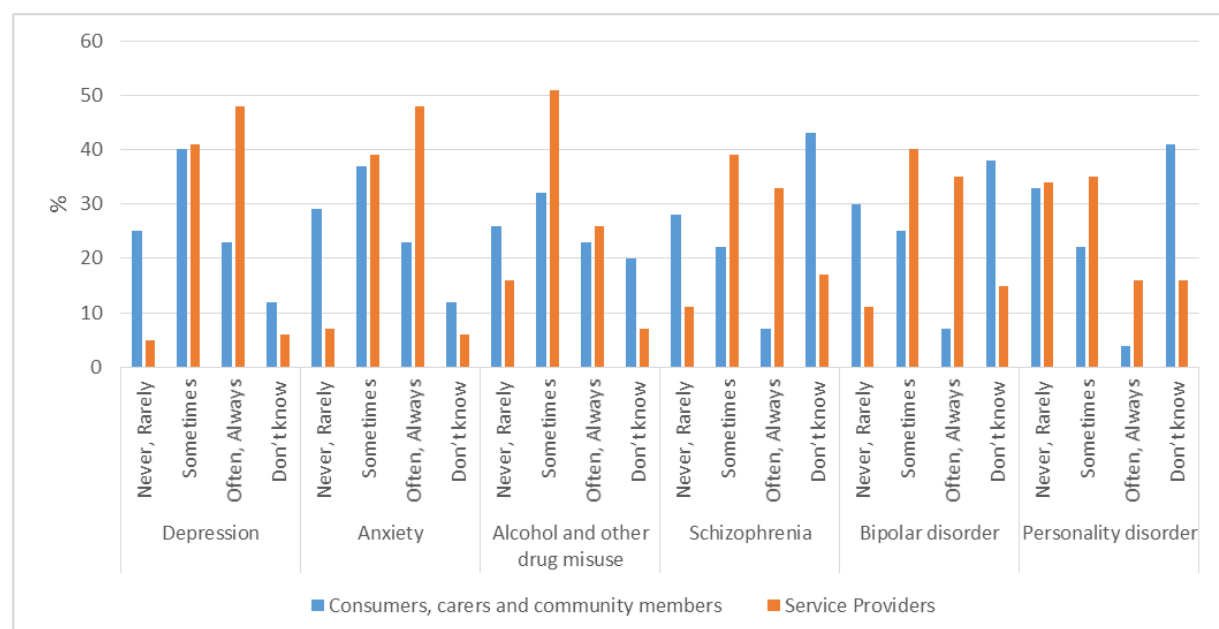


Figure 29: Proportion of survey participants reporting how often needs were met of people in their community experiencing specific mental illnesses

The results of the validation survey showed that for the identified priorities in relation to service gaps, the majority of participants reported they agreed or strongly agreed with the service gap statements. The exception to this was for gaps in relation to: the capacity of services to recruit and retain allied health staff; and the availability of early intervention services, with two participants disagreeing with these statements.

Service Types

Given the central role of general practice there were concerns that the model of care in this setting did not support effective mental health care. While it was recognised that GPs play a key role, the need for other staff in general practice such as practice nurses and other allied health providers to provide care for people experiencing a mental illness was common. While practice nurses are more common in general practice they often do not have the required credentials to provide mental health care. There are also significant barriers to gaining the required credentials to provide mental health nursing care in general practice which has resulted in few nurses completing the required training. It was perceived that if there was a commitment to strengthening the role of general practice in mental health care there is a need to ensure that multidisciplinary teams located in general practice are supported.

Access by GPs to psychiatrists through telehealth was perceived as enhancing services especially in rural areas. However, this was perceived as mostly unavailable. This perception was relevant for all ages and especially for children and young people with few child psychiatrists available across the region. Access to child psychiatrists was mainly in Newcastle and for those with severe mental illness. This was reinforced by service provider survey data with 82% indicating access to psychiatrists was poor.

Early intervention to prevent onset of mental illness, to prevent deterioration of symptoms, to support recovery and specifically for those experiencing first onset of psychosis is a key service gap. There needs to be a significant shift in the way services are delivered to ensure early intervention across the service system.

The lack of access to early intervention services was a key finding from the interviews. Early intervention needed to be viewed in its broadest sense: early intervention to prevent onset of mental illness; early intervention to prevent deterioration of mental illness; early intervention to support recovery; and specifically, early intervention for those experiencing first onset of psychosis. These services were perceived to be mostly unavailable. It was also recognised that there needed to be a significant shift in the whole way services are delivered to ensure early intervention was applied across the service system.

Over half of participants in the consumer, client and community member (56%) and service provider (51%) surveys disagreed that early intervention was accessible. In addition, 99% of participants in both samples indicated that there was a need to increase access to early intervention services to improve mental health.

The uneven distribution of psychologists was raised as a concern. In particular, while most communities had psychologists, many of them required gap payments limiting access for people who could not afford care. It was perceived that people were foregoing care because of the inability to pay

the gap fee. For services where access did not require a payment there was often a waiting list and strict criteria for access. In addition, there were concerns about services being provided by some organisations with a reliance on provisional psychologists. In some instances, provisional psychologists were working alone with minimal supervision. It was perceived that their experience in providing care for people with complex mental illness was limited.

E-health options were widely supported but mainly for, and by, young people and males. Barriers to accessing E-health options were identified especially in rural areas. These barriers related to internet coverage with connectivity raised as a significant barrier. Data from the surveys indicated that 59% of service providers would be willing to refer clients to online services for mental health issues, however only 30% of service providers agreed that their clients would be willing to use online services. This compares with nearly half (48%) of consumers, clients and community members indicating that they would be willing to use online services.

Navigating the Service System

The mental health service system is made up of many discrete services, each targeting different population groups and different health and social dimensions of mental health. Navigating the service system was commonly described as a “nightmare” for service providers, GPs, consumers and carers. The difficulty in navigating the service system was associated with a number of different barriers to access. First, is a strong and common perception that the LHD mental health services have become increasingly restrictive in their criteria limiting access for children, young people and adults. The restricted access to LHD mental health services is perceived to have occurred in the absence of any planning across the system. It was commonly reported by staff in the state mental health services that the criteria for accessing their services was for a patient to be “homicidal, suicidal or seriously self-harming”. While this was not explicitly stated for mental health services, it was described as the way services operate. People with mild to moderate mental illness receive clinical care in the community from GPs, mental health nurses and allied health providers. However, for people experiencing severe and chronic mental illness who are not acutely unwell, clinical services are rarely available.

Difficulties in navigating the service system is limiting access to care for consumers and making referrals challenging for service providers.

Second, if someone was triaged as meeting criteria for state mental health services, and as a result presented to an acute facility, they were often not admitted or were discharged early. This was reported as often occurring in the middle of the night and sometimes with patients at some distance from their home without transport.

Third, the mental health line, the initial point of access for someone experiencing acute mental health illness was commonly and strongly criticised by service providers and community members. Waiting times on the phone were reportedly lengthy, creating difficulties for service providers often with unwell people in their rooms, and more importantly causing concerns for consumers who were unwell, and for their carers. In addition, access to services rarely occurred, with most people reporting that their clients were deemed ineligible for state based mental health services.

I have had really unwell clients in my room who I think needed to be seen by a specialist. I have used the 1800 mental health line and have had to wait for up to an hour to speak to someone. This is really hard when I have someone in my rooms who is really sick and I have to wait on the phone. But it's even harder for the client. After all the waiting you usually are told that they are not eligible for admission and so you are left with nowhere to go....

Service Provider

Fourth, there have been significant changes in the service system in the past five years for a number of reasons. The Australian Government's primary care policy resulted in transition from Medicare Locals to Primary Health Networks. Under the previous policy, programs and services were provided directly through Medicare Locals. Under the PHNs, services are commissioned to meet local needs. Changes have occurred in services resulting from this transition from Medicare Locals to Primary Health Networks. There have also been a number of changes in the names and focus of services in the last few years, for example Richmond PRA became Flourish Australia and Schizophrenia Fellowship has become Onedoor Mental Health. In addition, there are now many private allied health providers delivering mental health services to the community. These private providers were supported through programs such as ATAPS and MHNIP, as well as through the MBS. Under the MBS, Medicare rebates are available for clients with an assessed mental disorder for up to ten individual and ten group allied mental health services per calendar year. These patients need to be referred by a GP under a GP Mental Health Treatment Plan.

Lastly, with the advent of the National Disability Insurance Scheme (NDIS) many of the non-government services which provided support services for people with a mental illness now require clients between 18 and 65 years of age to have an NDIS plan to access support services. While this was reported as potentially beneficial for people experiencing mental illness it also presented significant challenges for services and clients. The process of applying for and being granted an NDIS plan was perceived to be lengthy and challenging for clients with reliance on family members, carers or support workers to complete the paper work and assessments. Some clients indicated reluctance to apply for access to the NDIS because it conflicts with the concept of recovery which is a strong ethos for some mental health services and for clients. It was also perceived that acceptance for a NDIS plan was dependent on the mental health knowledge, attitudes and understanding of the assessors.

This instability in the service system is impacting on referral pathways, access to care and on recruitment and retention of staff, particularly in rural areas. Most significantly it is impacting on care for clients and ultimately on outcomes. It was commonly reported by service providers that they were uncertain which services or service providers to refer clients to as a result of the changes in the service system. It was compounded further by the perception that information on available services and service providers was unavailable.

There have been so many changes in the services for people with a mental illness I have no idea where to refer to anymore. I am unsure of the latest names of services, what their criteria are.... There is no where I can go to find out this information.

GP

Service Models for Mental Health

The findings from the interviews demonstrate that there is no clarity about the service model overall at a system level across the HNECC PHN region, or for service models within local government areas. Rather, there are many services operating separately with limited efforts to provide care in partnership unless under an agreed consortia model.

Stepped Care Model

A stepped care model was supported in principle, however most service providers, clients, carers and community members perceived that such a model was not in place. Rather there was a disparate array of services with little alignment to a stepped care model. Barriers to operating a stepped care model which were reported by interview participants included: access to specialist services when needed, such as those provided through state services, was mostly described as 'near impossible'; many disparate NGO services provide support services for clients, with access to clinical care if needed mostly through other community services, and thus dependent on partnerships and clients meeting criteria for access; shared information was difficult due to confidentiality concerns; and follow-up care after a hospital visit was very limited.

A stepped care model is dependent on effective integration and collaboration between service providers across the mental health system. Collaboration is dependent on developing and sustaining effective partnerships between service providers. With many services funded on a sessional basis, concerns were expressed by service providers that this neglects the need for partnerships. Reliance on sessional funding was perceived to be a significant system barrier to collaborative and integrated care.

Data from the surveys indicated agreement by service providers, clients, carers and community members that elements aligned to a stepped care model were needed to improve services: the need to improve coordination between services was agreed or strongly agreed with by 93% of consumers, carers and community members and 95% of service providers; and the need for improved follow up of patients after hospital discharge was agreed or strongly agreed with by 95% of consumers, carers and community members and 95% of service providers.

