Submission by the

Black Dog Institute

Inquiry into the accessibility and quality of mental health services in rural and remote Australia

May 2018

Contact
Scientia Professor Helen Christensen, Director & Chief Scientist
Black Dog Institute
T: 02 9382 9288 E: h.christensen@blackdog.org.au


Black Dog
Institute

Introduction

The Black Dog Institute is a global leader in mental health research and one of only two Medical Research Institutes in Australia to focus on mental health and suicide prevention. Uniquely, the Institute has a strategic objective to use the latest technology and other tools to quickly turn its world-class research findings into clinical services, education and e-health products that improve the lives of people with mental illness. Crucially, everything we do is informed by the voice of lived experience.

There are currently 135 active research studies underway at the Institute in the areas of suicide prevention, e-mental health, workplace mental health, novel treatments and prevention in young people. The Institute is a global pioneer in e-mental health, having built a body of evidence for the efficacy of online and mobile-based treatments for mild to moderate symptoms of mental illness over the past 11 years. These websites, tools and apps (such as the transformational universal screening initiative through GP surgeries, StepCare) have the potential to reduce barriers that prevent help-seeking and make mental health care more accessible to people living in rural and remote areas.

Black Dog is also leading Australia's largest scientific suicide prevention trial – LifeSpan – which uses nine strategies that have been proven in international studies to reduce suicide in an approach that connects, amplifies and builds on existing suicide prevention services in four sites across regional and rural NSW. Concurrently, the Institute is supporting the implementation of similar evidence-based systems approaches to suicide prevention with a focus on priority populations in a further 12 National Suicide Prevention Trial (NSPT) sites. Nine of these are outside metropolitan areas. Black Dog also provides expert advice to the Victorian government funded place-based suicide prevention trials and is working with the ACT government on their commitment to deliver LifeSpan from July 2018.

Education is used extensively by the Black Dog Institute to connect health professionals and the community with the latest research evidence. Specialised training for healthcare professionals and evidence-based community education programs in schools and workplaces are offered Australia-wide. These programs improve mental health literacy and reduce stigma, improve available primary health care services and encourage help seeking. Our partnerships with organisations such as the CBH Group in Western Australia, allow us to provide the latest expert mental health training to GPs, nurses and social workers in rural and remote areas either free of charge or at heavily subsidised rates.

To maximise its effectiveness and reach the Institute partners with a range of organisations including the POCHE Centre for Indigenous Health at the University of Western Australia and the National LGBTI Health Alliance. It is proud to be a trusted partner of government, universities, health services, workplaces, clinicians, industry, philanthropists, and schools across the country.

The Black Dog Institute welcomes the opportunity to contribute to this Inquiry. This submission provides information about our knowledge and work according to five of the Inquiry's terms of reference (b to f), as outlined below.

The higher rate of suicide in rural and remote Australia

Black Dog Institute has significant expertise and experience in the use and interpretation of suicide data, which is relevant when considering suicide rates in different parts of the country and how these should be understood and addressed.

The figures in this section help to demonstrate a picture of the higher rates in Very Remote and Remote Australia (**Figure 1**) and how the suicide rate increases with remoteness (**Figure 2**). These graphs have been created utilising National Coronial Information System data for New South Wales, the Northern Territory and Queensland.

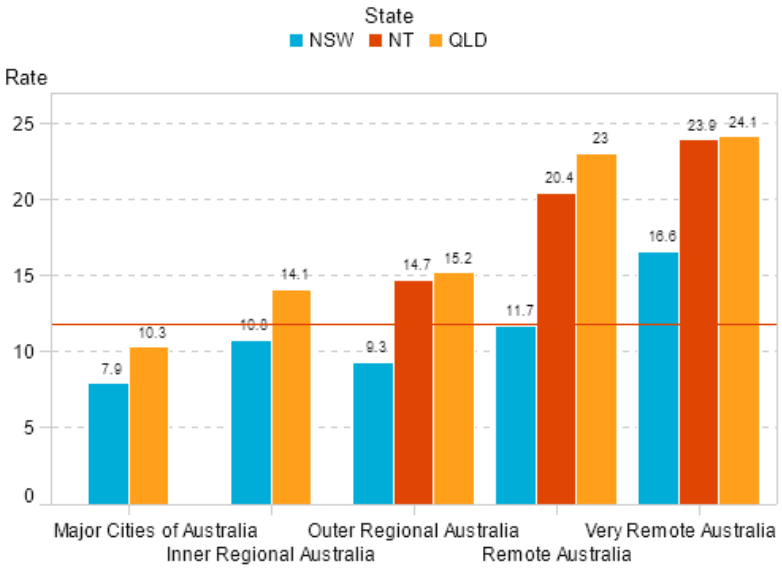


Figure1: **The rate of suicide per 100,000 in NSW, NT and QLD as a function of location type**

