

Mental Health in Rural and Remote South Australian Communities

August 2013

Health Performance Council



Government
of South Australia

Health Performance Council

Health Performance Council, "Mental Health in Rural and Remote South Australian Communities"

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1. Summary

In preparation for its 2014 four yearly review of the health system, the Health Performance Council (HPC) held a series of consultation forums, including with Health Advisory Councils (HACs). From this initial consultation process, it was clear that mental health was an important issue for regional South Australia. In response to that feedback, the HPC conducted a review of mental health outcomes and mental health services in country South Australia. In summary, the HPC's findings from that review are:

Health Advisory Councils have considerable, valuable knowledge of their local communities' perspectives, health outcomes and service needs.

HACs' knowledge of rural and regional mental health outcomes was corroborated by other evidence, including academic literature and quantitative data of health outcomes. Many of the concerns they expressed about service variations across the state also proved accurate when examining service delivery data.

Well-being and mental health care are major concerns for country South Australia.

This in no way means that mental health is any less important for metropolitan residents; instead, HPC's review explored what elements may represent differences in the country experience with the mental health care system and in mental health outcomes. While comparisons are often made between metropolitan and country areas, this simple division may mask the diversity and complexity of country South Australia's experiences. Given the diversity of South Australian communities, consideration must be given to assessing the risk factors and outcomes across different regions. Despite statistical challenges in disaggregating data, appropriate responses to communities need to be developed through collection of information from other sources, such as tapping into the full expertise and knowledge of local communities.

On many indicators, the health of residents in some regions of country SA is indeed lagging behind their metropolitan counterparts.

The severity of mental health risk factors and outcome indicators is particularly evident in some areas, with the Northern and Far Western and the Mid North regions of the state performing particularly poorly on multiple indicators. Aboriginal South Australians as well are experiencing much poorer outcomes across the board and continue to seek appropriate cultural responses. Understanding and responding to the state's diversity will be a critical element to ensuring the health system is providing appropriate services; the HPC is continuing to seek evidence of health service activity separated by diversity factors.

Alcohol, illicit substances and personal safety are a significant concern for rural and regional South Australians yet access to corresponding services is less outside the metropolitan area.

For performance and monitoring purposes, it is clear that responsive and effective mental health services recognise and account for the complexity of an individual's and community's experiences with alcohol and illicit substances and personal safety. Rural and regional South Australians are not accessing community or acute alcohol and drug services at the rate of metropolitan South Australians, indicating an area for consideration. As mental health has a strong interaction with cross-government services, the importance of a whole of government strategy is particularly evident in these issues. As the South Australian Health in All Policies Approach states, "health is not merely a product of health sector activities...and therefore [is] often best influenced by policies and actions beyond the health sector" (SA Health 2009). The

health system has a role addressing the mental health outcomes of these issues and in working with other agencies better suited to address the fundamental causes.

While there have been some improvements in the accessibility of mental health services in country areas, particularly for crisis interventions, levels of service are not yet appropriate for the level of need and complexity.

There have been significant investments in infrastructure as a result of the *Stepping Up* recommendations which will improve the system's effectiveness and patient experiences. Yet HAC feedback indicates that the less tangible elements of the country patient journey may need refinements, particularly to ensure continuity of care, such as after hospital discharge and transfer between services.

Rural and regional South Australians access community mental health services less, are admitted to hospital at higher rates, receive specialised psychiatric care in hospital less and receive less community follow-up once released.

From the two consultation sessions with HACs and the system performance questions they developed for the system, it is evident that early intervention is a priority for residents of rural South Australia. Lack of knowledge of available services and how to access them creates an accessibility barrier for some country residents, and this is compounded by stigma and a culture of self-sufficiency. This is even more keenly experienced by specific populations, particularly Aboriginal and culturally and linguistically diverse people.

An adequate and well-supported workforce – both generalist and specialist – will be critical to the system's efficiency and medium and long-term sustainability.

In the short term, preparing existing staff with the tools they need to appropriately respond to patients with mental ill health will be essential to improving patients' experiences and reducing demand on the system.

Active contribution of individuals and communities will be the foundation of the system most efficiently meeting challenges in a way that responds to the diversity of rural SA.

It is not only a question of *if* the system consults with the population it is serving, but also the *quality* of that consultation and the depth of its impact on system responses. For rural and regional services, engagement of users of the mental health system and carers will be particularly important in ensuring services are designed to meet the populations' needs. The Country Health SA 3 Year and 10 Year Plans are a vital step in this process and communities see themselves as ongoing partners in their implementation. As these plans are relatively new, evaluation will be needed to see if they are implemented as planned and if they make a positive difference in communities. The HPC will continue to monitor the engagement of individuals and communities in health service planning, implementation and evaluation, including in the 3 and 10 Year Plans. It will present its full analysis to the Minister for Health and Ageing in its 2014 review of the South Australian health system.

2. Overview

The Report

The Health Performance Council has prepared this report as a part of its 2014 review of the health system in South Australia. It reflects the current elements that contribute to or diminish rural and remote South Australians' mental health and well-being, their mental health outcomes and health system responses to their needs.

The conditions which impact rural South Australians – the economy, the environment, technology and social factors – change and will continue to change. Systems such as health, education and housing impact, and are impacted by, South Australians. These systems are also influenced by external factors. This report therefore reflects a point in time with the information available at the time.

Role of the Health Performance Council

The Health Performance Council (HPC) was established under the *Health Care Act 2008* to provide independent advice to the South Australian Minister for Health and Ageing and Parliament. HPC members are appointed by the Governor of South Australia on the recommendation of the Minister for Health and Ageing and are chosen for their collective capacity, qualifications, skills, experience and expertise to carry out the HPC's functions.

The HPC advises the Minister on the aspects of the health system that work well and those that can be improved. The HPC specifically assesses how the health system is performing in terms of it being effective, safe, responsive, accessible, efficient and sustainable in the provision of high quality care to the South Australian community. The HPC aims to contribute to the well-being of all South Australians, including the diversity of South Australians living in rural and remote areas, by supporting continuous improvement in the health system.

The HPC conducts four yearly reviews of the public and private health system's performance and provides advice about:

- Health outcomes for South Australians, including particular population groups
- The operation of the South Australian health system, including its engagement with individuals and communities, and
- Any other relevant significant issues.

In December 2010, the HPC submitted its inaugural report, *Reflecting on Results: Review of the Public Health System's Performance for 2008–2010*, to the Minister for Health. The HPC is currently implementing its 2014 review processes in order to submit its second four yearly report by 31 December 2014.

2010 Review Findings

The HPC's 2010 review of the health system, *Reflecting on Results*, assessed the performance of South Australia's public health system against the objectives in its strategic plan. It noted that SA Health has committed to provide appropriate services closer to where people live but that, at that stage, it was too early to assess service developments in rural and remote communities. The review also found that SA Health committed to reform mental health care but that evidence of a system-wide approach, improved access and inter-agency coordination was lacking. It did note, though, the increased focus on improving capacity for country services. *Reflecting on Results* found that reducing the gap in health outcomes for Aboriginal people, including for mental health, remained a significant challenge for the health system.

Given the lack of evidence in these and other areas, the HPC noted its intention to continue to monitor specific areas in the lead up to its 2014 review report. Included were three areas particularly relevant to rural and remote mental health care:

- service developments in rural and remote areas aimed at providing services closer to where people live
- alignment of the clinical profile of hospitals in metropolitan and country regions with 10 Year Local Health Service Plans and a lower proportion of country residents being treated in metropolitan hospitals, and
- evaluation of the effectiveness of a more culturally responsive service for Aboriginal people.

Stakeholder Consultation 2012

The HPC values effective community and stakeholder engagement as a fundamental aspect of performing its role. The HPC particularly considers Health Advisory Councils to be key stakeholders in its work. Health Advisory Councils (HACs) were established under the *Health Care Act 2008* to advise the Minister for Health and Ageing on regional health issues; Section 11 of the Act also requires the HPC to obtain the views of HACs where relevant.

In preparation for its 2014 four yearly review of the health system, the HPC held a series of consultation forums from September 2011 to April 2012 with a diverse range of stakeholders, including community groups, clinicians, and health system managers. The HPC held a specific forum for HACs in September 2011 which was attended by 35 HAC representatives. In addition, three HAC representatives provided feedback to the HPC via an online survey.

From this initial consultation process, it was clear that mental health was an important issue for regional South Australia. When asked the most critical health issue in their communities at that time, HAC representatives most frequently stated mental health. Social and structural factors that influence mental health and well-being were frequently mentioned, such as physical health, substance use, safety, the environment and employment. Consultation participants were also asked what questions they would like asked of the health system about its performance during HPC's 2014 review. Of the 25 questions generated, 4 directly related to mental health:

- What systems are in place to address mental health?
- What additional resources are Country Health SA putting into the mental health sector to provide appropriate and early interventions?
- How well do you think you [the health system] are supporting the early diagnosis, early treatment and follow-up of mental health problems in rural areas?
- How do you plan to meet the increasing mental health demands on the health system, particularly in relation to early diagnosis and intervention, especially at the local level?

Participants were given the opportunity to confirm the questions they generated via e-mail and encouraged to discuss the findings with their HAC colleagues to generate additional questions.

Commissioned Exploratory Study

In response to the concerns raised during consultation, the HPC commissioned consultant Dr Iolanda Principe to explore South Australian rural and remote mental health issues in greater detail to assist the HPC to understand the key issues.

Dr Principe reviewed the local 10 Year Health Service Plans and regionally amalgamated 3 Year Implementation Plans coordinated by the Country Health SA Local Health Network (Country Health SA), information from HAC representatives, and literature regarding mental

health in regional, rural and remote Australia. Dr Principe also conducted targeted consultation sessions with HAC Presiding Members, professionals with expertise in the rural health workforce, and representatives from the Department for Health and Ageing, including from Country Health SA. From this information, HPC identified for major themes about mental health determinants and status, which are presented in Chapter 4.