Hub and Spoke Model

For mental health services across the HNECC PHN region the hub and spoke model appears to be accepted conceptually by service providers, particularly in rural areas where this model has been applied in other areas of health. In mental health however, like other chronic disease care, services are required to provide collaborative care irrespective of organisational boundaries. Care under this model was perceived to be harder when care is provided across multiple organisations all operating different hub and spoke models.

An effective hub and spoke model would recognise the central role of the GP as the primary care provider for mental health, with ready access to specialist psychiatric advice as needed. This model was identified by service providers as being provided in areas such as intensive care, emergency and stroke care.

However, this hub and spoke model was not consistently applied across all areas of the HNECC PHN region for mental health care. In particular, GP access to psychiatric specialist advice was reported as limited in most areas.

In some LGAs, access to psychiatric specialist advice occurred through the LHD mental health services. In these instances, GPs either in their private practice or when providing medical on call in the local hospital had to ring the nearest acute mental health unit and speak with a staff member. The LHD staff member effectively acted as a triage point, determining whether psychiatric input was warranted. In this sense, they operated as gatekeepers to psychiatrists with a perception that clinical indicators, as well as service activity indicators (such as bed availability), influenced the decision. If a decision that psychiatric input was needed was made, the LHD would contact the psychiatrist first before the GP had access to the needed advice. This often occurred late at night when GPs were called into the hospital and took many hours to resolve. This complicated process was frustrating for GPs, nurses and patients and was perceived to contribute to significant risks for staff and patients.

The GP and other primary care providers are central to mental health care. Access to specialist advice when needed is key to achieving this role.

The other night I had to attend the hospital for a severe mental health case. It was in the middle of the night. I was the only GP on. I had to ring [LHD mental health unit] to see if I could speak with a psychiatrist. The person I spoke with took the information and makes the decision about whether to ring their psychiatrist on call. I then had to wait around while all this happens with a very unwell patient in ED.....When finally someone saw this patient it was 36 hours later.

GP in rural community

The other concern raised about the hub and spoke model was that allocation of services and service providers was based on this model without knowledge of communities and the interactions between communities. Examples were given where services were expected to operate as hub services and provided spoke services to communities, which on a map may appear relatively close but based on actual distances and community linkages did not routinely work together.

Contractually some hub sites are supposed to be providing outreach services to spokes. However, it was identified by interview participants in both hub and spoke sites that the demands of the hub sites dominated decisions about care to other locations. There was a perception that often clients in spoke sites missed out on services because the hub sites were so busy that there was insufficient time and staff to provide the contracted outreach services. Examples were also provided where hub type services used less experienced staff such as provisional psychologists to provide services at spoke sites, often unsupervised, and providing care for people with complex mental health problems. There was concern that in these instances, clinicians were operating above their capacity with little support from hub sites and care for clients was ultimately being compromised.

It was recognised however that the hub and spoke model had the potential to address some of the recruitment challenges for mental health service providers.

Service Quality

The quality of services was perceived as variable by most interview participants. In particular, concerns were expressed about the quality of services provided by LHD mental health services, especially in the acute setting. Other concerns about service quality related to the lack of experienced clinical staff in some organisations, with reliance on staff such as provisional psychologists. The reliance on provisional psychologists was perceived by some as reflecting the sessional payment structure used in the commissioning of services. Cost per session was less with provisional staff but did not necessarily result in quality and improved outcomes for clients. There was also concern about the quality of services being provided by NGOs without access to clinical input. This was perceived as being needed to ensure staff could be supported when working with people with severe and complex conditions especially when symptoms were escalating.

Just over a third (34%) of service providers expressed confidence in the quality of the services they can refer to, with 91% indicating there was a need to improve the quality of mental health treatment services in the hospital system. For consumers, clients and carers 55% reported the quality of the services as high, however a much higher proportion (88%) indicated there was a need to improve the quality of treatment services in the hospital system.

Few support services appeared to have a systematic approach to quality. A quality framework including an approach to manage clinical risk was considered imperative for all services but was not a focus of many services. In addition, there were few examples of services reporting client outcomes, and clinical and client experience, with a reliance on activity reporting. Indicators for client outcomes, and clinical and client experience reflect the quadruple aims of health care, align to HNECC's strategic plan and are fundamental for high quality services.

Service Frameworks

The findings of this needs assessment indicate that there are some approaches to mental health promotion in the HNECC PHN region as demonstrated through school link coordinators and staff in the Rural Adversity Mental Health Program (RAMHP). Results from the surveys indicate strong support for mental health promotion and prevention. For service providers, consumers, carers and community members, 96% agreed or strongly agreed that there was need to improve mental health promotion and prevention.

However, there appears to be no systematic approach to mental health prevention and promotion which is aligned to evidence-based frameworks. Rather, there is a reliance on delivery of training programs across different settings such as schools, workplaces and sporting groups. This is not to say that this is not a worthwhile approach, however overreliance on training misses opportunities for other mental health promotion strategies.

Perceptions of Suicide Prevention Service Needs

For suicide prevention, the analysis was informed by frameworks for mental health and suicide prevention.

Suicide Prevention Needs

Many of the current strategies aimed at preventing suicide are based on one on one clinical interaction with at risk clients. Concerns were expressed by a number of interview participants about the capacity of services to manage patients at risk of suicide. There were three main areas of concern regarding these at risk people. The first related to the way LHD mental health services managed patients expressing suicidal ideation. A common experience reported was that often people at risk were not admitted, rather they were observed in Emergency Departments and then sent home. Service providers in LHD mental health services indicated that non-admission to an acute unit or observation in an ED was often appropriate. They indicated that this time may be sufficient to provide the needed care for patients and reduce the crisis situation which prompted suicidal ideation. If admitted or following presentation, it was perceived that patients were discharged quickly, often after hours in the absence of options for people to return home, with little or no-follow up and no connection with other services. It was acknowledged by a number of LHD mental health service providers that follow-up care needed improving. Concerningly, GPs reported rarely receiving information about patients presenting to hospital with suicidal ideation or following a suicide attempt. If information was received it was often weeks after the patient had presented to an ED, thus reducing opportunities for GPs to provide care for the patient.

The second area of concern was the capacity of GPs to provide care for people with suicidal ideation. This was raised by many interview participants but particularly by young people. It was perceived that some GPs lacked the skills in identifying a patient at risk of suicide, often ignored risk factors and were reluctant to have the conversation about suicide. Further, some young people expressed concern about the attitudes of some GPs towards suicide. Young people reported experiences with GPs dismissing suicide attempts as attention seeking behaviour; offering no support, referrals or understanding; and neglecting to explore the contributory factors. In contrast, examples were provided where GPs excelled in managing suicide risk in young people, demonstrating high levels of skills, empathy and commitment in relation to suicidal ideation. Where this occurred, it was perceived to be a combination of the commitment of the GP to addressing mental health, identifying and acting upon contributory factors, and implementing care plans to reduce suicide risk.

The third area of need related to the capacity of support services to recognise suicide risk in clients. There was a perception that training of staff in mental health was often insufficient to allow support service staff to identify risks and associated factors, and to escalate concerns to clinicians to help manage patients at risk. Staff in these services commonly indicated that they felt they were required to operate beyond their scope of practice in supporting people with mental illness and especially for those at risk of suicide.

There were also concerns that the sectors across the community (e.g. education sector, workplaces and community groups) did not have the capacity to identify those at risk of suicide or expressing suicidal ideation, or to provide services and support for those who had attempted suicide or for families following a suicide of a family member. It was acknowledged that there was increased recognition of the role of these sectors across the community to address suicide. This required the capacity of sectors such as education, sporting clubs, workplaces and communities in general to build to be strengthened to address suicide.

There was little evidence of a strategic approach to suicide prevention across the HNECC PHN region. The potential for community based suicide prevention plans in line with state and national frameworks is a missed opportunity.

All participants in the validation survey agreed or strongly agreed with the service gaps statements in relation to suicide prevention. The majority agreed about the need for services for people at risk of suicide, suicide prevention services and for post suicide intervention strategies and services.

Post-vention Suicide Needs

A number of communities have established post-vention committees following suicides in their communities. Supported by organisations such as [Lifeline Hunter](#) and [United Synergies](#), a number of communities in the HNECC PHN region have implemented a range of strategies to support families, friends and colleagues of people in their community after a suicide. In addition, some communities such as Maitland, and Lake Macquarie have established suicide prevention networks without organisational support, with membership from those affected by the suicide of a family member or friend. In the Upper Hunter, Where there's a Will has been established as a not for profit charity with a focus on suicide prevention. Schools also reported post-vention strategies with support often provided by Headspace at state level. However, these strategies are not in place in every community and the capacity of communities to respond following a suicide was identified as an area of need.

Only 10% of consumers, carers and community members agreed or strongly agreed that there were services for family and friends after a suicide attempt, with the remaining 90% being unsure or disagreeing about the existence of such services. A higher proportion of service providers (31%) agreed or strongly agreed that there were services for family and friends after a suicide attempt, however 38% were unaware of these services.

The provision of support for families following a suicide attempt or completed suicide was also perceived as a significant system challenge and a barrier to addressing suicide. It was perceived that families were often in the best place to provide support for a loved one following a suicide attempt. However, the claimed need for privacy and confidentiality was used as a barrier to involving families. This was considered a significant barrier to recovery for both the person who had attempted suicide and the family.

Barriers to Accessing Services

In 2015-16, in the HNECC PHN region, the percentage of adults who did not see or delayed seeing a GP due to cost in the preceding 12 months was 5.4% (Australia 4.1%)¹⁰. The percentage of adults who delayed or avoided filling a prescription due to cost in the preceding 12 months was 9.1% (national 7.6%)¹⁰. In 2014, LGAs with the highest rate of people finding cost of services a barrier were Great Lakes (3.9 per 100), Armidale Dumaresq (3.7 per 100), and Cessnock (3.4 per 100); and those with the lowest rate were Lake Macquarie and Uralla (both 1.7 per 100)³.

In 2014, in the HNECC PHN region, the rate of people who often had difficulty or could not get to places as needed with transport was 4.1 per 100, compared to 4.0 per 100 Australia-wide, and 4.3 per 100 for NSW. LGAs with the highest rate of people encountering transportation barriers were Moree Plains (4.7 per 100), Wyong (4.6 per 100) and Liverpool Plains (4.5 per 100); and those with the lowest rate were Uralla (3.5 per 100), Singleton and Walcha (both 3.6 per 100)³.

In 2013-14, in the HNECC PHN region, the percentage of adults who felt they waited longer than acceptable to get an appointment with a GP was 24.6% (Australia 22.6%)¹⁰.

Perceptions of Barriers to Service Access

In addition to the difficulties of navigating the service system, the interview participants identified a number of barriers to accessing services. There were three main categories of barriers identified in the thematic analysis of the interviews. The first category related to the capacity of the services. It was perceived that the capacity of some services to provide the breadth of services for people experiencing moderate to severe mental illness was limited. Despite evidence for the need for comprehensive health and social services^{31, 160}, there were few services that provided seamless access to clinical, therapeutic and support services. Most provided clinical and therapeutic or support services but not both, with reliance on referrals to other agencies. Referral between services was often described as difficult, with challenges around information sharing, case management and role delineation.