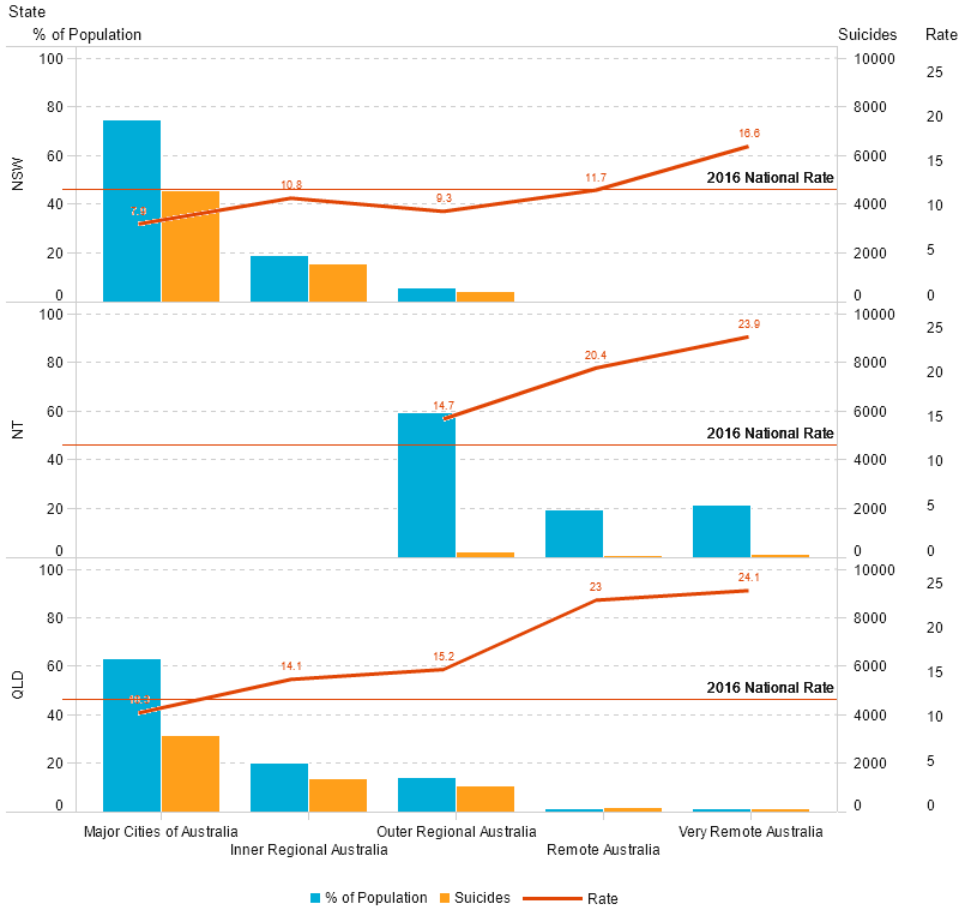


Figure2: **The percent of people in NSW, NT and QLD as a function of location type with suicide count and rate.**

Nevertheless, caution should be taken when representing suicide data and comparing rates between different remote and metropolitan areas. A single suicidal incident can drastically change the suicide rate in areas with smaller populations. Interventions likely to have the greatest overall impact may be those that focus on the total number of deaths, coupled with the potential for successful means restriction activities, rather than rates.

The suicide prevention approach we take through LifeSpan is to utilise data in a sophisticated manner to guide decision making at the local level. In partnership with the Australian National University and the SAS Institute, we have increased the utility and capability of data by building on the concept of a suicide register to create a tool we refer to as 'Big Data used Intelligently for Suicide Prevention' (BDISP). This has involved incorporating additional data sources such as self-harm data (suicide attempt), a health resources register and proximity to services mapping, all with the ability to correlate with socioeconomic factors, basic community profiles, social risk factors and NGO information, along with implementation of prevention efforts and models. These partnerships have enabled interrogation of multiple, unlinked datasets and geospatial mapping to allow regional identification of suicide clusters, trends, rates and correlates. This gives us the capacity to produce a rich picture of risk and need in a region, to inform planning and prevention.