The findings were provided to Country Health SA to allow confirmation of information it supplied. Country Health SA provided additional information, including updates on progress since the report was written. Country Health SA noted that all its regional 10 Year Health Service Plans and 3 Year Implementation Plans will be integrated into its 2012-2013 Business Plan.

The Chair and Deputy Chair of the HPC then presented Dr Principe's findings to HAC Presiding Members to confirm their accuracy and elicit additional feedback. Twenty-one HAC representatives attended and confirmed that the themes from the report are accurate and continue to be relevant. Attendees also resoundingly confirmed that, a year on from the original discussion with the HPC, mental health is still the most important health issue in country SA.

The HPC also sought to confirm the findings with clinicians. HPC consulted with targeted clinicians at various stages of the study to ensure that the key findings are accurate and to ask for further comment from a clinical perspective. The HPC Chair and Deputy Chair presented Dr Principe's findings to clinical team leaders from across rural South Australia. Attendees confirmed that the key issues identified by Dr Principe reflect their experiences working in rural areas. A list of all parties consulted throughout this process can be found on page 27.

Other Information Considered

Dr Principe's review highlighted the areas of HACs' highest concerns regarding rural and remote mental health, giving the HPC specific areas for further examination. The HPC considered qualitative and quantitative data about regional and rural South Australia and related mental health outcomes data; this information is presented in chapters 3 and 4. The HPC also closely considered the South Australian Social Inclusion Board's *Stepping Up: Social Inclusion Action Plan for Mental Health Reform* and SA Health's *Mental Health and Well-being Policy* and its 41 recommendations. Chapter 5 presents the HPC's assessment of data about health system responses relevant to the major themes from the consultations and literature review.

The HPC would like to acknowledge the generous contribution of time and consideration by those who contributed to this project, in particular the Health Advisory Councils and Country Health SA. The HPC is also grateful to Dr Iolanda Principe and the Australian Institute for Health and Welfare for their thorough work.

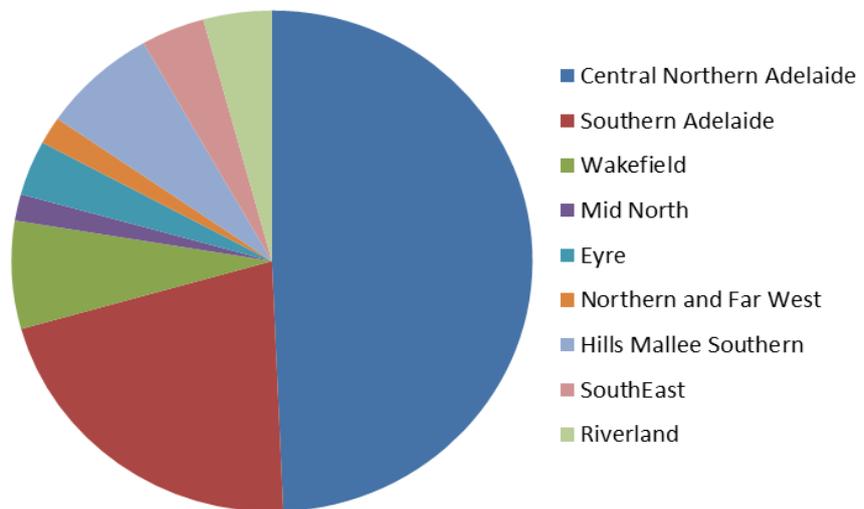
3. Mental Health Issues and Status in Rural and Regional SA

South Australia is diverse. Different regions have different histories, geographies, and economic and social strengths. Communities across South Australia therefore face varied challenges, not only between metropolitan and country regions, but also between country regions.

In 2011, there were 1.6 million South Australians, 70.5% of whom lived in

metropolitan Adelaide and 29.5% in rural and remote areas (Australian Bureau of Statistics [ABS] 2012a). Figure 1 shows how South Australians were distributed across the state. And South Australia is growing. Between 2006 and 2011, metropolitan Adelaide and country SA recorded similar growth, up 5.9% and 4.9% respectively (ABS 2012b).

Figure 1. South Australian Population Distribution by Region



Source: Based on ABS 2012a

A harsh natural climate, higher occupational risks, geographic isolation and the need for long-distance travel are a part of life for many rural communities. Fewer resources and lower socioeconomic status than urban populations add to these challenges (Standing Council on Health 2012). These challenges have been balanced by better social networks and connectedness than metropolitan communities, and therefore higher individual and community resilience. Yet rural communities face also challenges, particularly economic and environmental changes (including drought, salinity and fire), which have tested that resilience and which have been reported to lead to increased family breakdown, social isolation, and changing demographics from out-migration.

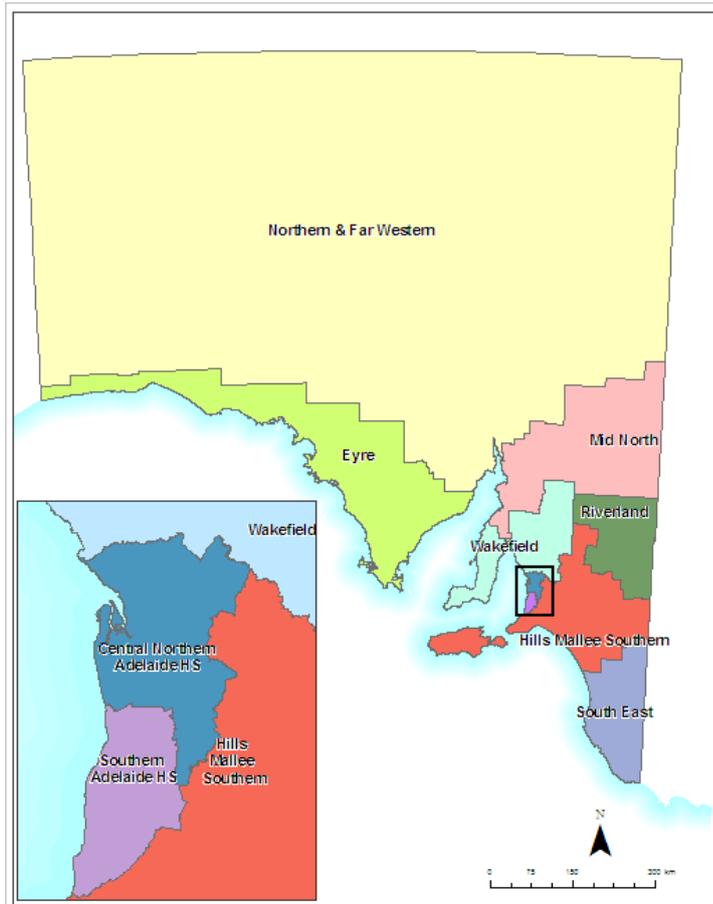
Diversity in and across Regions

South Australia is rich with diversity, including in its rural and regional areas. There is also diversity between regions, such as demographic composition. Understanding and responding to this diversity is a critical element to providing appropriate services, including mental health services, across communities. *Stepping Up* noted the need for the mental health system to consider specific population groups, namely country residents, Aboriginal people, people with complex needs and those in the justice system. The HPC also considers the specific needs of culturally and linguistically diverse communities to be an important element.

Traditional data collection techniques can create difficulties in collecting statistically useful data in rural areas due to small population sizes. Although data is not always available separated by these aspects and different agencies use different regional boundaries, this report uses what sources are available to start to identify regional diversity. Generally, the September 2012 South Australian Monitoring and Surveillance System (SAMSS) regions are used, as depicted in Figure 2.

While 22.1% of South Australians in 2011 were born overseas, metropolitan Adelaide had a higher proportion of residents who were born abroad, at 29.5% (ABS 2012a). All regional

Figure 2. SAMSS Regions



Source: Health System Information and Performance SA Health, 2012.

areas also had a significant proportion of residents born outside Australia, the highest being the Hills Mallee Southern area (which includes Mount Barker, Kangaroo Island and Victor Harbor), where 20.7% of residents were born abroad. Even in the region with the smallest proportion of residents born overseas, the Mid North, more than one in ten residents were born abroad, with 12.3% born outside of Australia.

In 2011, 14.4% of the South Australian population did not speak English as a main language at home (ABS 2012a). In regional areas, this ranged from 2.7% in the Wakefield region (which includes the Barossa and Yorke Peninsula) to 12.8% in the Northern and Far Western region. While 2.5% of South Australians did not speak English well or at all in 2011, South Australians lacking spoken English proficiency were concentrated in metropolitan Adelaide, where 4.1% of the population did not speak English well or at all. In regional South Australia, the Northern and Far Western area

of the state had the highest proportion of residents who did not speak English well or at all, with 2.1% of the population lacking spoken English proficiency.

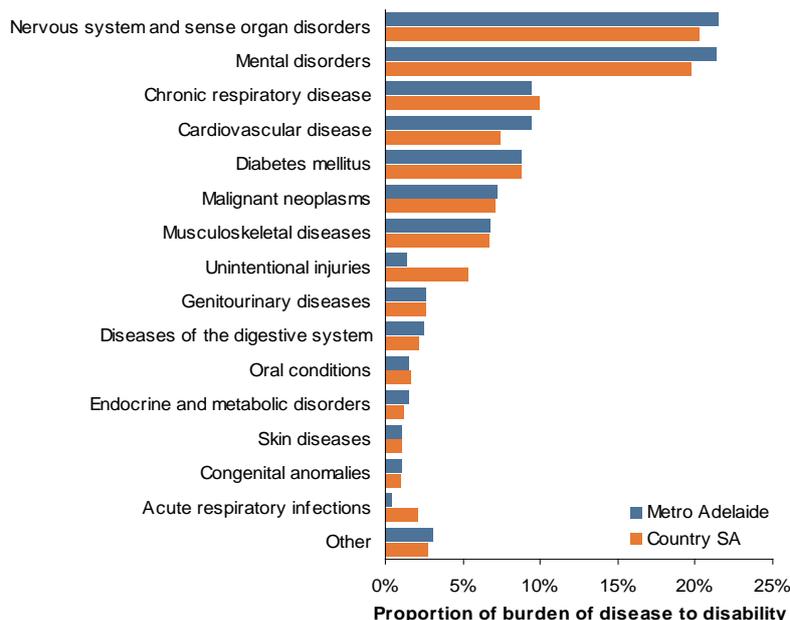
In 2011, 1.9% of South Australians identified as Aboriginal or Torres Strait Islander (ABS 2012a). While approximately half of Aboriginal or Torres Strait Islander South Australians lived in the metropolitan area in 2011, Aboriginal or Torres Strait Islanders were also a significant population in country regions, notably 3.55% of Riverland residents, 5.7% of Eyre residents, and 19.3% of Northern and Far Western region residents.