The second category of barriers related to system challenges. Cost was reported as a significant barrier to accessing services by clients and carers. Many GPs, psychiatrists and private allied health staff charged a gap payment on top of the Medicare rebate with few reportedly bulk billing. Over the year these costs were significant especially for those with moderate to severe mental illness, where work was limited as a result of their illness and were thus reliant on welfare payments. Service providers commonly indicated that their decisions about referral were made on knowledge about service costs rather than on care needs.

Cost of services was identified as a barrier to access by 81% of service providers and by 71% of consumers, clients or carers. In addition, 79% of service providers indicated that they needed to consider the cost of services first in making referrals.

Many general practices have multi-disciplinary teams to support integrated patient care especially for those with chronic diseases. For example, practice nurses support patients in general practice with diabetes management, cardiovascular and respiratory diseases. However multi-disciplinary support

within general practice for patients experiencing mental illness is not common. Many service providers indicated that the provision of multi-disciplinary support within general practices would provide better care and improved outcomes for patients experiencing mental illness. Roles could include assessment, brief interventions, support with medication review (mental health nurse role), referral and preparing and monitoring mental health plans, and ongoing management especially for people with severe mental illness and other complex problems.

While the need for more multi-disciplinary support within general practice for patients experiencing mental illness was widely supported there were a number of barriers to implementation which would need to be addressed. The first related to funding for such positions with no current funding for these roles other than MBS rebateable sessions for allied health staff who delivered services within a practice. There were some examples where psychologists or mental health nurses provided services in some practices but it was perceived that there were insufficient patient numbers in most practices to make it viable for these clinicians to work in a single practice. To overcome this there were a number of clinicians who used rooms in a number of general practices to enable sufficient volume for financial viability.

The second barrier related specifically to mental health nurses in general practice. While the role of mental health nurses in general practice was widely supported it was acknowledged that there were few credentialed nurses who could work in these roles. Attaining the necessary credentials for working as a mental health nurse in general practice was perceived as difficult. Further the pay differential between mental health nurses in general practice and those working in LHD mental health services contributed was a factor in limiting the supply.

Under the different allied health access programs, the clients are eligible for 6 sessions per annum with an additional six under exceptional circumstances. It was perceived that this was too restrictive with allied health professionals commonly indicated that clients experiencing mental illness, especially severe mental illness and other complex problems, required more than the system allowed. This was particularly relevant for clients who had experienced trauma and abuse, and especially for Aboriginal and Torres Strait Islander clients given the significant impact of inter-generational trauma. The need for more than the 12 sessions maximum was required but not available under current programs unless paid for privately.

Some services have limited capacity to provide services when funded on a monthly sessional basis. In these instances, sessions are commonly allocated on a monthly basis and if demand is greater than supply services close their books until more sessions become available at the beginning of the next month.

Transport was another system related challenge. The challenges that transport presented was not in rural areas alone but also in urban areas. Clients often had to rely on public transport to access specialist clinical services distant to their home. Transport was limited often requiring whole day or overnight stays. Community transport, while available, was often charged at a prohibitive cost and consumers often experienced stigmatising attitudes to them requesting access.

For residents in aged care facilities experiencing mental health problems, it was perceived that access to mental health care was very limited. While services were available through the resident's GP and mental health care plans could be offered, there was a perception that allied health providers were reluctant to provide services to aged care facility residents. In addition, it was perceived that while the staff in the aged care facility provided physical health care, they rarely assessed the mental health of residents.

The final category of challenges related to individual factors. In line with the literature, stigma related to mental illness was commonly reported as a barrier to help seeking. Males were reported to be reluctant to seek care due to the stigma associated with needing help. Clients and carers in rural communities reported this as a significant problem for rural males. These barriers were compounded by general stigma in the community about mental illness and in some service providers.

Workforce

General Practice Workforce

Table 24 presents information on the general practice workforce by LGA for the HNECC PHN Region, with considerable local level variability notable. GP FTE for example ranges from 293.9 per 100,000 in Upper Hunter LGA, to 43.2 per 100,000 in Dungog LGA.

Table 24: General Practice Workforce Characteristics, HNECC PHN Region, 2017.

LGA	GPs/100,000	GP FTE/100,000	Number of general practices ^c	Solo general practice (%)	Practices with nurses (%)	Practices with allied health ^d staff (%)	Practices with bulk billing ^e available (%)
Armidale Regional	107.9	75.4	10	10	90	0	100
Central Coast	124.6	85.9	108	26	66	11	92
Cessnock	85.6	75.5	18	28	67	28	100
Dungog	68.6	43.2	3	33	67	33	100
Glen Innes Severn	136.4	97.6	5	40	60	0	100
Gunnedah	78.1	73.3	3	0	100	33	100
Gwydir	100	95	2	0	100	0	100
Inverell	80.9	73.6	6	33	83	0	83
Lake Macquarie	121.1	88.3	59	20	83	10	92
Liverpool Plains	102.6	51.9	6	33	67	17	100
Maitland	90.8	68.7	27	22	78	4	96
Mid-Coast	119.5	88.1	35	26	66	20	94
Moree Plains	87.3	82.3	6	33	67	17	83
Muswellbrook	116.6	95.5	4	50	100	0	100
Narrabri	74.6	64.7	5	40	40	0	100
Newcastle	152.7	94.9	65	31	65	9	85
Port Stephens	129.6	78.3	23	22	91	22	100
Singleton	97.2	76.1	8	13	100	13	88
Tamworth Regional	99.3	62.1	22	41	82	32	82
Tenterfield	97.9	71.6	5	20	80	0	100
Upper Hunter	367.3	293.9	5	60	100	20	100
Uralla	63	37.5	2	50	100	0	100
Walcha	65.6	56.1	2	100	50	0	100

There is also a wide range in the proportion of general practices with nurses from 100% in 6 LGAs, to only 40% in Narrabri, 50% in Walcha and 65% in Newcastle. 8 out of the 23 LGAs do not have allied

^c General Practices in this report include Aboriginal Medical Services

^d Allied health includes: Aboriginal Health Worker; Diabetes Educator; Dietitian; Exercise Physiologist; Nutritionist; Occupational Therapist; Pharmacist; Physiotherapist; Podiatrist; Psychologist; Social Worker; and Speech Pathologist.

^e Bulk billing available includes: all patients bulk billed; and bulk billing available for specific groups (e.g. concession card holders) or under particular circumstances.

health clinicians on staff, with the highest proportion of practices with allied health staff located in Dungog and Gunnedah LGAs (33%). In 60% of LGAs, all general practices offer bulk billing to either all patients or a cohort of patients, with the lowest proportion of practices offering bulk billing in Tamworth Regional (82%), Inverell and Moree Plains (83%) LGAs.

MBS Mental Health Provider Workforce

As can be seen in Table 25, in 2015-16, in the HNECC PHN region, 1,644 GPs provided mental health services through the MBS¹⁵⁷. The average number of providers in the HNECC PHN region was 132.1 per 100,000 and ranged at a local SA3 level from 106.4 per 100,000 in Lower Hunter to 172.8 per 100,000 in Great Lakes¹⁵⁷. The patient to provider ratio was 66.7 for the HNECC PHN region and ranged from 24.6 in Armidale to 87.6 in Newcastle.

Table 25: MBS GP Mental Health Providers, by SA3, HNECC PHN Region, 2015-16¹⁵⁷.

SA3	MBS GP Mental Health Providers 2015-16			
	Number of Providers	Rate / 100,000	Number of Patients	Patient / Provider Ratio
Armidale	56	114.8	2,301	24.6
Gosford	232	132.4	17,803	34.3
Great Lakes	55	106.4	3,109	82.8
Inverell-Tenterfield	52	132.8	1,781	41.4
Lake Macquarie-East	186	148.2	13,793	74.2
Lake Macquarie-West	91	118.8	5,513	78.03
Lower Hunter	95	143.6	7,864	57.8
Maitland	87	172.8	6,789	56.5
Moree-Narrabri	31	121.8	762	74.5
Newcastle	263	111.2	18,424	87.6
Port Stephens	105	119.06	6,074	60.6
Tamworth-Gunnedah	110	148.5	4,555	41.09
Taree-Gloucester	66	155.6	4,915	70.05
Upper Hunter	40	133.4	2,289	76.7
Wyong	177	126	15,502	57.2
HNECC PHN	1,644	132.1	109,622	66.7

As can be seen in Table 26, in 2015-16, in the HNECC PHN region, 741 Allied Mental Health Providers provided services through the MBS. The average number of providers in the HNECC PHN region was 59.6 per 100,000 and considerable local level variability can be seen, ranging from 7.4 per 100,000 in Moree-Narrabri SA3 to 120.7 per 100,000 in Newcastle SA3¹⁵⁷. The patient to provider ratio was 77.3 for the HNECC PHN region and ranged from 57.3 in Inverell-Tenterfield to 132.8 in Wyong.

Table 26: MBS Allied Mental Health Providers by SA3, HNECC PHN Region, 2015-16¹⁵⁷.

SA3	MBS Allied Mental Health Providers 2015-16			
	Number of Providers	Rate / 100,000	Number of Patients	Patient / Provider Ratio
Armidale	22	7.4	1,347	78.5
Gosford	126	25.5	10,826	79.6
Great Lakes	13	15.7	1,321	112.8
Inverell-Tenterfield	10	45.9	796	57.3
Lake Macquarie-East	92	73.3	6,285	68.3
Lake Macquarie-West	23	82	2,021	83.6
Lower Hunter	14	41.04	1,579	92.1
Maitland	60	40.9	5,013	101.6
Moree-Narrabri	2	62.7	157	95.2
Newcastle	204	42.09	14,301	99.06
Port Stephens	30	30.09	2,763	87.9
Tamworth-Gunnedah	38	58.3	2,178	61.2
Taree-Gloucester	34	120.7	3,237	70.1
Upper Hunter	6	72.4	797	85.9
Wyong	67	18.9	6,637	132.8
HNECC PHN	741	59.6	57,293	77.3

Perceptions of Workforce Needs

The findings regarding workforce were related to three main areas: access to clinicians; capacity of the workforce to address mental illness; and workforce recruitment and retention.

Access to Clinicians

Access to clinicians, particularly psychiatrists and experienced psychologists, was raised as the most common workforce need. Access had a number of dimensions. Firstly, it was perceived that there were insufficient numbers in all communities, but especially in rural areas, to meet community needs for mental illness. Related to this was concern about significant cutbacks to the psychologist workforce particularly those in LHD services which resulted in a substantial gap in services, particularly for those experiencing mild to moderate mental illness. Indeed, consumers who used to attend psychologists in community health centres indicated that access to clinical care was no longer available unless through private psychologists and involving a gap payment. Access to psychiatrists for adults, children and young people was a particular concern with a common perception that there were insufficient numbers to meet needs. Waiting lists to see psychologists and psychiatrists were common, and were longer for those who bulk billed.

Access to psychiatrists and experienced psychologists was the most common workforce need.