An example of this utilisation of data in practice can be demonstrated by considering firearms, which are more commonly the means of suicide in rural parts of Australia than in metropolitan or regional centres. Our suicide audit was able to demonstrate that 15% of suicides in the Murrumbidgee LifeSpan trial site over the period 2006-2015 were by firearms which compares with around 11% nationally.[1] Firearms are a means with high lethality but are more amenable to means restriction than other means such as falls/jumping and hanging. Therefore, a means restriction focus in rural areas on firearms safety and safety planning more generally is likely to have an impact on suicide rates, even allowing for the substitution of means.

Figure 3 shows the difference in suicide means between Inner Regional, Outer Regional, Remote, Very Remote and Major Cities in NSW.

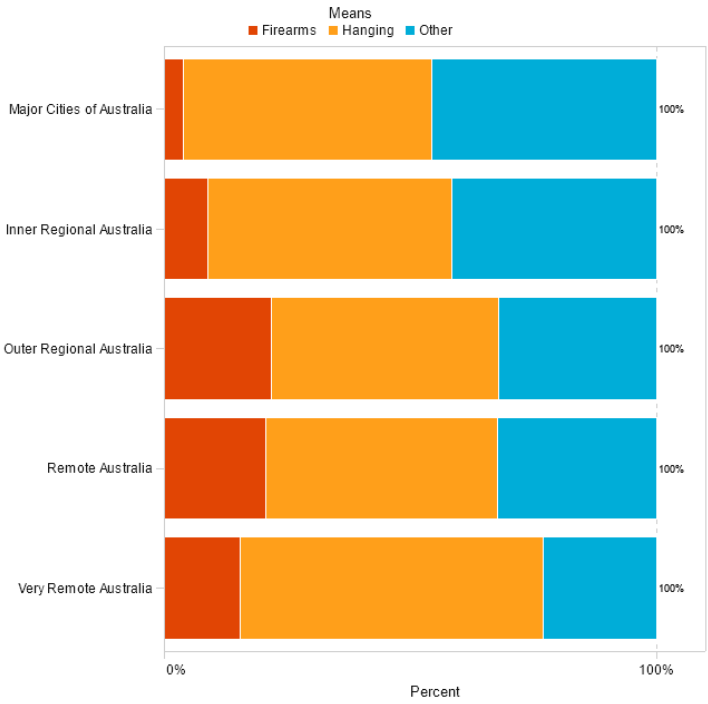


Figure 3: Means of suicide by region

In addition to drawing on our data capability, we also undertook a process of consultation to inform this submission with local knowledge and expertise about the reasons for higher suicide rates in rural areas. **Figure 4** demonstrates Black Dog's reach, pinpointing the locations in

[1] Matthew J. Spittal, Jane Pirkis, Matthew Miller, David M. Studdert, *Declines in the Lethality of Suicide Attempts Explain the Decline in Suicide Deaths in Australia,* 2012.

Australia where we are delivering or providing support to different systems approaches to suicide prevention.

We sought qualitative input from representatives in seven rural and remote locations delivering either the Black Dog-supported National Suicide Prevention Trials (funded by the Department of Health) or the NSW LifeSpan trials (funded by the Paul Ramsay Foundation). These are: Murrumbidgee (NSW), Country South Australia, Mid-West WA, The Kimberley (WA), Darwin (NT), Northern Tasmania and Western NSW. The responses highlighted issues related to access to services, employment, social and emotional wellbeing and Indigenous issues. We were told of the lack of suitable face-to-face services and the distance and cost incurred when travelling to an appropriate service provider. Employment within rural and remote locations can be isolated (e.g. FIFO workers), unpredictable and uncontrollable (e.g. drought), and opportunities for work may be limited due to economic decline in these regions. We were told by the Lifespan trial coordinators, most of whom were locals, that these factors along with challenges such as stigma, stoicism and vicarious trauma due to the impact of suicide deaths on members of remote communities, contribute to the higher rate of suicide in rural and remote Australia.