Mental Health Indicators

The World Health Organisation defines mental health as “a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community” (2012). Mental ill health is the experience of either a mental illness, a diagnosable disorder that interferes with an individual’s abilities, or a mental health problem, an absence of a sense of wellbeing or otherwise a mental issue which impacts an individual’s functioning (SA Health 2010). Therefore mental health is affected by biological, psychological, social and structural aspects—and a range of factors outside the direct responsibility of the health system. Important contributors to mental health outside the health system include disability, child protection, aged care, Aboriginal and Torres Street Islander affairs, multicultural affairs, community safety, environmental issues, justice, housing, education, employment, social inclusion and infrastructure issues.

Mental health indicators are signs of our psychological well-being as a state. While they are helpful in gauging how we are going, the indicators below are only the start of the story, not the full story. This is particularly true for service-use and diagnosis indicators, as social stigmas or difficulties accessing medical support for mental health conditions limit data reflecting the full extent of the populations' experience. Nevertheless, regional variances in indicators have a role in explaining differences in South Australians' experiences.

Figure 3. SA Relative Proportion of Years of Healthy Life Lost to Disability, by Top 15 Disease Groups and Region, 2005-07



Source: Based on SA Health 2012

Mental health disorders have a significant impact on South Australians – individuals, carers, families, communities, and society as a whole. One way to measure this impact is by considering the contribution of mental health disorders to years of healthy life lost due to disability. As illustrated in Figure 3, in 2005-2007, mental disorders were a close second to nervous system and sense organ disorders for reducing South Australians' healthy years of life in both metropolitan Adelaide and country areas.

Understanding and accurately reporting on the people who use the mental health system, particularly Aboriginal people and people who live in the country, were recommendations 3 and 5 of the *Stepping Up* report. During the HPC's consultation sessions, there was a perception that the gap between the frequency of mental health conditions in metropolitan and country areas is increasing. Dr Principe found that while prevalence of mental illness is not higher in country SA than in the metropolitan area, national data show people living in country areas are more likely to have a mental health issue at some point. Data from the South Australian Monitoring and Surveillance System reveal that while a simple split between metropolitan and country South Australia does not show a large difference in many areas, considering the diversity of regions creates a more nuanced picture. As evident below, when data were separated by region, there were significant variations between regions.

Overall, 17.1% of South Australians¹ have a current diagnosed mental health condition, including anxiety, depression and stress-related problems (SAMSS 2011d). The proportion of the population in country areas with a diagnosed mental health condition of 15.7%,² is *not* statistically significantly lower³ than the prevalence in the greater Adelaide region of 17.6%.⁴ Two country regions reported relatively low proportions of diagnosed mental health conditions – the South East at 7.5%⁵ and the Riverland at 8.8%.⁶ Two regional areas reported relatively much higher proportions of diagnosed mental health conditions, with the Mid North at 27.9%⁷ and the Northern and Far Western region at 28.3%.⁸

Psychological distress can have a major impact on people's lives and has a strong association with anxiety and affective disorders. Country residents were statistically significantly less likely⁹ to report experiencing psychological distress in the previous four weeks, with 7.8% of country residents¹⁰ reporting psychological distress, compared to 9.8% of those in

metropolitan Adelaide¹¹ (SAMSS 2011g). Two country regions report relatively high proportions of residents experiencing psychological distress – Hills Mallee Southern at 10.6%¹² and Northern and Far Western at 10.5%.¹³

Regardless of region, Aboriginal South Australians are experiencing high to very high psychological distress at levels much higher than non-indigenous South Australians. In 2008, 37.1% of Aboriginal South Australian living in the Adelaide metropolitan area¹⁴ experienced psychological distress in the previous 4 weeks, compared to 27.2% for regional areas¹⁵ and 34.4% for remote areas¹⁶ (ABS 2008).

Chronic conditions have a strong relationship with mental health and their impact was specifically mentioned during HPC's second consultation session with HACs. Country residents were statistically significantly more likely⁹ to report living with two or more chronic conditions (asthma, arthritis, diabetes, cardiovascular disease, osteoporosis or a medically diagnosed mental health condition), at a rate of 17.8%¹⁷ compared to 15.8% of metropolitan residents,¹⁸ respectively (SAMSS 2011e). The top three country regions for prevalence of their populations living with two or more chronic conditions are Northern and Far Western at 18.5%,¹⁹ the Riverland at 22.6%,²⁰ and Mid North at 24.0%.²¹

Perceptions of health also play an important role in wellbeing and mental health. An estimated 84.2% of South Australians²² rate their health as good, very good or excellent (SAMSS 2011c). South Australians living in the country are statistically significantly less likely⁹ to believe they are in good or better health compared to their metropolitan Adelaide counterparts. In 2011, 85.2% of metropolitan South Australians²³ rated their health as good or better compared to 81.6% of country South Australians.²⁴ Residents of the Riverland and Northern and Far Western regions reported the lowest rates of good or better health in the country, at 76.3%²⁵ and 78.6%,²⁶ respectively. While these data are not available by region for Aboriginal South Australians, in 2008 74.3% of Aboriginal South Australians living in the Adelaide area assessed their health as good or better,²⁷ compared to 69.2% in regional areas²⁸ and 75.6% in remote areas²⁹ (ABS 2008).

Suicide has an immense impact on families, communities and society. Although suicide data are not available separated by region and have some limitations, there is a gap between suicide rates in the metropolitan area compared to country SA. Between 2001 and 2005, there were 12.5 deaths reported to be by suicide per 100,000 people in the Adelaide Statistical Division compared to 14.0 per 100,000 people living in the rest of South Australia (ABS 2012c). In 2006-2010, both of these rates had reduced, and there was a smaller gap, with Adelaide metropolitan area at 11.7 and the rest of SA at 11.9. Men in both the greater Adelaide area and the rest of South Australia were more than three times more likely to take their lives than women, with an average of 18.4 suicides per 100,000 South Australian men compared to 5.3 South Australian women.

Between 2001 and 2010 Aboriginal South Australians committed suicide at a rate of more than twice that of non-indigenous South Australians, at 26.7 deaths reported to be by suicide per 100,000 Aboriginal people as opposed to 11.2 per 100,000 non-indigenous South Australians. Of the five jurisdictions that reported data (New South Wales, Queensland, Western Australia, South Australia and the Northern Territory), South Australia recorded the second highest Aboriginal suicide rate over the period of 2001-2010. The Northern Territory was highest, at 30.8 deaths by suicide per 100,000 Aboriginal Territorians.

4. Major Themes from Consultation and Literature

Despite differences in prevalence of mental health conditions across regions, it is clear that there is a growing awareness of the importance of wellness across rural and remote South Australia and the demand for mental health services is growing with it. There were also common themes from HACs about the mental health system. These four themes were: the importance of contributing factors, including substance use and safety; appropriate and timely mental health services; a sustained and sustainable workforce; and local solutions from local communities. These themes align in many ways with literature on rural mental health, the *Stepping Up* report, and the priorities of SA Health's *Mental Health and Well-being Policy*.

Contributing Factors

In consultations, alcohol was consistently referred to as both a symptom of, and contributor to, poor mental health in country SA. Survey data indicate that country residents are at statistically significantly higher risk,⁹ both in the short and long term, than their metropolitan counterparts from alcohol consumption. While 25.5%³⁰ of metropolitan residents drink alcohol at levels considered risky to high risk in the short term,³¹ 29.3% of country residents³² do (SAMSS 2011b). In three country regions, more than one in three residents drink at levels risky in the short term: the Hills Mallee Southern at 31.3%,³³ the Riverland at 34.1%,³⁴ and Northern and Far Western at 35.7%.³⁵ Riverland, Northern and Far Western and Mid-North residents reported drinking at levels putting them at long-term risk from alcohol at, 7.4%,³⁶ 8.8%³⁷ and 8.2%,³⁸ respectively (SAMSS 2011a). Overall, 5.3% of country residents³⁹ are at long-term risk due to their alcohol consumption, statistically significantly higher⁹ than the 2.9% of people living in metropolitan Adelaide.⁴⁰ Anecdotal evidence from those consulted suggested that both stigma and privacy issues are limiting country residents from seeking help for alcohol and drug dependency issues, with this reluctance to seek assistance also extending to emergency situations.

Overall, there was a statistically significantly higher⁹ prevalence of combined behavioural risk factors, such as smoking, alcohol consumption, physical inactivity, and inadequate nutrition, in country areas compared to metropolitan Adelaide. While 24.0%⁴¹ of metropolitan South Australians reported having two or more of these risk factors, 35.2% of country residents did.⁴² Very large proportions of residents in the Riverland and South East country regions particularly reported living with two or more risk factors, at 48.2%⁴³ and 41.4%⁴⁴ respectively (SAMSS 2011f).

Mental health issues co-occurring with alcohol and drug problems were flagged as a possible indicator of complex needs in the *Stepping Up* report. Quoting the Department for Families and Communities and regional community mental health services' 2006 Community Mental Health Audit, *Stepping Up* stated that at that stage 44% of adult users of mental health and services experienced substance abuse (Social Inclusion Board 2007). Its recommendations 15 and 16 advocated for responses to complex needs, like co-occurring mental health and substance issues, to be coordinated, systematic, and use a joined-up government approach.