The second and related dimension was the ability of consumers to access staff in a timely manner especially when needed. While this access barrier was identified for psychiatrists and experienced psychologists, it was also relevant for other mental health clinicians including mental health nurses and other allied health providers. Indeed, limited access to support staff was also identified in some services related to the allocation of funding based on sessions per month.

The survey findings were consistent with these perceptions, with 80% of consumers, clients and community members indicating that access to psychiatrists was poor and 73% disagreeing that access to psychologists and other mental health clinicians was good. Similarly, 82% of service providers indicated that access to psychiatrists was poor. A lower proportion of service providers (54%) disagreed that access to psychologists and other mental health clinicians was good.

Access barriers in terms of cost was the third dimension identified by participants. Many consumers, clients and carers indicated that cost was a barrier to accessing mental health care. There was a perception that few psychiatrists and psychologists bulk billed, with significant gap payments reported. A number of consumers reported making choices about accessing care based on cost with some waiting until their symptoms deteriorated before seeking care. This perception also aligned with the views of service providers and some GPs.

The only psychologist I can access locally charges a gap. My GP doesn't bulk bill. It is a significant amount for me to pay.....so I wait until I get really bad before I get any sort of help and often it is pretty bad. But I just can't afford to pay sometimes.

Consumer

It was also perceived by many service providers that this was an expensive way for the system to provide services. Given some consumers were waiting until symptoms escalated before seeking help in the community it often resulted in the need for more intensive help through specialist services such as in acute wards. Eighty-one percent of service providers and 71% of consumers, clients and community members reported cost as a barrier to accessing services.

Capacity of Workforce

There were a number of concerns regarding the capacity of the workforce to address mental illness. The capacity of provisional psychologists to meet the needs of people experiencing mental illness, especially those with severe and complex illness, was raised as a concern by many consumers and by some service providers. It was perceived that some organisations relied heavily on provisional psychologists to provide clinical care to people experiencing mental illness including those with severe and complex illness. Despite strict requirements of the Australian Psychological Society, this was suggested as occurring in the absence of supervision by an approved psychologist and thus affected quality of care. It was also perceived by some service providers as being a way for some organisations to reduce session costs but neglected quality of care.

The capacity of staff providing support in NGOs was also raised as an area of concern. While their role was recognised as key in social support by the majority of service providers and by consumers and carers, it was perceived that often their skills and experience in working with people with severe mental illness and complex needs was limited. Staff were often welfare trained without the mental health specific expertise. There were views expressed by staff from within support services and by external service providers that staff were often having to work beyond their level of qualification and scope of practice in order to support people experiencing severe mental illness and other complex problems. This was more likely to be a concern in services that did not have access to clinical input and where options for supervision and case review were not routinely provided. It was also perceived that there was no mechanism for escalating those clients with deteriorating mental health.

Clients and carers commonly indicated that the GP was critical in ensuring a comprehensive and supportive approach to care. However, concerns about the capacity of GPs to provide care was raised by consumers and some service providers. It was recognised that the capacity challenges of GPs

related to time, knowledge, skill, interest and attitude. Many consumers indicated that if you can find a GP who is “good with mental health” then stick with them. But there was a perception that this was not common. Indeed, many consumers and carers expressed concern about the attitudes of GPs to mental illness and to those people experiencing mental illness, which affected their willingness to provide appropriate care and to provide mental health care plans. Some consumers and carers indicated that GPs use of mental health care plans was dependent on the attitude of the GP to mental illness, rather than the symptoms of the patient and the evidence for care. There was also a common view by consumers, carers and some service providers that GPs often relied on medication as the first treatment option for depression and anxiety and as an alternative to preparing a mental health care plan.

Recruitment and Retention

Recruitment and retention of staff was a common theme in interviews across communities. Recruitment of psychiatrists and psychologists was a particular concern especially in rural areas. It was acknowledged that this was a concern across rural communities for many health professions. In many rural communities there was reliance on fly-in fly-out psychiatrists to provide specialist medical input, with access to care only available on days when the specialist was in town.

A number of incentive based strategies are in place to attract psychiatrists but these are not available for psychologists. There was a strong and common view that there needs to be investigation into incentives to attract health staff to rural communities. Examples were provided for other professions such as teachers and police who are offered housing rental concessions as a way of attracting them to rural areas. The use of psychiatrists from larger centres has been used with some communities having fly-in fly-out approaches to ensure access to this specialist care. While used for psychiatrists it was not routinely used for other clinicians.

Retention of mental health staff and in particular psychiatrists and psychologists as a concern. It was perceived that there was significant turnover in mental health staff which affected continuity of care.

I have now seen three psychologists, all very young. It seems they are in training and as soon as they have done their time in a rural area they are gone. They don't seem to have the experience to deal with someone like me with my condition. Then the next one comes along and I have to repeat the story all over again.....

Consumer

Reliance on provisional psychologists was perceived as impacting on their retention. A number of service providers indicated that the challenges faced by provisional psychologists in terms of the complexity of clients they were providing care for, often with minimal support, resulted in many leaving services.

Discussion

In Australia, mental illness accounts for a significant proportion of the total burden of disease⁵, with anxiety and depression being the leading causes of non-fatal illness burden¹⁶¹. Importantly, there is a significant gap in life expectancy between people with a mental illness and the general population aged between 12 and 16 years, with 80% of this attributable to chronic diseases, many of which are preventable¹⁶².

In Australia, suicide was the leading cause of premature death in 2015, accounting for 3,027 deaths, which represents a significant proportion of deaths in younger people⁹. In 2015, the standardised death rates for suicide was at its highest level in over ten years⁹. Deaths from intentional self-harm occur among males at a rate that is three times greater than that for females⁹. However, rates for females have been increasing over the last decade. For Aboriginal and Torres Strait Islander peoples the suicide rate is higher than that of non-Indigenous people⁸.

This needs assessment aimed to build a profile of the mental health and wellbeing of the HNECC PHN community and in particular to understand the mental health needs of vulnerable and hard to reach groups. It also aimed to understand suicide and suicide prevention strategies across the community. By identifying needs of the community, understanding the service system and determining service gaps, the results will inform the commissioning and targeting of primary mental health services and contribute to the development of Regional Mental Health and Suicide Prevention Plans.

Priority Needs for Mental Health and Suicide Prevention

The results of this needs assessment have identified priorities in relation to mental health and suicide prevention. For mental health, the priorities identified were in relation to specific population groups and types of mental illness. The validation process used to determine if the findings aligned to the views of HNECC's Community Advisory Committees and Clinical Councils showed support for these priorities.

While there was variation across LGAs, the rates at which people experienced psychological distress and chronic mental and behavioural disorders were higher across the HNECC PHN region compared to NSW and Australia. Again, while some variation occurred across LGAs, levels of high psychological distress were higher for males, whilst levels of very high psychological distress were higher for females.

The most common mental illnesses experienced by people in the HNECC PHN region were depression and anxiety. These mental disorders were also recognised by stakeholders as the most common mental illnesses facing their communities. However, the needs of people experiencing moderate to severe mental illness, including episodic and chronic mental illness, and those experiencing other health and social complexities, were identified as the highest priority need by stakeholders across all LGAs.

Data showed that those people experiencing mental health disorders were more likely to also have a range of chronic health problems¹⁶². Given the evidence that there is a significant gap in life expectancy between people experiencing mental illness compared to the rest of the population, ensuring those with chronic disease are also supported for their mental health needs is a priority for all health care providers.

The mental health needs of Aboriginal and Torres Strait Islander peoples were consistently high across the HNECC PHN region. In NSW, the prevalence of psychological distress was nearly three times higher amongst Aboriginal people compared to non-Indigenous people. The impact of intergenerational trauma for Aboriginal and Torres Strait Islander peoples, including the impact on family functioning, drug and alcohol use and domestic violence was identified as contributing to these high needs.

Common across many of these priority groups were factors associated with mental illness. Despite this, these factors and their association with mental illness were rarely routinely recognised by services. The potential for early intervention for mental illness by identifying associated factors and intervening before symptoms manifest or conditions deteriorate is yet to be realised.

Aboriginal and Torres Strait Islander Peoples

Aboriginal and Torres Strait Islander peoples were identified as a priority population group. For Aboriginal people, mental disorders and substance use disorders are leading causes of burden of disease, and psychological distress is experienced at higher rates than for non-Indigenous people¹⁴. Young Aboriginal people were hospitalised for mental and behavioural disorders at higher rates than the non-Indigenous population¹⁴.

While data is unavailable at HNECC PHN level, in NSW the prevalence of psychological distress was nearly three times higher in Aboriginal people compared to non-Indigenous people¹. This data was reinforced by key themes from the consultations, with the mental health needs of Aboriginal peoples considered a priority. These findings were consistent across all LGAs throughout the HNECC PHN region. The data also shows that the suicide rate amongst Aboriginal people was much higher than non-Indigenous people, particularly in younger age groups¹⁴.

While there is little variation in the rate of disease burden from common mental health problems such as anxiety and depression with remoteness, suicide rates and self-harm increase with distance from major cities⁵. As with mental health, the findings from the consultations reinforced this data with concerns about the extent of suicide in Aboriginal communities across the region, especially in young people.

Common across the quantitative data were findings about the factors associated with mental illness and suicide in Aboriginal communities. Factors such as intergenerational trauma, family dysfunction, alcohol-related problems, low educational attainment, unemployment and discrimination and racism are key findings⁸. These findings were reinforced by the qualitative data and support the need for trauma informed care by culturally appropriate services.

Young People Aged 12 – 25 years

Young people, especially adolescents, experience mental health disorders at a high rate in Australia¹³. Concerns about the mental health of children and young people were commonly expressed by interview participants. In particular, there was a perception that the prevalence and severity of mental illness were increasing for children and young people.

National data indicates that levels of self-harm in young people are high, with rates higher in females than males¹³. Suicidal ideation amongst children and young people is also common nationally, with female adolescents reporting the highest levels¹³. There is evidence that factors such as bullying, problem eating behaviours, smoking, alcohol and other substance use, the use of internet, social media and gaming are associated with mental illness in young people. Stigma associated with mental illness and poor mental health literacy have been identified as barriers to accessing mental health care for adolescents and young people¹³. The findings from the thematic analysis reinforced these data with concerns about increasing levels of self-harm in children and young people.

Males Aged 25 - 65 years

In NSW, the greatest disease burden resulting from mental illness occurred in the middle age years for both males and females. Levels of high or very high psychological distress, and the proportion of people experiencing mental and behavioural problems across the HNECC PHN region was higher than the NSW and Australian averages. Males in their middle ages were identified as a priority population group in the thematic analysis and this was consistent across communities. For males in these age groups, stigma in accessing services and reluctance to discuss mental illness were perceived as contributing to reduced service access and led to men being identified as a key priority group when assessing needs.

Older People

An important finding from this needs assessment was concern about mental health and suicide of older people, especially for those residing in aged care facilities and for older males. National data indicate that just over half of all permanent aged care residents experience mild, moderate or major symptoms of depression¹⁵⁵. For people living with chronic disease, often older people, levels of psychological distress are significantly higher^{5, 9}. The findings from the thematic analysis reinforced these data with concerns expressed about the mental health of older people especially males.