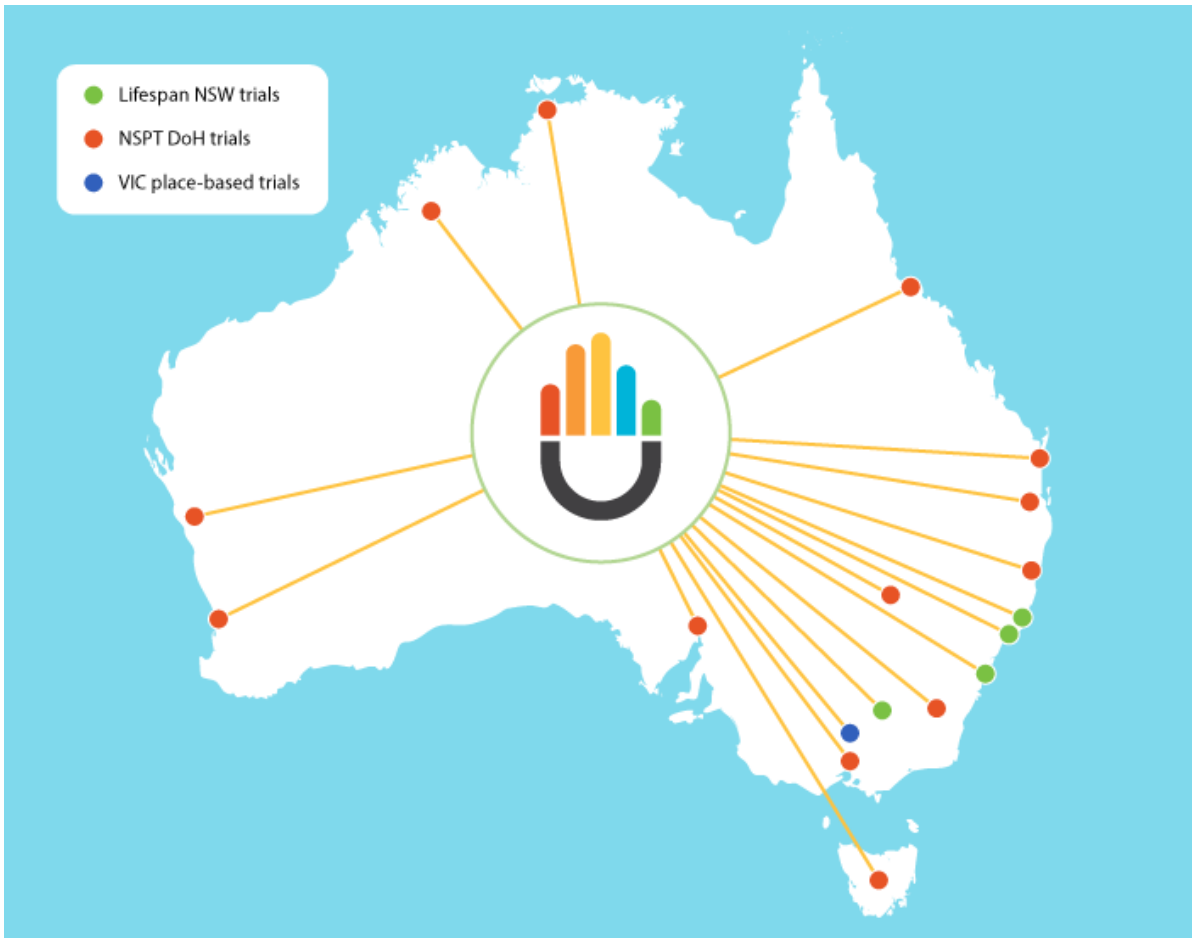


Figure 4: Black Dog LifeSpan reach across Australia

How can Black Dog further assist?

Further opportunities to address higher suicide rates in rural and remote areas are:

- By undertaking more intensive data analysis of suicide rates and locations. This service is part of our support in suicide prevention trial locations. It would be of benefit in non-trial PHNs and at the local level across the country, as well as from a national perspective;
- By incorporating the voices of lived experience, which are integral to all our work; and
- By working with local communities on the ground, to understand the unique characteristics of their regions and to support them to implement tailored and effective evidence-based strategies for suicide prevention.