Domestic violence was another issue frequently mentioned during the consultations and the exploratory study. Unfortunately, data for sexual and physical violence separated by sex, available in the ABS *Personal Safety Survey*, does not separate data between regions. Data are available from other sources about *general* experiences of violence separated by region, but not by sex. There was not a large difference between experiences of physical or threatened violence in the previous 12 months between metropolitan Adelaide (11.9%⁴⁵) and inner regional areas (12.3%⁴⁶), but residents of other rural areas of the state were less likely to report being a victim of actual or threatened violence, with 7.6% reporting an experience of violence in the last 12 months⁴⁷ (ABS 2006).

Perceptions of safety are also an important contributor to mental health. Here rural and regional South Australia performed better than metropolitan Adelaide, with 55.2% of inner regional residents⁴⁸ and 56.6% of other rural residents feeling safe to very safe to walk alone in their local area after dark⁴⁹ compared to 40.3% of metropolitan residents⁵⁰ (ABS 2006).

Removal from natural family can also have an impact on mental health, an issue particularly pertinent in light of a history of forced removal of Aboriginal children. 16.4% of Aboriginal South Australians living in the metropolitan area have been removed from their natural family at some point,⁵¹ compared to 7.5% in regional areas,⁵² and 8.2% in remote areas.⁵³ In the metropolitan area, 50.7% of Aboriginal South Australians have relatives who were removed from their natural family at some point,⁵⁴ compared to 36.1%⁵⁵ and 29.8%⁵⁶ for regional and remote areas, respectively (ABS 2008).

Appropriate and Timely Services

South Australia is a large state with few regional centres and a dispersed rural population. Innovative responses are helping to address the tyranny of distance, such as video-conferencing and various telephone-based services, like Lifeline, Kids Help Line and Mensline. There is also a level of acceptance that some specialised services cannot be maintained in all areas. However, communities continue to voice a desire for some face-to-face services close to home. Dr Principe particularly noted communities' desire for services close to where they live that address emergencies and are accessible after hours. Regional hospitals with mental health proficiency and appropriate resources were also seen as important. Specific issues identified include health services, such as emergency departments, having the facilities and knowledge to appropriately treat patients with challenging or aggressive behaviour, and to safely detain people when needed – and only when needed. In some rural areas, privacy concerns also remain for people seeking care.

Consulted stakeholders acknowledged that there have been improvements in some areas. Country Health SA states it has aimed to improve emergency care and specialist mental health care and these efforts may be having an impact. Communities reported improvements in crisis care and some satisfaction with the Glenside facility, which was redeveloped and now has a Rural and Remote Health Service following recommendations from the *Stepping Up* report. Six bed integrated acute inpatient units including both Limited Treatment Centre beds and Intermediate Care Centre beds are being established in Whyalla, Port Lincoln, Mount Gambier and Berri. Nevertheless, the separation of health services across metropolitan and country boundaries was considered an impediment to a systematic response to country health issues.

It seems improvements in crisis care may have shifted the community's concerns from crisis intervention to prevention and early intervention. At the second consultation session with HACs, there was generally praise for specialist and emergency care where available, but concerns remained about the health system's ability to identify and address mental health needs before they reach a crisis point. There was also a perception that the community itself has a role in encouraging early intervention, with traditional stigmas and a culture of self-reliance reducing the likelihood of people with mental health concerns seeking help before crisis.

An area critical to the system's responsiveness to rural and remote South Australians is its promotion of available services and its support of individuals to know how to access them. There was a perception that insufficient early intervention may lead to preventable mental health deterioration and crises. General promotion of mental health awareness was seen as a necessary step in addressing the reluctance to seek mental health care, even if tangible outcomes may be difficult to measure in the short term. Consultation participants voiced that they felt promotion and awareness raising are the roles of communities, local health services

and the greater health system. The *Stepping Up* report's recommendations 25-31 also raised prevention and early intervention as a key area requiring intervention, particularly for children, adolescents and young people.

Knowing what services are available is only one element of service accessibility; being able to get to those services is also a critical factor. HPC heard that transport problems have an impact on patients seeking services and on local health and police services. While the Patient Assistance Transport Scheme addresses part of rural South Australians' need for transport, communities reported that transport needs for mental health persist. The HACs reported incidents of people who required services simply not being able to access them due to lack of transport, effectively leaving care to family and friends.

There were also concerns regarding the accessibility of mental health services for different population groups, particularly Aboriginal people and people from culturally and linguistically diverse backgrounds. Communities perceive that the lack of culturally competent services has a detrimental impact on people accessing services they need. The South Australian Public Advocate has also noted the need for culturally safe and accessible mental health services (Public Advocate 2011). He notes that despite progress in improving mental health outcomes for the Aboriginal population being "painstakingly slow."

The HPC heard that integrated services are a critical element in ensuring accessibility. It was felt that a smooth patient journey requires improved communication and service interaction between primary, secondary and tertiary care and across public and community-based services. Country Health SA has existing partnerships with non-government organisations through service agreements, a positive move which it would seem the community would like to see increased and improved. This integration is critical to a "stepped system of care," which was core to the *Stepping Up* report, particularly recommendations 6-20 which focus on a systematic, integrated system of care which addresses the various levels of need.

Discussions with HACs indicated that another key partner in mental health care and recovery are carers—paid and unpaid. Partnerships with carers were seen as an essential piece in the care and recovery process, particularly outside crisis times. There was a perception that services and support to manage the daily lives of those living with risk factors or mental health conditions remain a challenge. Families and communities are impacted by the slow, ongoing drain of caring. Carers, often parents or other family members, consequently experience an impact on their own well-being.

A Sustainable Workforce

Although projected shortages in the health workforce are not unique to country South Australia, the need for an effective workforce mix with support at the local level continues to be a key concern for rural South Australia. Some HACs expressed that their communities have already experienced some improvements in general health workforce issues, but overall there is a perception that general and specialist health workforce capacity cannot meet demand – and that demand will continue to increase. In particular, the limited numbers of general practitioners and allied health professionals, a comparably under-represented cohort of private and non-government providers, and an ageing workforce have led to a concern that the system in rural areas is fragile and unsustainable. In the long-term, recruitment and retention will be key. In the short term, variable waiting times may result in patients choosing to access metropolitan services or seeking treatment only when problems escalate to crisis.

Consultation participants expressed a strong desire for a systematic approach to creating a sustainable rural and remote health workforce, both for generalist and specialist staff. Workforce issues were also highlighted by the *Stepping Up* report, which recommended structured workforce planning across sectors (recommendations 21 and 22), career

development for psychologists and allied health professionals (recommendation 23) and job redesign to support a people-centred recovery model.

State-funded psychiatrists currently provide visiting services at fourteen rural locations and the Commonwealth funds psychiatrists at nine locations. Country Health SA acknowledges that the overall number of psychiatrists in South Australia is appropriate for population numbers but there is currently an imbalance in the distribution of psychiatrists across the state. The HPC is pleased to note that the *Stepping Up* report's recommendation to create mental health nurse practitioner roles in country SA has been implemented and that two of the eight candidates have achieved Nurse Practitioner status.

A health workforce appropriately trained and supported to address mental health issues was also a key theme. There was a strong expectation that all health staff, regardless of their role, should address patients with professionalism and compassion. Basic knowledge of mental health issues and access to mental health resources were seen as key to staff being able to respond appropriately. It was seen that one way to address current gaps in the health workforce is for mental health specialists to be supported to make a concerted effort to support non-specialists through training and assistance with the development and implementation of procedures. The community saw mental health first aid training for non-specialist staff as an effective way to reduce stigma and support non-specialist staff to build knowledge and competency to better respond to patients with mental ill health. Country Health SA is currently delivering such training, including Aboriginal Mental Health First Aid training, a move which it would seem many communities would welcome to be expanded.

Staff lack of knowledge about mental health issues was also seen to have an impact on police services and the greater justice system. There were concerns that the justice system is sometimes inappropriately called by health workers and members of the community to detain and transport people experiencing mental health issues. There were also general questions about the justice system's response to mental health issues and the health system's role in supporting justice to respond appropriately. There was a perception that some people experiencing mental health conditions are labelled as offenders without the underlying causes receiving appropriate health treatment. This was particularly concerning for the community when mental health conditions contribute to anti-social behaviours and minor offending.

Local Solutions from Local Communities

Given the diversity of South Australian rural and regional communities, it is no surprise that communities expressed that effective mental health solutions must be tailored to their communities. Location-based solutions require local planning and there was a strong perception that local communities are knowledgeable not only of the main mental health issues in their area, but also their solutions.

Country Health SA worked with HACs in the development of the current local area 10 Year Health Service Plans and amalgamated regional 3 Year Implementation Plans. From the feedback received during consultation, the 3 Year Plans seem to be seen by communities as achievable. There was a perception that the 10 Year Plans have too long a range and are too focused on infrastructure. Nevertheless, communities expressed hope and trust that these plans will result in necessary improvements. Some HACs reported that there have already been positive results in their communities.

While the development of the 3 Year and 10 Year Plans are an example of engagement, communities voiced that they have an ongoing role engaging with the health system at all levels. The HACs clearly see this as their core business. Engagement specifically of mental health consumers was also seen as the role of the health system. A participant at the second HPC consultation session was pleased to note implementation of SA Health's Experts by

Experience Initiative. This program addresses recommendations 1, 2 and 41 of the *Stepping Up* report, which called for mental health care consumers and their carers and families to have meaningful input at all levels of the mental health care system. As previously mentioned, involvement of carers is seen as an important element of a response system. Carers told the HPC they see their role not only as active partners in the care and recovery process, but also in planning and evaluation of mental health services.