On a global level, older people have a higher risk of completed suicide than any other age-group^{97, 163}. In Australia, the highest age-specific suicide death rate occurs in males aged 85 years and over¹⁶⁴. This data was reinforced by the qualitative information with concerns about suicide rates in older males, especially amongst those who experiencing social isolation following the death of a partner.

Members of the LGBTIQ Community

Members of the LGBTIQ community in Australia experience mental illness at significantly higher rates than other Australians. A significantly higher proportion of this community meet criteria for experiencing a major depressive disorder and report high or very high levels of psychological distress compared to heterosexual Australians. These differences between the LGBTIQ and heterosexual community are magnified in young people¹⁶⁵. Members of the LGBTIQ community also report suicidal ideation and suicide attempts at higher levels than heterosexual people, with attempts at younger ages¹⁶⁵. The mental health and suicide needs of younger people were highlighted in the consultation with factors such as difficulties in coming out, stigma, discrimination, acceptance and isolation, contributing to mental ill-health and suicide.

For people who are transgender and intersex, discrimination, stigma and treatment by service providers were identified as significant factors affecting their mental health. That some services refused access, or refused to acknowledge transgender people by offering gender appropriate services based on sexual and gender diversity is concerning, and more importantly potentially harmful to their health. In addition, such refusal is contrary to the National Mental Health Standards regarding diversity and therefore is a risk to accreditation for services which refuse access.

Recommendations

Priority Groups

1. In developing regional plans recognition should be given to:
 - a. Priority population groups identified in this needs assessment:
 - i. Aboriginal and Torres Strait Islander people
 - ii. Young people aged 12 – 25 years
 - iii. Males aged 25 - 65 years
 - iv. Males aged over 80 years

- v. Older people residing in aged care facilities
 - vi. Members of the LGBTIQ community
 - b. Priority groups in relation to mental illness identified in this needs assessment:
 - i. People experiencing chronic and episodic moderate to severe mental illness
 - ii. People experiencing chronic and episodic moderate to severe mental illness and other health and social problems
 - iii. People experiencing early psychosis
 - c. Priority groups in relation to suicide prevention identified in this needs assessment:
 - i. Aboriginal and Torres Strait Islander people
 - ii. Young people aged 12 – 25 years
 - iii. Males aged 25 - 65 years
 - iv. Males aged over 80 years
 - v. People with previous suicide attempts
- 2. HNECC should ensure that services commissioned by HNECC demonstrate the appropriate targeting of these priority groups and report on activity and outcomes in relation to these priorities

Addressing Factors Associated with Mental Illness and Suicide

- 3. In order to provide holistic care and to support early intervention, the factors associated with mental health and suicide reported in this needs assessment need to be identified in regional plans, service plans and in client health care plans with strategies to address factors including:
 - a. Stigma associated with help seeking
 - b. Social and geographic isolation
 - c. Trauma (including intergenerational trauma)
 - d. Cultural safety
- 4. All services commissioned by HNECC should demonstrate that they are culturally safe and have implemented cultural safety strategies to support access and care for Aboriginal and Torres Strait Islander peoples
- 5. In line with the RACGP standards for general practices, HNECC should build the capacity of general practices to provide respectful and culturally appropriate care
- 6. Supported by capacity building strategies, services commissioned by HNECC should ensure compliance with the National Mental Health Standards “Diversity Responsiveness” by accounting for the cultural and social diversity of consumers and meeting their needs and those of their carers and community throughout all phases of care including for:
 - a. Aboriginal and Torres Strait Islander people
 - b. Culturally and Linguistically Diverse (CALD) people;
 - c. Those with different religious and spiritual beliefs
 - d. People with differences in gender and sexual orientation
 - e. People with physical and intellectual disability
 - f. People across ages and socio-economic status
- 7. HNECC and services providers should monitor and manage the significant barrier to accessing services presented by the cost of services, and ensure services for mental health and suicide prevention are provided in communities where gap payment is not a condition of service
- 8. Options for addressing the significant barrier of transport to specialised services should be explored in the regional plans
- 9. Strategies to support national campaigns addressing stigma at a local level should be explored by HNECC and other services across the service system

10. Strategies to overcome stigma barriers encountered by people experiencing mental illness when accessing community transport need to be implemented
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Service Needs

In line with evidence⁶, the findings from this needs assessment identified that there are a diverse, but disparate range of services for mental health and suicide prevention in the HNECC PHN region. Based on a range of indicators the mental health and mental health service needs vary considerably across the region with no one LGA having significant need across all indicators. Given the key findings that the needs are high in all regions it is therefore difficult to determine specific LGAs as having higher mental health needs compared to others.

The National Mental Health Service Planning Framework addresses a commitment under the Fourth National Mental Health Plan to develop a national service planning framework that establishes targets for the mix and level of the full range of mental health services, backed by innovative funding models. This project aims to achieve a population based planning model for mental health that will better identify service demand and care packages across the sector in both inpatient and community environments. The associated Planning Support Tool will be made available to Primary Health Networks in the future to help plan, coordinate and resource mental health services to meet population needs.

The findings from this needs assessment support the need for strengthening primary mental health care in communities and in particular for integration across the system. The need for improved integration across all services was considered a priority need. However, providing an integrated service system which meets community needs requires more than rhetoric. Rather it requires a framework for delivery across the service system, reflecting evidence and based on community needs. Leadership is a key element of the framework, in this instance at a PHN level, local health district level and at a service level. Without leadership and commitment to provide an integrated mental health system, it is unlikely that outcomes for people experiencing mental illness, their families and carers, and the community will be realised.

Principles for Addressing Mental Health and Suicide Prevention

Developing a response to mental health needs to be guided by evidence and informed by effective public health approaches for a range of health issues. The following principles, adapted from key mental health and suicide prevention frameworks are recommended to guide the development of strategies for HNECC in commissioning services. The principles suggest that strategies selected should^{70, 166, 167}:

- Focus on **population health** approaches
- Be **evidence-based** or **theoretically informed**
- Apply **multiple and sustainable strategies**
- Focus on **risk and protective factors**
- Ensure options for **early intervention**
- Provide **clear pathways to appropriate and accessible services**
- Provide **support for families**
- Be **targeted and tailored** to specific groups include specific cultural and age groups
- Build **capacity of services** to promote mental health and well-being
- Adopt **effective governance and evaluation**

The application of these principles across the service system is key in developing regional plans for mental health and suicide prevention.

Population Based Approach

The National Review of Mental Health Programs and Services⁶ emphasised the provision of stepped care approaches in the context of population need. Implicit in this is the need for services conceptualised not just as stand-alone services for individuals, but for the community as a whole. Mental health services are expected to result in outcomes for individuals and the population. For this to occur services need to be effective, accessible and efficient.

Evidence supports the effectiveness of 6 session psychology services for the general population¹⁶⁸. It is also recognised that for some clients there is a need for more sessions. In particular for Aboriginal clients and for those where trauma may be a significant factor¹⁴. However, many service providers questioned the limit of the number of sessions allowable under program such as Better Access. In the absence of data for outcome effectiveness across these services it is impossible to make definitive judgements on the number of sessions which maximise client as well as population outcomes. For services wanting more sessions it could be argued that in doing this they potentially deny a significant need in their local community, as fewer people in need can access the services. In the context of current Australian government policy, and in line with evidence, it is not acceptable that services should be provided to consumers for unlimited amounts of time without justification of outcomes to the service system and indeed the community they serve.

Leadership from HNECC, LHDs and NGOs is required to reorient organisations providing services to those experiencing mental illness to a population health focus. While challenging, this reorientation is nationally recognised as imperative.

Service Models

The stepped care model has been widely identified as providing a conceptual framework for the planning and delivery of services. Stepped care services would range from no-cost and low-cost options for people with the less severe mental health issues, through to options to provide support and wrap-around services for people with severe and persistent mental ill-health, with the aim that all can live contributing lives in the community. Currently this model does not exist in the HNECC PHN region and is unlikely to be applied without commitment for implementation across the service system.

Planning services in line with hub and spoke models offers the most likely solution to improve access across the multiple LGAs in the HNECC PHN region. This model is reliant on ensuring that services are provided at hubs and across spoke sites. Recruitment and retention of staff, in particular allied health staff, is more likely to be successful in a hub and spoke model with clinical supervision and collegial support key ingredients.

The hub and spoke model needs to be factored into commissioning of services, ensuring coverage across communities. There is also a need for accountability to ensure that services are delivered as contracted, particularly in the spoke sites.

The central role of the GP in the provision of mental health care needs to be a key tenet of service models. However, for GPs to undertake this central role, this needs to occur in the context of support and capacity building across the service system.

Addressing Service Gaps

Distribution of primary mental health care service providers (GPs, allied health providers) and the patient to provider ratio varied across the HNECC PHN region with the variation not related to rurality. Similarly, there was significant variation in the rate per 100,000 population for psychiatry and psychology services, with lower rates more likely in rural areas.

Overnight hospitalisations for mental illness in the HNECC PHN region vary across the region but occur at a rate higher than the Australian average. This occurred for anxiety and stress disorders, bipolar and mood disorders, depressive disorders and for drug and alcohol use. The hospitalisation rate for schizophrenia and delusional disorders was lower than the Australian rate.

Prescribing rates for medication to treat mood disorders, anxiety and for psychotic symptoms vary across the HNECC PHN region. However, rates in many communities are in the highest deciles for prescribing in Australia. Reasons for this vary but may be related to a range of community and social factors, service access and prescribing practices of GPs and psychiatrists.

The rate of hospitalisation due to intentional self-harm was consistently higher for the HNECC PHN region compared to NSW, and rates were higher for females than males. The rate of hospitalisation due to intentional self-harm was much higher in the 15-24 year age group compared with other ages.

Addressing the key service gaps in the mental health system should be a priority in developing regional plans. The gap in services for people experiencing chronic and episodic moderate to severe mental illness, including those with other health and social problems, is a priority for planning for the system. Without addressing this key gap, it is unlikely that there will be significant improvements in the service system. This needs to occur in partnership across the system, particularly with LHD mental health services.

Addressing needs for people experiencing chronic and episodic, moderate to severe mental illness, needs to move beyond rhetoric and address a range of service elements including: access, waiting times and cost barriers for psychiatrists across communities; patient and service provider experience of the mental health line; access to experienced psychologists across communities; assertive and proactive case management and follow-up; and a stronger focus across all services in prevention and early intervention with the aim of trying to prevent people requiring more intensive services. If these elements are addressed there are opportunities to keep people out of acute settings rather than the current system, which due to service gaps channels people into the acute setting.

An assessment of the success of addressing this gap will be ultimately measured by patient outcomes. Key to measuring outcomes is ensuring patient and service provider experience is routinely measured and monitored.

Early intervention was also identified as a key gap. While there is recognition of the need for early intervention services especially for early psychosis, there is a need to ensure all services focus on early intervention as part of aiming to prevent mental health from deteriorating, leading to the need for more intensive services. The basis of the stepped care model is to ensure that with effective monitoring, patients can move between service levels dependent on need. The focus of stepped care is to prevent patients from requiring more intensive services but enabling pathways when needed.