The nature of the mental health workforce

Consultation with trial coordinators in rural and remote areas provided us with direct experience of the nature of the mental health workforce and supported what is already widely known and documented about the workforce in these regions. Trial coordinators spoke of the transient nature of the workforce, with practitioners moving regularly from towns making it difficult for trust to be developed within a community or for ongoing consultation and support. Access to specialists or qualified and experienced practitioners is also a challenge in rural and remote regions with one practitioner called upon to support numerous health concerns outside their remit. Turnover is another issue, as many within the workforce are young graduates who typically leave after a short time.

Our BDISP enables us to map the distribution of workforce across specific geographical regions. This provides a snapshot of the type and distribution of workforce. **Figure 5** shows the distribution of GPs and psychologists in the Murrumbidgee, one of our suicide prevention trial regions.

Black Dog Institute provides services and education into rural and remote communities to assist in maintaining skills, and upskilling health professionals and the community in mental health. We have been experiencing increased demand for training programs in rural and remote areas. Black Dog offers both face-to-face and online / e-mental Health in Practice (eMHPrac) accredited training for health professionals delivered by expert clinical facilitators. Funded by the Department of Health, eMHPrac is a suite of online training modules, webinars and e-resources designed to introduce health professionals to online programs and tools, and to demonstrate how e-mental health technologies can be integrated into primary care. Face-to-face workshops, supported by philanthropy and professional fees, offer training in the areas of depression, anxiety, bipolar, youth and more. The face-to-face and eMHPrac training provides evidence-based approaches to support health professionals to:

- treat and diagnose common mental health issues;
- contribute to suicide prevention; and
- integrate online programs and tools into the treatment of their patients.