5. Mental Health Service Activity

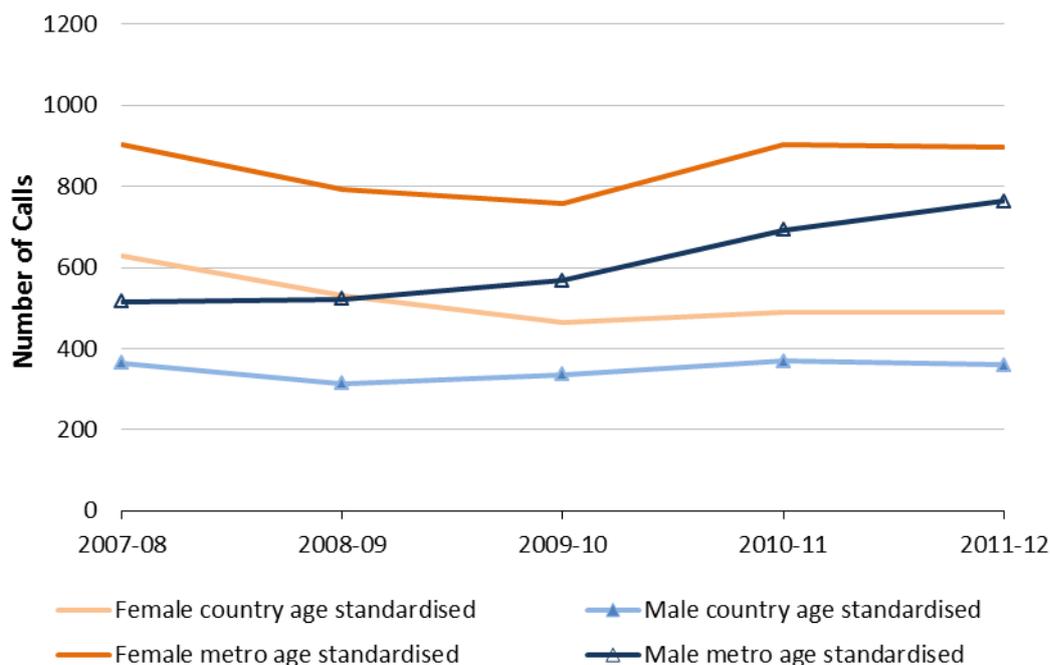
Following the consultations and literature review presented in Chapter 4, the HPC seeks to identify in this case study evidence of the health system’s response to regional South Australians’ mental health and well-being. Available measures of system effectiveness were matched with the major themes identified in the of this report: Contributing Factors, Appropriate and Timely Services, A Sustainable Workforce, and Local Solutions from Local Communities. Data were acquired from a variety of sources, including from various SA Health datasets and from a customised data extract prepared by the Australian Institute for Health and Welfare. Where possible, information was analysed by region, over time and compared to other jurisdictions. These variations were not always possible due to data limitations, but the greatest level of statistically sound disaggregation is provided throughout this section.

Contributing Factors

Drug and alcohol use were consistently mentioned during consultations as having a relationship to the prevalence of mental health and behavioural problems. As discussed on page 13, rural and remote South Australians are more likely than metropolitan residents to drink alcohol at levels considered risky, both in the short term and in the long-term risk. Yet, as consultation attendees indicated, it does not seem country residents are seeking preventative or emergency help for alcohol and drug related issues at the same rates as those living in metropolitan Adelaide.

As Figure 4 reveals, data show a significantly higher proportion of people in the metropolitan area making contact with South Australia’s state-wide drug and alcohol telephone counselling and information service, Alcohol and Drug Information Service (Drug and Alcohol Services South Australia, Customised report, 2013). In 2011-2012, this gap meant that for every 100,000 South Australians, there were 408 additional calls from the Adelaide area seeking help than from people living in country areas. The data also reveal a gap between women and men contacting the service, with women in both metropolitan and rural and regional areas much more likely to contact the service.

Figure 4. Calls to SA Alcohol and Drug Information Service (per 100,000 population)



Source: Based on Drug and Alcohol Services South Australia, Customised report, 2013

The gap between metropolitan and country residents receiving alcohol and drug related services extends to the emergency department. In 2012, metropolitan residents were twice as likely to be seen in an emergency department for an alcohol-related condition as country residents, with 32.5 of every 10,000 metropolitan residents attending an ED due to alcohol compared 15.4 per 10,000 country residents⁵⁷ (Emergency Department Data Collection database). The difference in these rates is intensified by the previously established higher prevalence of drinking alcohol at risky in country areas, suggesting potentially an even higher proportion of country residents who need emergency services not seeking them. The gap does not extend to drug-related emergency department presentations, with 5.3 of every 10,000 metropolitan residents attending an ED due to drug-related conditions, compared 4.9 per 10,000 country residents.⁵⁷ Note this data is by patients' residence, as more than 99% of metropolitan residents who present at EDs due to alcohol-related causes go to a metropolitan hospital, 42.1% of country residents seeking ED care for alcohol present at metropolitan hospitals.⁵⁷

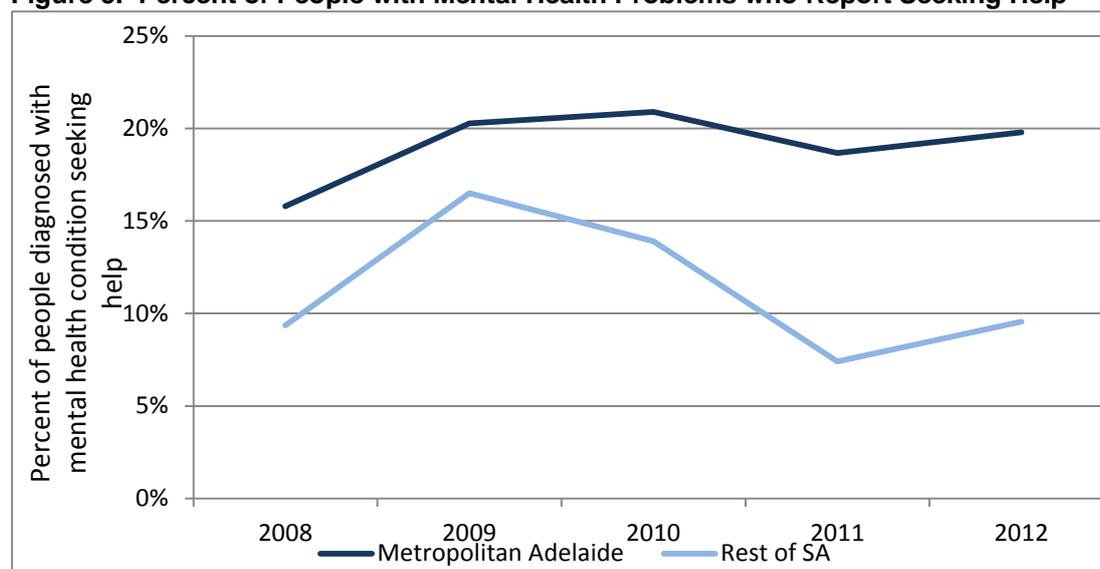
Once presenting at an ED, most South Australians presenting with an alcohol-related condition are seen relatively quickly. For country hospitals, 99.0% of people presenting to emergency departments with alcohol-related conditions are seen within the agreed threshold time, with an average wait time of slightly less than six minutes.⁵⁸ For metropolitan emergency departments, 72.8% of alcohol-related patients are seen within the threshold time, with an average wait time of forty minutes.

Appropriate and Timely Services

Non-Hospital Services

Consultation participants noted a stigma and a culture of self-reliance reducing the likelihood of South Australians living in rural and regional areas seeking help before mental crises. Data seem to support this impression by indicating a regional difference for people experiencing mental health problems seeking professional help. In 2012, people living in the Adelaide area diagnosed with a current mental health problem were more than twice as likely to seek help as rural and regional South Australians, with just under one in five people with mental health problems who live in the metropolitan area reporting that they are seeking help, compared to less than one in ten country residents with a mental health problem⁵⁹ (South Australian Monitoring and Surveillance System Health Information Portal, Customised report, 2013). Figure 5 shows that a regional gap has been persistent over the last five years.

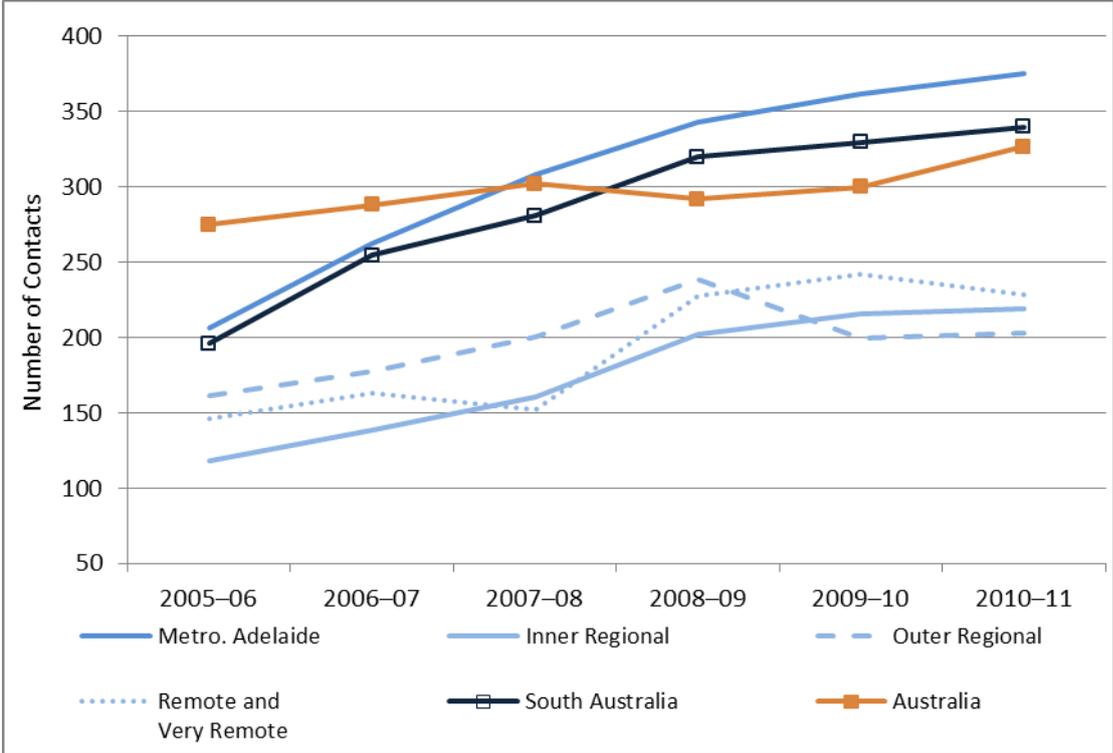
Figure 5. Percent of People with Mental Health Problems who Report Seeking Help



Source: Based on South Australian Monitoring and Surveillance System Health Information Portal, Customised report, 2013.