This is relevant for all services – clinical and support services with mechanisms for escalation are key to the success of the stepped care model. As a result, support services will need to have access to clinical input to support them in determining when a client’s mental health is deteriorating. Commissioning of services should reflect this need with services demonstrating how access to clinical input is achieved.

Family members and carers are key members of support teams for those people experiencing severe mental illness. The findings from this needs assessment recognise this role. Importantly the findings demonstrate the need for services to recognise their role in order to provide optimal care. In addition, the findings indicate that the impact on family and carers of someone with severe mental illness is significant. Support for carers and family members should be a key element of services across communities.

Mental Health and Suicide Prevention Frameworks

Evidence and policy documents support a systematic approach to mental health and suicide prevention. However, the findings of this needs assessment indicate that there was little evidence of such approaches in the HNECC PHN region. There is strong support for mental health promotion, prevention and for suicide prevention, but this needs to occur in a systematic way reflecting known frameworks and evidence.

Suicide Prevention Models / Frameworks

Older people have a higher risk of completed suicide than any other group worldwide and often complete suicide on their first attempt¹⁶³. Older people are less likely to seek help for mental illness due to perceived stigma, self-reliance, poor mental health literacy, service gaps and a lack of professional specialisation in mental health later in life⁹⁷. Research has suggested that telephone counselling based crisis intervention and suicide prevention services, can be effective in improving outcomes for older people¹⁶³. Other research has suggested that direct outreach to senior housing sites and senior centers is an effective way to identify vulnerable older adults at high risk of depression and anxiety¹⁶⁹. The HOPES program (Helping Older People Experience Success) which teaches improved community living skills, healthy living skills and social skills has also been shown to be effective for improving independent living skills, community functioning and symptoms for older people experiencing severe mental illness¹⁷⁰. Memory Banking, an intervention focused on older people sharing their life story within the context of aging preparation and preventing ageing related distress, showed positive change in depression, mood disturbance, cognitive performance, anxiety and well-being¹⁷¹.

Suicide has also been shown to be common among adolescents in Australia whilst many youth treated in Emergency Departments (EDs) do not receive follow up care¹⁷². Research has shown the importance of developing effective outpatient mental health treatments and using Family Intervention for Suicide Prevention (FISP) to link suicidal youth presenting to ED to outpatient mental health treatment¹⁷². The FISP is a family-based cognitive behavior therapy session which aims to increase motivation for follow up treatment, coping, support and safety by care linkage to telephone contacts after discharge¹⁷³. Research showed that FISP delivered in the ED was associated with improved linkage to outpatient follow-up treatment for young people¹⁷³.

The Suicide Prevention Framework for NSW identifies nine strategies that could be applied in parallel at a local or regional level to reduce the number of suicides¹⁶⁷:

- Reducing access to lethal means
- Responsible reporting of suicide by the media

- Promotion of national suicide awareness programs
- School-based peer support and mental health literacy
- Gatekeeper training for those likely to be in contact with high risk individuals, including teachers, clergy, and community social workers
- Regular suicide prevention training for emergency services
- Training GPs to assess risk and start conversations
- Adequate access to tailored evidence-based therapies such as cognitive behaviour therapy (CBT) to high risk groups
- Targeted support for people who have made a previous attempt or are in current crisis through phone and online counselling, training for emergency department staff and out-patient support

This framework aligns with those in other states, and at national and international levels. A number of these strategies, such as suicide prevention training through delivery of Applied Suicide Intervention Skills Training (ASIST), are used in most communities across the HNECC PHN region. However, as with mental health promotion there appears to be no systematic approach to suicide prevention aligned to evidence-based frameworks.

Recommendations

Frameworks and Models of Care

11. The HNECC stepped care framework, which reflects evidence and national and state mental health policies should form the basis of service models and should inform regional plans
12. Decisions on commissioning of services should reflect the principles outlined in this report for addressing mental health and suicide prevention
13. Early intervention is a priority for improving mental health outcomes and is applicable across:
 - a. All stages of life
 - b. All mental illness categories
14. The hub and spoke model, which supports integrated care between main referral sites (hubs) and those in outlying communities (spokes) should form the basis of service delivery for mental health care
15. From the perspective of HNECC, consideration should be given to applying the hub and spoke model in service planning and commissioning with alignment against LHD clusters, where this fits with program objectives
16. The population health needs of communities should guide the planning and delivery of services across the mental health system
17. Mental health prevention and promotion, and suicide prevention should reflect evidence based frameworks with an emphasis on strategies which are broader than education and training
18. Mental health promotion and prevention, and suicide prevention strategies should be implemented across sectors including:
 - a. Youth specific services
 - b. Education and training sectors
 - c. Community and sporting groups
 - d. Workplaces
 - e. Aged care facilities
 - f. General health system
19. The capacity of communities to implement evidence-based post-vention strategies needs strengthening

General Practice

20. The capacity of general practice to play a central role in mental health care needs to be supported through:
 - a. Supporting multi-disciplinary teams including mental health nurses to work in general practice improve patient access and outcomes
 - b. Education and training of GPs particularly in relation to evidence based guidelines and stigma
 - c. Access to specialist advice for GPs when needed
 - d. Support for GPs in developing and monitoring mental health care plans
 - e. Access to allied health staff in local communities to support clinical care and case management
21. HNECC should advocate for simplifying the credentialing processes for mental health nurses to work in general practice
22. The stability of the mental health support service system and the associated pathways to care should be a priority to support the central role of GPs in mental health care

23. Direct twenty-four-hour access to psychiatrists for GPs in rural towns and other communities where there are no acute facilities should be provided

Service Gaps

24. Strategies to address the gap in services for people experiencing chronic and episodic moderate to severe mental illness including those with other health and social problems is a priority

25. To address the priority gap for people experiencing chronic and episodic moderate to severe mental illness there is a need to:

- a. Reduce waiting times and cost barriers for psychiatry across communities
- b. Improve patient and service provider experience of the mental health line
- c. Provide greater access to experienced psychologists across communities
- d. Apply assertive and proactive case management and follow-up
- e. Reorient services to keep people out of acute settings rather than the current system which channels people to the acute setting due to a lack of services
- f. Ensure patient and service provider experience is routinely measured and monitored

26. Services for early psychosis should be accessible across communities

27. Services to support families and carers should be accessible and promoted across communities

28. Organisations that provide support services to people with mental illness should demonstrate their capacity to access clinical care for clients when symptoms are escalating. This could occur through partnerships, consortia or in-house access to clinicians and requires mechanisms for escalating clients experiencing a worsening of symptoms

Quality and Effectiveness

The need for a focus on quality is characteristic of many reviews of mental health in Australia and indeed in mental health systems globally^{6, 31}. Data is fundamental to achieving this focus on quality and in particular for ensuring quality improvement in services and for measuring effectiveness of services and outcomes for clients.

The findings of this needs assessment indicate inconsistencies in approaches to quality and to quality improvement across all services. It is acknowledged that this may be new for some services. However, with an emphasis in regional planning there are opportunities to build the capacity of services to measure quality and to support the use of quality indicators to improve service performance.

That examples were provided where mechanisms for escalating clients' needs to more specialist services are not available in some services is concerning. The need for frameworks aligned to clinical governance approaches in health are needed across the mental health service system, including those support services. Such frameworks support case review and clinical supervision to support an approach to managing risk.

This opportunity to focus on quality also provides a platform for striving for consistency in quality and outcomes indicators across the services system. This is recognised as being a key element in mental health reforms. Indeed the Mental Health Commission emphasises the need to move towards funding for outcomes rather than activity⁶. The focus on outcomes is not apparent in many of the mental health services in the HNECC PHN region to date and is an area which needs strengthening across the system.

The opportunity for commissioning processes to link to outcomes is yet to be realised but has the potential to support these national reforms. Findings suggest commissioning processes applied to date focus on activity rather than on outcomes and quality. While efficiency is a key outcome it needs to link to quality and effectiveness. Indeed experience from other countries suggests the need to focus on quality, effectiveness and efficiency as a key success factor in commissioning¹⁷⁴.

Investing in developing quality and outcome indicators, which are relevant to an integrated service system is challenging. Certainly, there is no evidence that this is currently occurring. In the absence of consistent and relevant outcome measures it will be difficult to determine whether services, and by extension the investment of public money is meeting the needs of people experiencing mental illness and the community.

Recommendations

Quality and Effectiveness

29. All services should be required to demonstrate an approach to quality through the development, implementation, monitoring and evaluation of:
 - a. Service improvement plans
 - b. Clinical governance frameworks
 - c. Case review policies and procedures
 - d. Clinical supervision
30. Commissioning of services by HNECC should reflect the need for an approach to quality, requiring services to demonstrate this commitment as an element of key performance indicators
31. In ensuring an approach to quality, commissioning of services should consider the service model, and discipline and experience of staff
32. The capacity of services to develop and implement an approach to quality should be strengthened with the aim of developing a consistent approach with tailoring to service types.
33. Services should ensure a commitment to measurement and reporting of activity and outcomes in line with the quadruple aims of health care (patient experience, clinician experience, population health outcomes and efficiency)
34. The development of outcomes which are consistent across like services and evidence-based, tailored to services, measured efficiently and able to be used for service improvement and client care should be resourced and implemented

Workforce

There are significant workforce challenges in the delivery of mental health services identified in this needs assessment. Some of these challenges require structural reforms and are beyond the scope of this review. These challenges are not restricted to services within the HNECC PHN region but are apparent nationally and internationally. Building the capacity of the mental health workforce to increase the impact of mental health services has been a feature of governments in many developed countries³¹. The findings of this needs assessment demonstrate the need for building capacity across the service system. This will be particularly relevant as, and when, an integrated service model develops.

Addressing recruitment and retention challenges for workforce is problematic at a local level in the absence of structural reforms. However, there are opportunities for implementing approaches which

address some of the challenges. Access to clinical supervision and professional development impacts on retention. Importantly it is a key feature of service quality and therefore should be a key element of any service.

The hub and spoke model has potential to support recruitment and retention of staff in services. Hub and spoke models can offer opportunities for access to specialist advice, professional supervision and professional development, which may not be available in smaller services.

Recommendations

Workforce

35. A focus on building the capacity of mental health service staff to increase the impact of mental health services should be a key feature of regional plans
36. Services should be required to demonstrate that professional development and supervision is accessible to staff, particularly for psychologists
37. Recruitment and retention strategies for allied health staff in services should be implemented in line with a hub and spoke model

Planning and Commissioning

Some of the findings of this needs assessment relate to planning and commissioning mental health services, rather than the mental health and suicide prevention needs directly.

Planning

The findings highlight the need for approaches which support integrated and collaborative care. Addressing these needs is dependent on effective, intersectoral planning. With commitment of time, resources and energy to regional plans by service providers including LHD mental health services, GPs and other clinical and support services, there is an opportunity to provide services to meet needs of local communities. In the absence of intersectoral planning, it is likely that this needs assessment will result in little change for people experiencing mental illness or for communities in general.