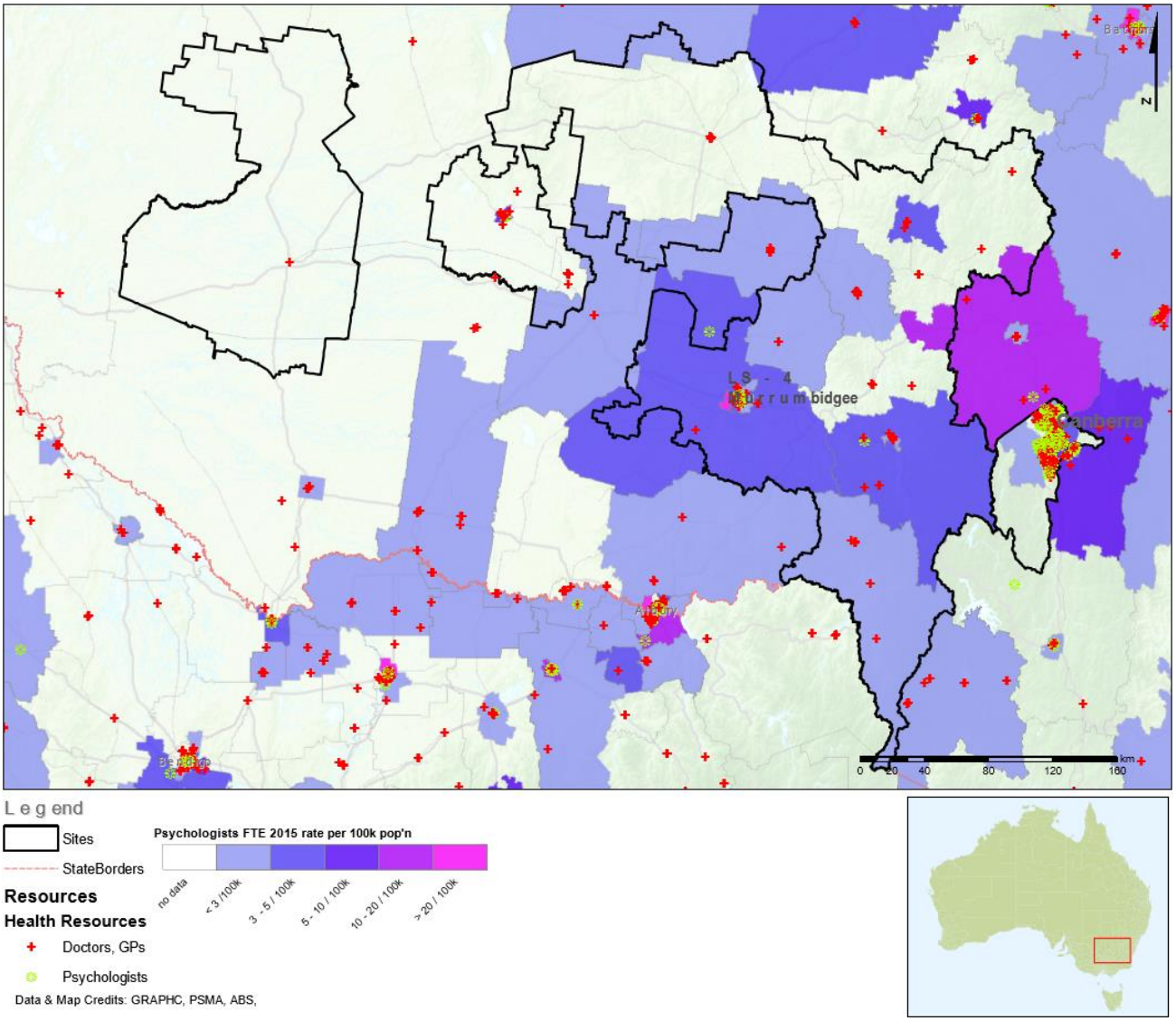


Figure 5: Workforce mapping for GPs and psychologists in the Murrumbidgee region

As shown in **Figure 6**, in the period 2014 – 2018, the Black Dog Institute reached 12,236 health professionals through delivery of face to face and online learning interventions across Australia, including:

- 8,433 participants of 491 face to face workshops
- 3,758 participants accessing online learning modules

Figure 7 shows a breakdown of participants by profession in the same period, 2014 – 2018, for face-to-face and online training for rural and remote areas.

Figure 6: Face to face workshops online training and participant numbers for health professionals, 2014-2018

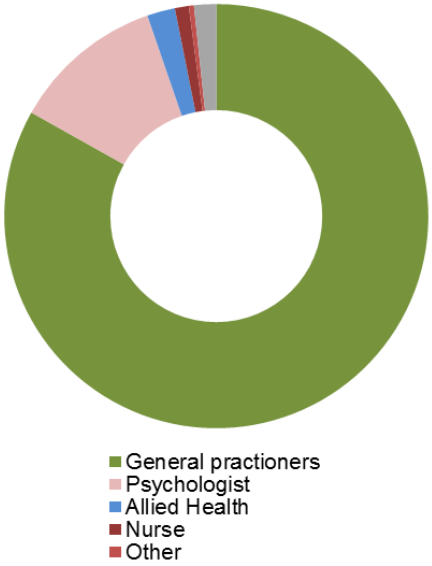


Figure 7: Breakdown of participants by profession for face to face and online training in rural and remote areas

Black Dog education reach in rural and remote areas in 2014 -2018 found 8,433 participants attended 491 face-to-face workshops Australia wide. On average 15 participants attended each workshop.

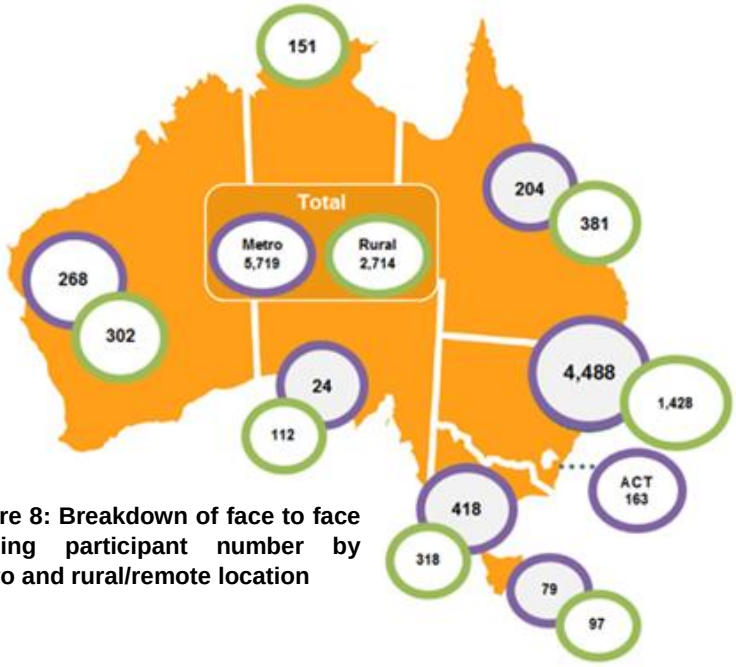


Figure 8: Breakdown of face to face training participant number by metro and rural/remote location

Figure 8 shows the breakdown of participants attending workshops by location with:

- 5,719 metro health professional participants
- 2,714 rural and remote health professional participants

Interestingly, South Australia, Tasmania, Western Australia and Queensland all indicate a higher participation rate in rural and remote areas. This can be attributed to proactive policy in the form of philanthropy grants received from HSBC and CBH Group, offering training in rural and remote areas.