Given that health status data suggests similar prevalence of mental health issues across metropolitan and overall regional SA, the HPC sought regional data on service utilisation across the spectrum of mental health services available. Data on community mental health care service contacts show that while the per capita use of community mental health care services is higher in metropolitan Adelaide than across Australia, the rest of South Australia is receiving community mental health services at a significantly lower rate. In 2010-2011, there were less than 214 mental health contacts for every 1000 country residents received community mental health care services, compared to 375 for every 1000 metropolitan residents (Australian Institute of Health and Welfare [AIHW], Customised report, 2013). While use of community services has been increasing over the last five years, the gap between metropolitan and rural and remote rates has been consistent, as evident in Figure 6.

Figure 6. Community mental health care service contacts per 1,000 people

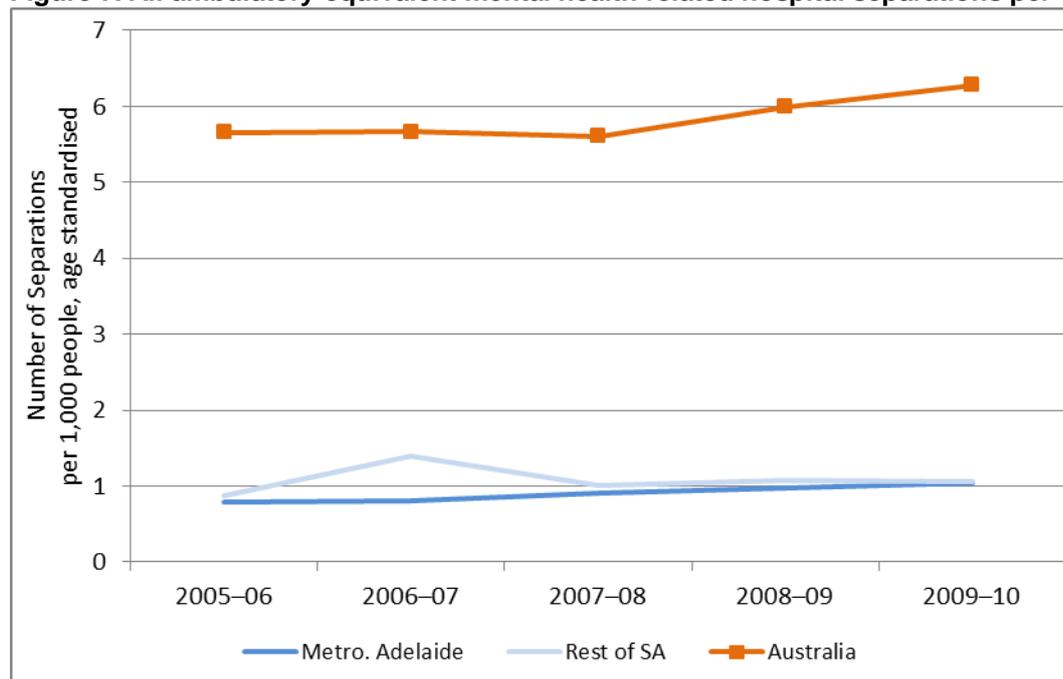


Source: Based on AIHW, Customised report, 2013

South Australian rates of use of ambulatory mental health services, services for people not admitted to a hospital or residential service, are approximately one-sixth of the Australian average (AIHW, Customised report, 2013). While there was a slight increase in ambulatory-equivalent mental health services across South Australia between 2005-06 to 2009-10, the level of this type of non-emergency mental health treatment in South Australia remains significantly below the Australian average (refer to Figure 7, page 21).

For those with a mental health problem which may impair normal social function, the National Disability Agreement funds psychiatric disability support services. At 361.4 per 100,000 people, the rate of South Australians receiving psychiatric disability support services in the metropolitan area is similar to the Australian average of 364.9⁶⁰ (AIHW, Customised report, 2013). The rate is higher in regional South Australia, at 437.4 for inner regional and 416.4 for outer regional. Psychiatric disability support services were less prevalent in remote areas, at 296.6 per 100,000 remote residents.

Figure 7. All ambulatory-equivalent mental health-related hospital separations per 1,000 people



Source: Based on AIHW, Customised report, 2013

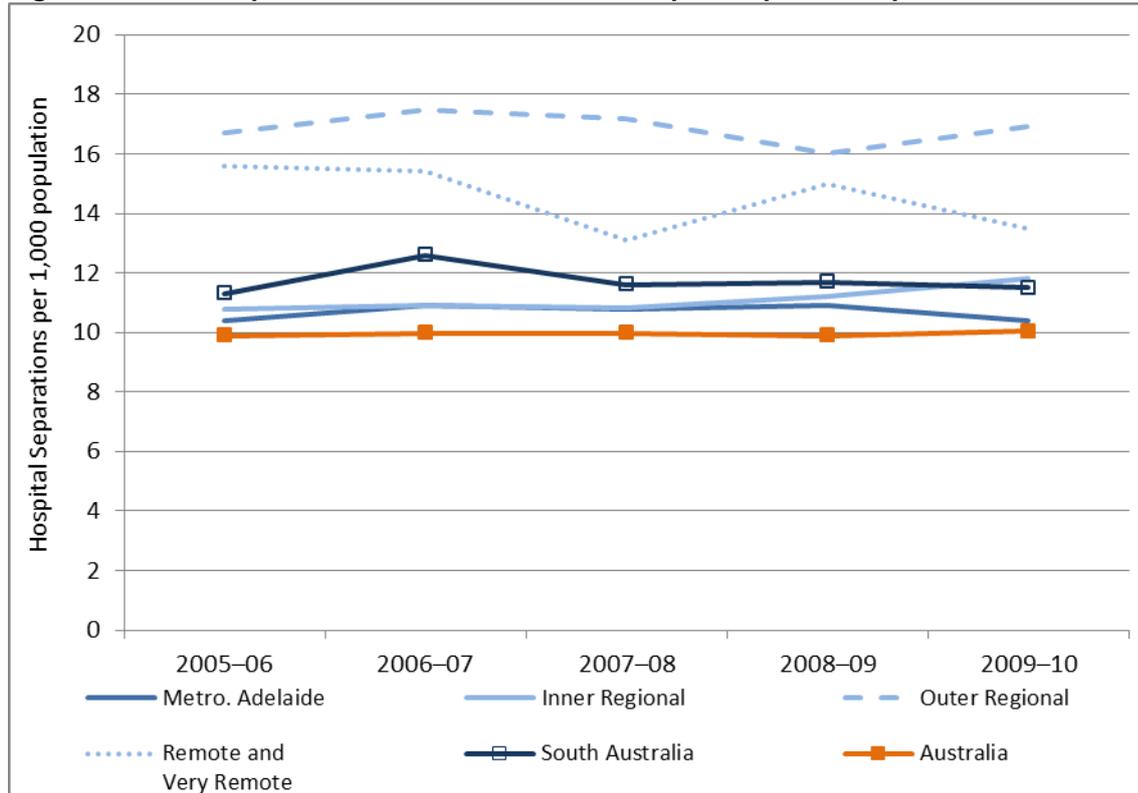
At the tertiary end of non-hospital care is residential mental health care. While metropolitan Adelaide has proportionately more episodes of residential mental health care (2.8 episodes per 10,000 people) than the Australian average (1.9 episodes per 10,000 people), the rest of South Australia lags significantly behind, at 0.7 episodes per 10,000 people⁶⁰ (AIHW, Customised report, 2013).

Hospital Services

A regional gap is again evident in emergency department utilisation. In 2012, 123.6 people per every 10,000 metropolitan residents were seen in emergency departments for mental health related diagnoses, compared to 69.3 for country residents (Emergency Department Data Collection database). While nearly half of country residents seeking emergency department treatment due to a mental health condition present at a metropolitan hospital, there is a significant difference in waiting times across regions. For country emergency departments, 95.3% of people presenting with a mental health condition are seen within the agreed threshold time, with an average wait time of 10.7 minutes. For metropolitan emergency departments, 64.2% of patients with a mental health diagnosis are seen within the threshold time, with an average wait time of 43.6 minutes.⁵⁸

Despite lower rates of using other services, the rates of rural and regional South Australians being admitted to hospital due to mental health conditions are much higher than those of living in the Adelaide area or of the Australian average. In 2009-2010, rural and remote South Australia had an admitted mental health patient rate of 14.1 per 1,000 residents, compared to 10.4 for metropolitan Adelaide and 10.0 for Australia overall⁵⁷ (AIHW, Customised report, 2013). As evident in Figure 8, the rate is particularly high for outer regional areas and has stayed close to 17 admitted patients per 1,000 people for the previous five years.