The requirement for regional plans is included in the Australian government specification for mental health service funding. In addition to the targeting of investment by PHNs in mental health and suicide prevention, the Australian government has indicated that regional mental health and suicide prevention plans offer the potential to:

- guide and support a broader regional model of stepped care
- support the process of integration with state services
- facilitate the development of new pathways
- make optimal use of the available workforce and resources

Meeting this requirement can only be achieved by leadership and commitment at a regional, local and service level. With this commitment, opportunities for making significant reforms to the mental health system may be realised. Importantly there is potential to realise the reforms identified by the National Mental Health Commission⁶ and in particular ensure a person-centred mental health system with clearly defined pathways reflecting needs. As indicated in this report, the development and implementation of a stepped care framework supports the person-centred approach and features a system which is responsive to need.

Commissioning

Commissioning has been used to provide high quality and responsive primary care in a number of countries including the United Kingdom and New Zealand¹⁷⁴. It also aims to strengthen the role of local clinicians and other stakeholders in strategic planning and purchasing of services¹⁷⁴. In the context of primary care in Australia, needs assessments are the mechanism for strategically planning and commissioning services to meet local needs.

Commissioning is a relatively new approach for primary care in Australia and represents a significant change to policy, practices and culture¹⁷⁴. In Australia, as in other countries, it comes with a number of challenges. The findings of this needs assessment indicate that many service providers lack understanding of the commissioning approach. This is in part related to the changes from the previous service model where services were provided directly by Medicare Locals. It also reflects an adjustment to the new commissioning approaches where organisations are commissioned by PHNs to deliver services with opportunities for strengthening the evidence base and for co-design with other service providers to meet local needs.

Importantly, commissioning includes ongoing assessment to monitor the quality of services and ensure that contractual obligations are met¹⁷⁴. A focus on quality of PHN commissioned mental health services is not a key feature. This is not surprising in this stage of the evolution of PHNs and of commissioning. However, the findings suggest that a focus on quality in mental health services in general, and as part of the commissioning process, is an area that needs strengthening. The concerns about quality of services is a key finding of this needs assessment and warrants attention from the service system. The opportunity for consistent approaches to quality and to quality indicators is an opportunity yet to be realised in the mental health system, but is one which offers real potential for addressing this significant need.

There are high expectations that there will be significant amounts of funding for mental health and suicide prevention available through HNECC and to services throughout the HNEC PHN region. This reflects some lack of understanding, and the relative infancy, of HNECC's commissioning process and indicates the need for ongoing communication about the role of HNECC.

This needs assessment was undertaken by HNECC for the communities within the HNECC PHN region. It is not specifically for needs relevant to HNECC commissioned services, rather for the needs of the communities and for people experiencing mental ill-health. In this way, it can equally be viewed as a needs assessment to inform all organisations that provide services for people experiencing mental illness or that have a role in mental health promotion and prevention.

Recommendations

Planning and Commissioning

38. In partnership with HNECC, the development of regional plans for mental health and for suicide prevention should involve and be supported by:
 - a. Chief Executives of Central Coast and Hunter New England Local Health Districts, their Directors of Mental Health and their cluster managers
 - b. Service Managers of other clinical and support services

c. Private providers including medical specialists, GPs and allied health

39. As part of the regional planning process all participating providers and organisations should demonstrate willingness to reform service models to meet community needs

Limitations

The findings of this needs assessment should be interpreted within the limitations of the methods used. This needs assessment relied heavily on available data at national, state and sometimes at a PHN or LGA level. These data were complemented by qualitative data from participants from many local communities. Triangulation of data from the quantitative and qualitative findings was supported by an additional step in the validation of findings.

There have been significant changes across the service system over the last five years for reasons which have been discussed in this report. Data on service activity and outcomes were not available to determine whether services are meeting the needs and achieving the client and population outcomes expected by communities as a return on the investment of public money. However, it would be expected that with support and leadership, in future these data could contribute to needs assessment processes, allowing greater understanding at a local community level.

Conclusion

This needs assessment provides an opportunity to guide the development of integrated services to meet the needs of communities across the HNECC PHN region. The strength of the needs assessment was in the consistency of the findings between the quantitative and qualitative methods and more importantly the commitment of stakeholders to participate and so willingly share their views on mental health and suicide needs in their communities.

Relationships between service providers, the community and commissioning agents are a key feature of mental health services¹⁷⁴. There is an opportunity to build on these relationships initiated as part of this needs assessment process to plan and build a better mental health system. This needs assessment has built high expectations that mental health and suicide prevention services can be improved to meet community need and the identified priorities. It is now incumbent on HNECC, the LHD and other services to meet these expectations with effective planning as the key first step.

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Appendices

Appendix A: Mental Health Services Commissioned by HNECC, by LGA, June 2016

	Indigenous Mental Health	MHNIP	Primary Mental Health Care	Headspace	Good SPACE (formerly known as Farm-link)	Counselling	Suicide Prevention
Armidale Regional	HealthWISE New England North West	Integral Health	Centacare		CRRMH		
Central Coast	Yerin AMS	Central Coast Primary Care and private providers	Central Coast Primary Care	CCLHD			Lifeline Newcastle and Central Coast and Central Coast Primary Care
Cessnock	Hunter Primary Care and New Horizons	Cessnock Community Health Care and private practice	Hunter Primary Care				Lifeline Newcastle and Central Coast
Dungog	Hunter Primary Care		Life Matters Psychologists				Lifeline Newcastle and Central Coast
Glen Innes Severn	HealthWISE New England North West		Centacare		CRRMH		
Gunnedah	Centacare		HealthWISE New England North West		CRRMH		
Gwydir	HealthWISE New England North West		Centacare		CRRMH		
Inverell			Centacare		CRRMH		
Lake Macquarie	Hunter Primary Care and New Horizons		Hunter Primary Care				Lifeline Newcastle and Central Coast
Liverpool Plains	HealthWISE New England North West		HealthWISE New England North West				
Maitland	Hunter Primary Care and New Horizons		Hunter Primary Care and Life Matters Psychologists	Samaritans			Lifeline Newcastle and Central Coast
Mid Coast	Hunter Primary Care and New Horizons		Life Matters				Lifeline Newcastle and Central Coast and Biripi Aboriginal Corporation
Moree Plains	Centacare		Centacare		CRRMH		
Muswellbrook	Hunter Primary Care	Hunter Primary Care	Hunter Primary Care				Lifeline Newcastle and Central Coast
Narrabri	Centacare		Centacare		CRRMH		
Newcastle	Hunter Primary Care and New Horizons	Private practices	Hunter Primary Care	Hunter Primary Care			Lifeline Newcastle and Central Coast and Hunter
Port Stephens	Hunter Primary Care and New Horizons		Hunter Primary Care			Lifeline Newcastle and Central Coast and Port Stephens Family and Neighbourhood Services (for youth)	Lifeline Newcastle and Central Coast
Singleton	Hunter Primary Care		Hunter Primary Care				Lifeline Newcastle and Central Coast
Tamworth Regional	HealthWISE New England North West	HealthWISE New England North West and private practice	HealthWISE New England North West and Centacare	Centacare	CRRMH		
Tenterfield	HealthWISE New England North West		Centacare		CRRMH		
Upper Hunter	Hunter Primary Care		Hunter Primary Care		CRRMH		
Uralla	HealthWISE New England North West				CRRMH		
Walcha	HealthWISE New England North West		HealthWISE New England North West		CRRMH		

Appendix B: Interventions for Mental Health, by SA3, 2013-14

<i>Interventions for Mental Health & Psychotropic Medicine Dispensing 2013-14⁹²</i>																		
SA3	Mental health plan		Antidepressant ≤17yrs		Antidepressant 18-64yrs		Antidepressant 65yrs +		Anxiolytic 18-64yrs		Anxiolytic 65yrs+		Antipsychotic ≤17yrs		Antipsychotic 18 to 64yrs		Antipsychotic 65yrs+	
	Services	Rate/100,000	Prescriptions (P)	Rate/100,000	P	Rate/100,000	P	Rate/100,000	P	Rate/100,000	P	Rate/100,000	P	Rate/100,000	P	Rate/100,000	P	Rate/100,000
Armidale	1,371	3,897	648	6,969	25,911	116,327	10,765	175,212	2,600	12,131	1,229	20,109	159	1,740	4,228	20,373	1,293	21,166
Gosford	9,166	5,814	4,705	12,157	120,899	116,292	69,869	201,482	16,616	15,985	10,231	29,680	1,572	4,135	19,328	19,482	9,546	26,225
Great Lakes	1,569	6,229	1,006	16,844	24,186	138,598	19,439	197,406	4,573	27,628	3,562	35,683	261	4,345	5,085	32,301	2,891	28,506
Inverell - Tenterfield	1,126	3,357	713	7,816	30,587	131,979	18,358	215,990	3,954	16,784	2,457	29,163	319	3,499	4,794	22,556	1,783	20,929
Lake Macquarie - East	6,014	5,226	3,776	13,201	105,858	139,808	50,627	220,862	10,034	13,054	6,229	27,050	1,052	3,792	15,617	21,531	5,686	24,005
Lake Macquarie - West	3,652	5,340	2,229	13,038	66,012	147,256	31,628	214,336	6,878	15,297	3,927	26,508	683	4,065	11,176	25,611	4,038	26,059
Lower Hunter	3,773	4,486	2,665	12,513	75,782	139,558	26,581	218,628	9,073	16,825	4,241	35,298	745	3,518	10,208	19,204	3,493	29,066
Maitland	3,264	4,770	2,467	14,546	63,558	145,779	23,064	248,578	5,237	12,009	3,051	33,231	768	4,476	8,176	19,283	2,424	26,004
Moree - Narrabri	605	2,354	386	6,025	15,614	93,522	6,824	175,681	2,720	16,603	1,138	29,599	160	2,522	3,054	19,323	920	24,034
Newcastle	8,318	5,159	3,941	12,805	141,535	135,340	54,954	208,659	14,997	14,657	7,200	27,046	1,032	3,319	29,563	28,893	8,530	30,675
Port Stephens	3,284	5,198	2,102	12,875	60,643	143,173	32,177	208,825	5,488	13,177	3,621	23,592	652	3,981	8,704	22,387	3,096	20,469
Tamworth - Gunnedah	2,858	3,845	2,831	13,829	65,615	135,994	29,634	203,627	5,090	10,727	2,562	17,694	465	2,270	8,410	18,232	2,801	19,059
Taree - Gloucester	2,783	6,134	2,001	15,501	46,525	149,214	26,531	205,863	6,078	20,063	3,471	27,269	714	5,698	8,771	32,352	3,292	25,266
Upper Hunter	1,135	3,749	514	6,762	19,969	103,100	8,205	190,481	1,771	9,349	563	13,356	112	1,440	2,255	11,939	878	20,429
Wyong	8,101	5,656	4,367	11,757	123,636	134,153	70,792	232,208	17,526	19,118	11,294	37,190	2,077	5,609	19,807	22,474	7,961	25,389
AUSTRALIA	965,946	4,260	404,276	7,989	14,933,534	101,239	6,592,577	196,574	2,508,346	17,201	1,265,996	37,695	104,697	2,070	2,582,447	17,844	919,026	27,043