Figure 8. Admitted patient mental health-related hospital separations per 1,000, all sectors



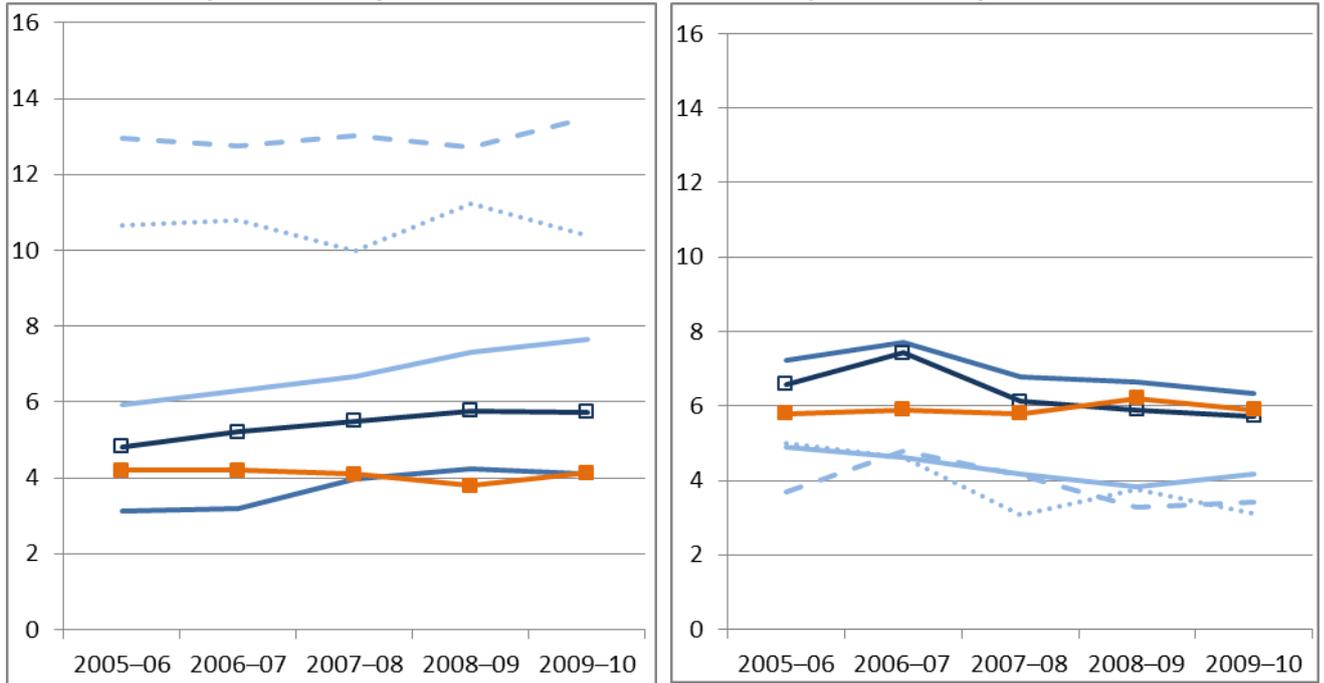
Source: Based on AIHW, Customised report, 2013.

Once patients are admitted, the data indicates there is a difference in the types of care rural and regional South Australians receive. As evident in Figure 9 on page 23, rural and regional South Australians are disproportionately released from hospital without specialised psychiatric care (AIHW, Customised report, 2013). As can be seen in Figure 9A, outer regional and remote communities in South Australia have nearly three times the Australian average for mental health admittance rate without specialised psychiatric care.

Continuity of care was consistently mentioned by consultation participants as essential for those with mental health conditions and their families to living productive lives. Once released from acute and non-acute hospital wards following a mental health-related admission, South Australians living in rural and remote areas experience less follow up. In 2011-2012, 39.4% of country residents received follow up within 7 days, compared to 53.5% of metropolitan residents (SA Health, Customised report, 2013). Although follow up rates have been increasing across South Australia as depicted in Figure 10 on page 23, the gap between metropolitan and country residents has not lessened over the last five financial years. It is worth further investigation as to whether the gap in follow-up may be a system-reporting issue, or may contribute to the high rates of country residents' hospital admission due to mental health issues.

Despite rural and regional patients being admitted to hospital at higher rates, receiving specialised psychiatric care in hospital at lower rates and receiving less community follow up, unplanned readmission within 28 days of a mental health related admission for country residents were consistently lower than those of metropolitan residents between 2007-2008 and 2011-2012 (SA Health, Customised report, 2013). In 2012, only 6% of country mental health patients were unexpectedly readmitted within 28 days of their initial admission, compared to 8% of metropolitan mental health patients. South Australia also compared favourably with other states, ranking well below all jurisdictions other than the ACT (Productivity Commission 2013).

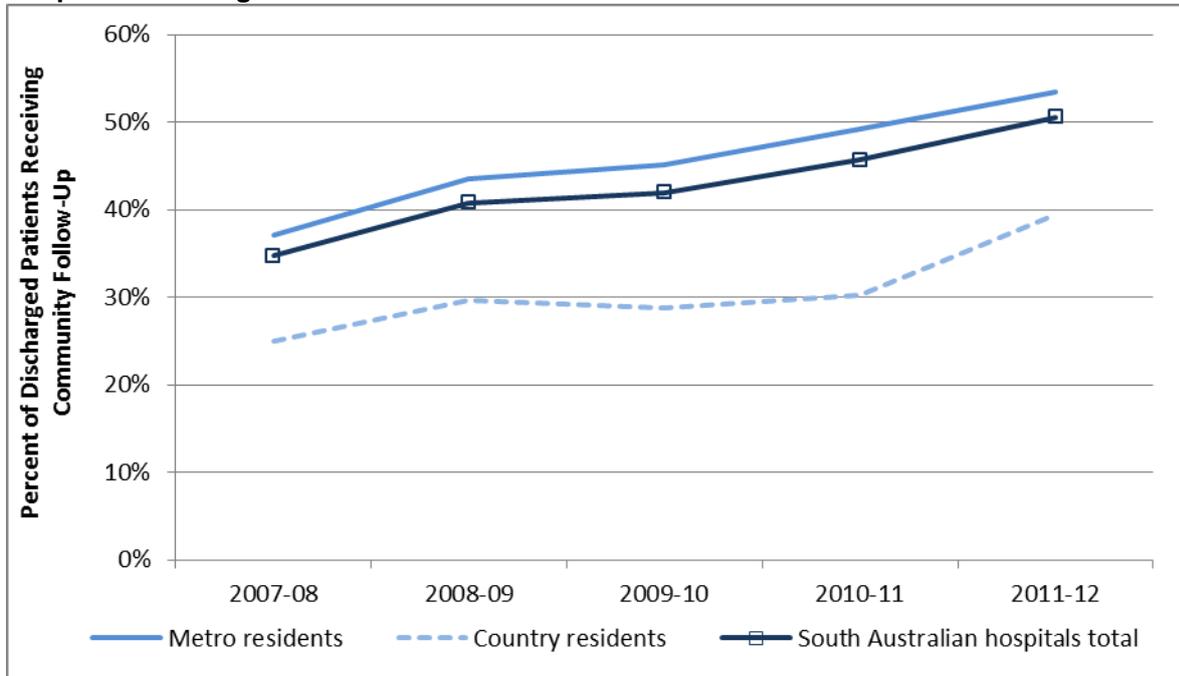
Figure 9. Admitted patient mental health-related hospital separations, per 1,000 population
A. Without Specialised Psychiatric Care **B. With Specialised Psychiatric Care**



— Metro Adelaide — Inner Regional - - - Outer Regional
⋯ Remote and Very Remote —□— South Australia —■— Australia

Source: Based on AIHW, Customised Report, 2013

Figure 10. Community Follow-Up within Seven Days of Discharged from South Australian Hospitals following a Mental Health-Related Admission



Source: Based on SA Health, Customised report, 2013

During consultations, the HPC was also provided with varying views on regional and metropolitan mental health expenditure and facilities. It was clear from both consulted parties and health service use data that there is overlap between country and urban services, so the HPC considered funding by both the location of services and the residence of people receiving them. While 88.8% of inpatient mental health expenditure in South Australia in 2011-2012 went to metropolitan hospitals, expenditure is not so clearly metropolitan based when considered by patients' residence (SA Health, Customised report, 2013). As earlier stated, rural and remote residents use Adelaide area hospitals for a variety of reasons. For this reason, when inpatient expenditure is considered by residence, 26.9% of mental health expenditure goes to country residents' health. Specialist services are more clearly metropolitan-centric, with 99.4% of outpatient psychiatry funding and 97.2% of psychology outpatient funding being spent in metropolitan hospitals. As for mental health facilities, at slightly more than 30 average available psychiatric beds in public hospitals and psychiatric hospitals per every 100,000 people, South Australia has a similar rate of available beds to the Australian average (AIHW, Customised Report, 2013).

A Sustainable Workforce and Local Solutions

A sustainable health system will be able to recruit and support its workforce. Workforce sustainability in rural and regional areas was a particular concern for those consulted. Currently, South Australia has 17 full-time-equivalent employed psychiatrists and psychiatrists-in-training per 100,000 people, only slightly lower than the Australian average of 18 (AIHW, Customised report, 2013). Yet Country Health SA reports that all South Australian psychiatrists are metropolitan based, with all regional and remote services provided by teleconferencing or visiting doctors.

Chapter 3 of this report demonstrates the rich diversity of South Australia, both in and between regions. Understanding and responding to this diversity is a critical element to providing appropriate services, including mental health services, across communities. It was difficult to find state-wide evidence of use of health services separated by cultural and linguistic status. Similarly, the Health Performance Council is continuing to seek system data on service use by Aboriginal South Australians.

Consultation attendees strongly voiced that addressing mental health issues within the diversity of South Australia's regional areas will require strong collaboration with local communities. Available quantitative measures to inform system performance under this theme are limited. However, the HPC will continue to monitor the implementation of Country Region 10 Year Health Service Plans and regionally amalgamated 3 Year Implementation Plans, particularly in relation to mental health. These plans identified mental health as a priority area for implementation in the first 3 years of the 10 year plans.

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7. Consulted Stakeholder List

Country Health Advisory Councils consulted, September 2011

- Balaklava and Riverton Health Advisory Council Inc.
- Barossa and Districts Health Advisory Council Inc.
- Berri Barmera District Health Advisory Council Inc.
- Bordertown and District Health Advisory Council Inc.
- Ceduna District Health Services Health Advisory Council Inc.
- Coorong Health Service Health Advisory Council Inc.
- Country Health SA Board Health Advisory Council Inc.
- Eastern Eyre Health Advisory Council Inc.
- Eudunda Kapunda Health Advisory Council Inc.
- Far North Health Advisory Council
- Gawler District Health Advisory Council Inc.
- Hawker District Memorial Health Advisory Council
- Hills Area Health Advisory Council Inc.
- Kangaroo Island Health Advisory Council Inc.
- Kingston/Robe Health Advisory Council Inc.
- Leigh Creek Health Services Health Advisory Council
- Lower Eyre Health Advisory Council Inc.
- Lower North Health Advisory Council Inc.
- Loxton and Districts Health Advisory Council Inc.
- Mallee Health Service Health Advisory Council Inc.
- Mannum District Hospital Health Advisory Council Inc.
- Mid North Health Advisory Council Inc.
- Mid-West Health Advisory Council Inc.
- Millicent and Districts Health Advisory Council Inc.
- Mount Gambier and Districts Health Advisory Council Inc.
- The Murray Bridge Soldiers' Memorial Hospital Health Advisory Council Inc.
- Naracoorte Area Health Advisory Council Inc.
- Northern Yorke Peninsula Health Advisory Council Inc.
- Penola and Districts Health Advisory Council Inc.
- Pika Wiya Health Advisory Council Inc.
- Port Augusta, Roxby Downs, Woomera Health Advisory Council
- Port Broughton District Hospital and Health Services Health Advisory Council Inc.
- Port Lincoln Health Advisory Council
- Port Pirie Health Service Advisory Council
- Quorn Health Services Health Advisory Council
- Renmark Paringa District Health Advisory Council Inc.
- South Coast Health Advisory Council Inc.
- Southern Flinders Health Advisory Council
- Waikerie and Districts Health Advisory Council Inc.

- Whyalla Hospital and Health Services Advisory Council
- Yorke Peninsula Health Advisory Council Inc.

Consulted by Dr Iolanda Principe, Feb-Aug 2012

- Dr Michael Beckoff, GP Clinical Advisor, Country Health SA
- George Beltchev, Executive Consultant, Health Workforce Australia (former CEO, Country Health SA)
- Dr Lia Bryant, Senior Researcher and Deputy Director, Hawke Institute of Sustainable Societies, University of South Australia
- Brian Clarke, Presiding Member, Bordertown and District Health Advisory Council Inc
- Lyn Dohle, Presiding Member, Kangaroo Island Health Advisory Council
- Bethany Fenech, Senior Research and Reporting Officer, Mental Health Workforce, Health Workforce Australia
- Dr Ken Fielke, Clinical Director Mental Health, Country Health SA
- Rebecca Graham, Executive Director, Mental Health, Country Health SA
- Bruce Green, Presiding Member, Port Lincoln Health Advisory Council
- Kathleen Gregurke, Presiding Member, Mallee Health Service Health Advisory Council
- Graham Gribble, Presiding Member, Kingston/Robe Health Advisory Council Inc
- Grant King, Presiding Member, Mount Gambier and Districts Health Advisory Council
- Yvonne Kloeden, Presiding Member, Ceduna District Health Services, Health Advisory Council, Inc
- Les Kropinyeri, Chair, Eyre Aboriginal Health Advisory Committee
- April Lawrie-Smith, Executive Director, Aboriginal Health Services, SA Health
- Amanda McCulloch, General Manager, Rural Doctors Workforce Agency of SA Inc
- Lyn Poole, Chief Executive Officer, Rural Doctors Workforce Agency of SA Inc
- Greg Sam, CEO, Rural Health Workforce Australia
- Alexandra Walsh, Presiding Member, Far North Health Advisory Council
- Derek Wright, Executive Director, Operations, SA Health

Country Health Advisory Councils consulted, September 2012

Presiding Members from all HACs invited; HACs in attendance were:

- Balaklava and Riverton Health Advisory Council Inc.
- Barossa and Districts Health Advisory Council Inc.
- Bordertown and District Health Advisory Council Inc.
- Country Health SA LHN Board Health Advisory Council Inc.
- Eastern Eyre Health Advisory Council Inc.
- Eudunda Kapunda Health Advisory Council Inc.
- Gawler District Health Advisory Council Inc.
- Hawker District Memorial Health Advisory Council
- Kangaroo Island Health Advisory Council Inc.
- Lower Eyre Health Advisory Council Inc.
- Lower North Health Advisory Council Inc.
- Mallee Health Service Health Advisory Council Inc.
- Mid North Health Advisory Council Inc.
- Mid-West Health Advisory Council Inc.

- Naracoorte Area Health Advisory Council Inc.
- Port Augusta, Roxby Downs, Woomera Health Advisory Council
- Port Lincoln Health Advisory Council
- Quorn Health Services Health Advisory Council
- Renmark Paringa District Health Advisory Council Inc.
- The Murray Bridge Soldiers' Memorial Hospital Health Advisory Council Inc.
- Yorke Peninsula Health Advisory Council Inc.

Clinicians consulted, December 2012

- Clinical Director, Country Health SA
- Clinical Mental Health Nursing Director, Country Health SA

Team Leaders or Senior Network Clinicians from:

- Kangaroo Island
- Inner Rural
- Whyalla
- Mid North
- North West
- South East
- Riverland South East
- North West
- Murray Mallee
- Port Augusta
- Yorke Peninsula
- Southern Fleurieu
- Lower North
- Distance Consultation
- Emergency Triage and Liaison Service

Country Health SA Advanced Clinical Leads for:

- Mental Health Social Work
- Mental Health Occupational Therapist
- Psychology

8. Technical Notes for Statistical Estimates

¹ 95% Confidence interval 16.1-18.1

² 95% Confidence interval 13.9-17.6

³ $p > 0.05$; Fisher's Exact Test, one-tailed, at the $\alpha = 0.05$ level of statistical significance

⁴ 95% Confidence interval 16.4-18.8

⁵ 95% Confidence interval 4.2-10.7

⁶ 95% Confidence interval 2.6-15.1

⁷ 95% Confidence interval 18.9-36.9

⁸ 95% Confidence interval 21.4-35.2

⁹ $p \leq 0.05$; Fisher's Exact Test, one-tailed, at the $\alpha = 0.05$ level of statistical significance

¹⁰ 95% Confidence interval 6.5-9.1

¹¹ 95% Confidence interval 8.9-10.7

¹² 95% Confidence interval 7.7-13.5

¹³ 95% Confidence interval 5.9-15.1

¹⁴ Relative standard error 7.4%

¹⁵ Relative standard error 17.7%

¹⁶ Relative standard error 21.4%

¹⁷ 95% Confidence interval 15.9-19.7

¹⁸ 95% Confidence interval 14.7-16.8

¹⁹ 95% Confidence interval 12.7-24.3

²⁰ 95% Confidence interval 14.1-31.1

²¹ 95% Confidence interval 15.8-32.3

²² 95% Confidence interval 83.3-85.1

²³ 95% Confidence interval 84.1-86.3

²⁴ 95% Confidence interval 79.7-83.5

²⁵ 95% Confidence interval 67.7-85.0

²⁶ 95% Confidence interval 72.5-84.7

²⁷ Relative standard error 7.4% for excellent and very good, 8.6% for good

²⁸ Relative standard error 12.7% for excellent and very good, 11.9% for good

²⁹ Relative standard error 14.6% for excellent and very good, 25.9% for good. Note that the ABS advises that an estimate with a relative standard error between 25 and 50% should be used with caution.

³⁰ 95% Confidence interval 24.2-26.8

³¹ Short-term risk is defined for women as consuming 5 or more standard drinks on any one day; for men as 7 or more on any one day. Long-term risk for women is defined as 3 or more standard drinks on an average day, or a weekly average of more than 15. Long-term risk for men is 5 or more standard drinks on an average day, or a weekly average of more than 29.

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- ³² 95% Confidence interval 27.1-31.5
- ³³ 95% Confidence interval 26.9-35.7
- ³⁴ 95% Confidence interval 24.5-43.7
- ³⁵ 95% Confidence interval 28.5-42.8
- ³⁶ 95% Confidence interval 2.1-12.7
- ³⁷ 95% Confidence interval 4.6-13.0
- ³⁸ 95% Confidence interval 2.9-13.5
- ³⁹ 95% Confidence interval 4.2-6.4
- ⁴⁰ 95% Confidence interval 2.4-3.4
- ⁴¹ 95% Confidence interval 22.6-25.3
- ⁴² 95% Confidence interval 32.7-37.6
- ⁴³ 95% Confidence interval 37.4-58.9
- ⁴⁴ 95% Confidence interval 35.2-47.7
- ⁴⁵ Relative standard error 9.1%
- ⁴⁶ Relative standard error 21.9%
- ⁴⁷ Relative standard error 31.2%. Note that the ABS advises that an estimate with a relative standard error between 25 and 50% should be used with caution.
- ⁴⁸ Relative standard error 9.9%
- ⁴⁹ Relative standard error 7.2%
- ⁵⁰ Relative standard error 2.9%
- ⁵¹ Relative standard error 13.4%
- ⁵² Relative standard error 34.9%. Note that the ABS advises that an estimate with a relative standard error between 25 and 50% should be used with caution.
- ⁵³ Relative standard error 24.2%
- ⁵⁴ Relative standard error 7.0%
- ⁵⁵ Relative standard error 15.2%
- ⁵⁶ Relative standard error 14.2%
- ⁵⁷ Excludes those who did not wait and left at their own risk
- ⁵⁸ Excludes those who did not wait
- ⁵⁹ Metropolitan Adelaide: 19.8%, 95% Confidence interval 16.8%-22.8%; rest of South Australia: 9.6%, 95% Confidence interval 5.8%-13.4%
- ⁶⁰ Age standardised