Table Legend- Decile of Rate

- 1, 2
- 3, 4
- 5, 6
- 7, 8
- 9, 10



Appendix C: Mental Health Hospitalisation Rates, by SA3, 2014-15

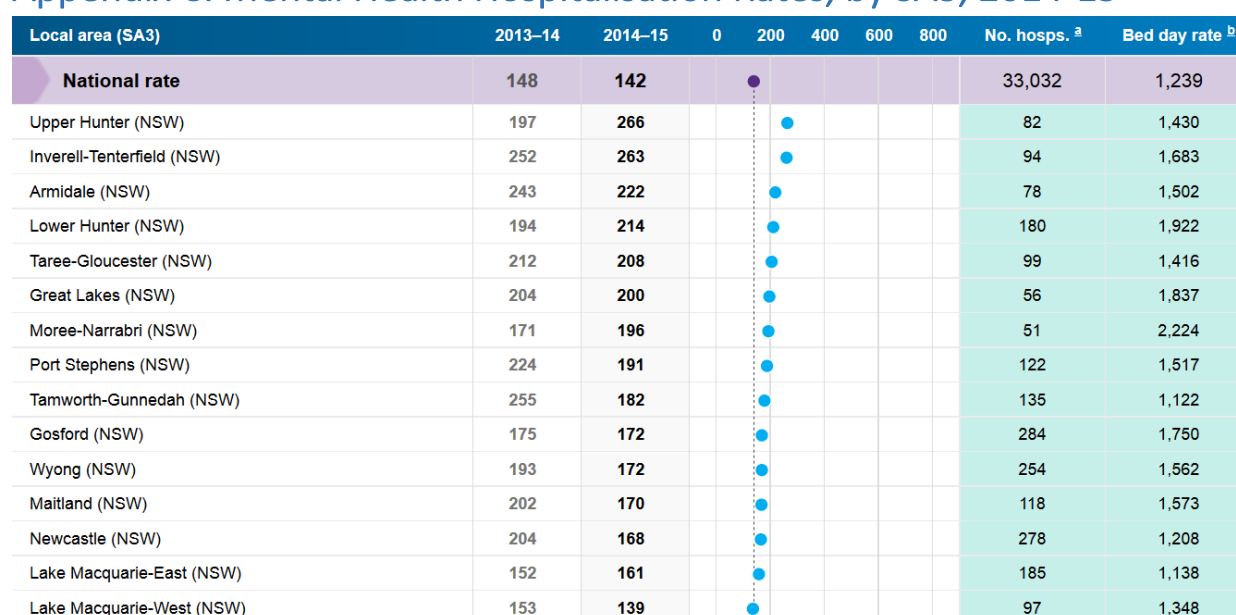


Figure 30: Rate of mental health overnight hospitalisations for anxiety and stress disorders, rate per 100,000, HNECC PHN region, by SA3, 2014-15¹⁰.

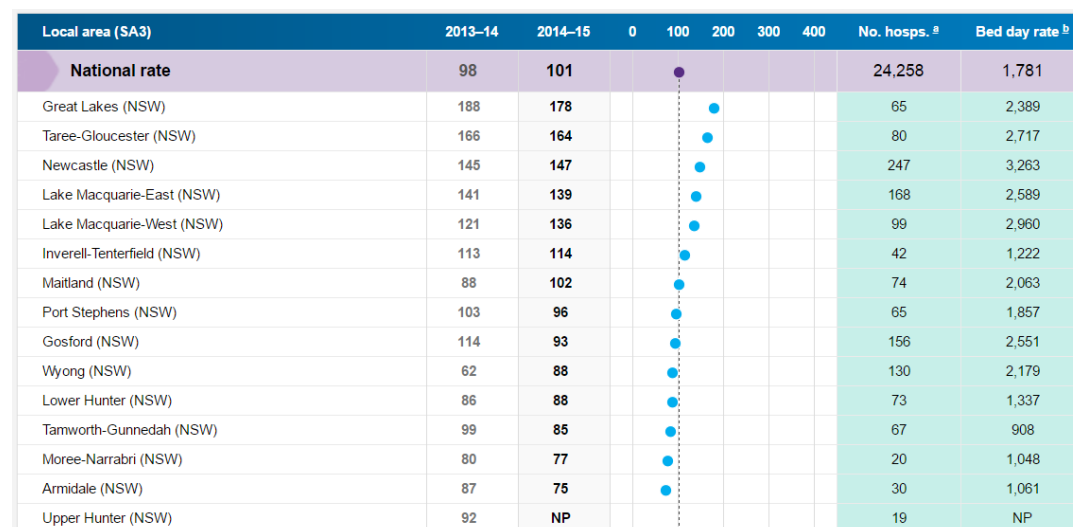


Figure 31: Rate of mental health overnight hospitalisations for bipolar and mood disorders, rate per 100,000, HNECC PHN region, by SA3, 2014-15¹⁰.

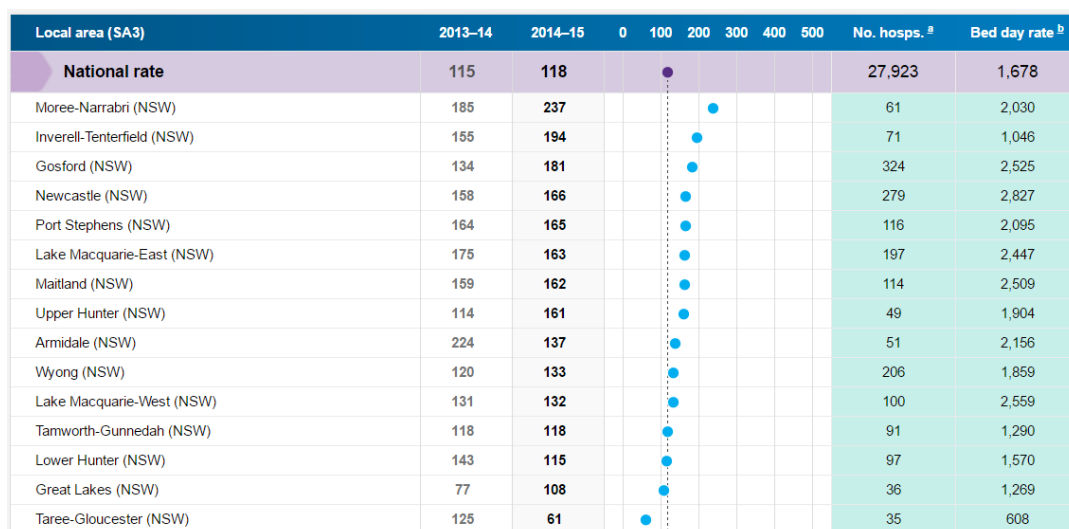


Figure 32: Rate of mental health overnight hospitalisations for depressive episodes, rate per 100,000, HNECC PHN region, by SA3, 2014-15¹⁰.

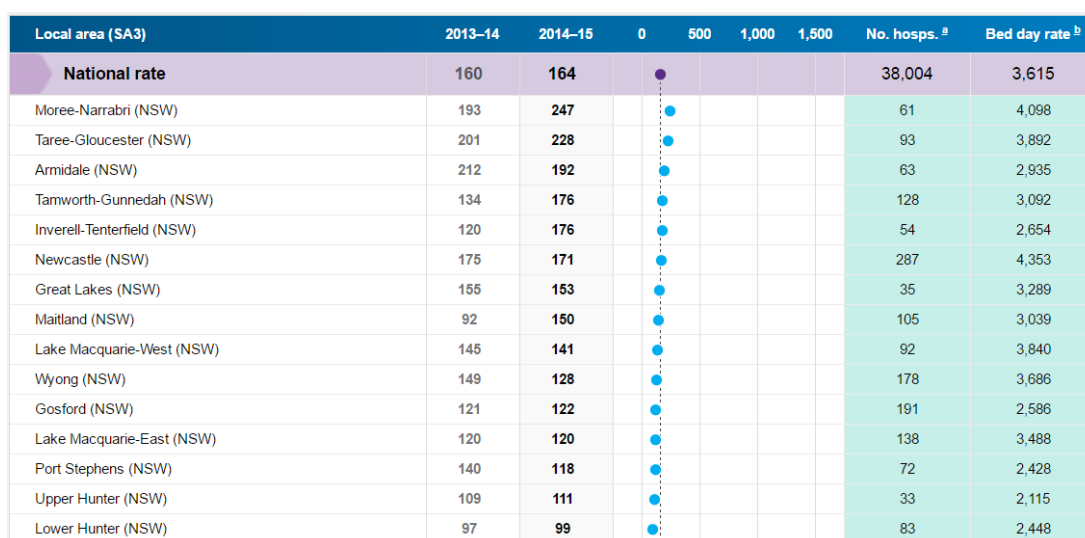


Figure 33: Rate of mental health overnight hospitalisations for schizophrenia and delusional disorders, rate per 100,000, HNECC PHN region, by SA3, 2014-15¹⁰.

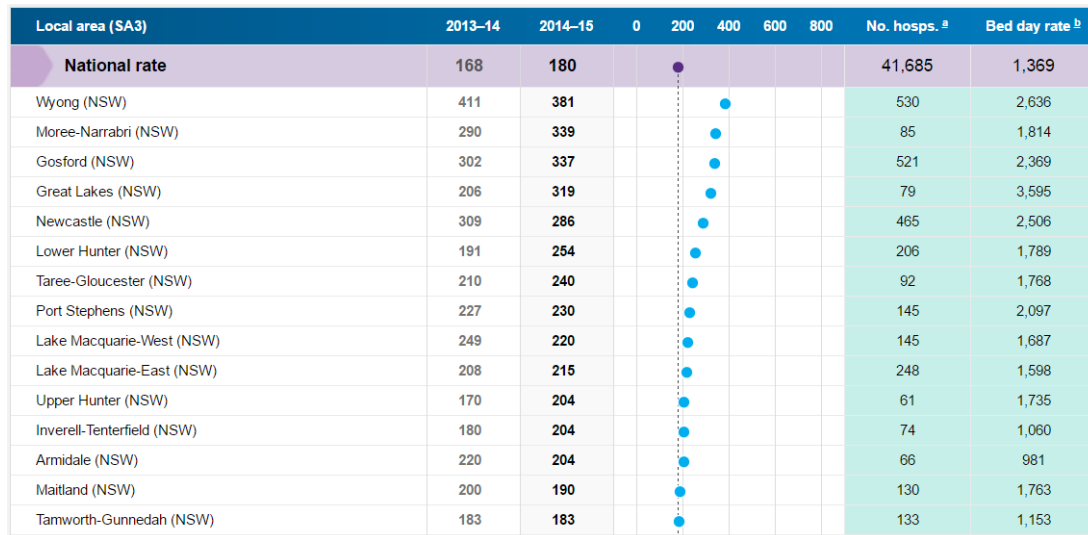


Figure 34: Rate of mental health overnight hospitalisations for drug and alcohol use, rate per 100,000, HNECC PHN region, by SA3, 2014-15¹⁰.



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