Figure 9 provides a breakdown of participants by health profession in face-to-face training in rural and remote locations and indicates GP engagement is much higher than that of Allied Health Professionals which might be explained by the accreditation GPs receive through some of the programs, or because GPs are attracted in particular to Black Dog programs while Allied Health professionals seek other training.

Figure 9: Participants by health profession for face to face training in rural and remote

Figure 10 shows that since 2014 there has been an increase in regional and remote locations of face-to-face workshops. This may be attributed to the grants provided by HSBC and CHB Group in rural and remote areas.

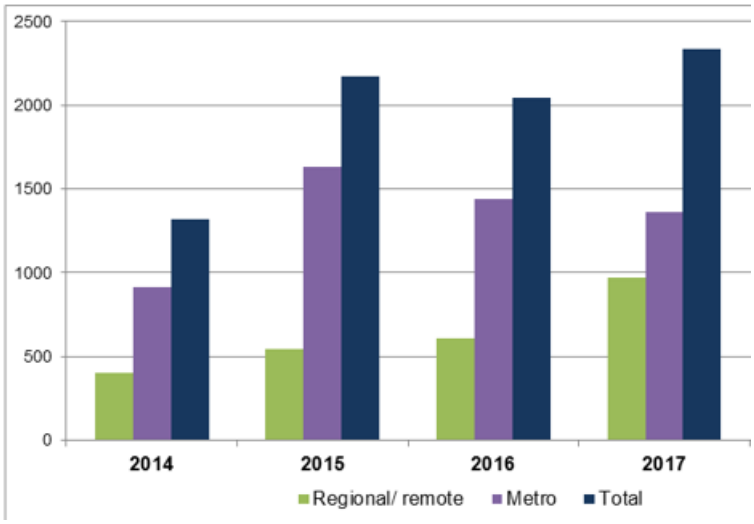


Figure 10: Demand for face-to-face workshops, 2014-2017. The proportion of rural workshops is increasing over time.

In addition to health professional training, Black Dog Institute also delivers programs in schools to prevent depression, or suicide risk, or to intervene early before depression and suicide risk exacerbate. While many of these programs are in early phase testing, others are now routinely rolled out in schools. Schools provide the opportunity to catch kids before they fall. In rural areas, the school and school teachers and principals are critical in the management and early detection of health problems. Examples of our work to date include:

- Roll out of Youth Aware of Mental Health (YAM) program to 5,000 children in NSW;
- Development of a step care program for adolescents currently in testing in 25 schools in NSW as a randomised controlled trial. This study alone identified 184 students at risk that were referred to school counsellors, or to local mental health services;
- The use of SPARX program to prevent the development of mental health symptoms in young people prior to the Higher School Certificate in NSW;
- The development of a sleep app to prevent depression in 12-14-year olds, also currently in trial in NSW;
- The use of Sources of Strength, a program shown to reduce mental health problems in young people, currently in progress in rural and regional schools; and
- Training programs for Year Advisors to assist in helping students in their Year classes.

A further area of investigation is the use of apps and training within workplaces. Workplaces provide the opportunity to provide anonymous and easy access to mental health programs and may be a preferred route to assisting farmers, emergency workers, and others in rural and remote areas who do not wish to or cannot seek mental health care.

How can Black Dog further assist?
Further opportunities we have identified with respect to the rural mental health workforce are:

- Providing more intensive data analysis of workforce distributions in regional and rural areas;
- Giving advice about the nature and type of educational programs and areas of need for education in Australia. The HSBC and CBH Group grants were offered to Black Dog to extend its educational programs into rural areas. CBH was specifically targeting Western Australia. Given the rise in demand, a consistent and potentially government-led program of educational funding to deliver high quality education "in place" in rural Australia would increase support for those in rural and remote areas; and
- Briefing the Inquiry about our mental health programs in schools in further detail.

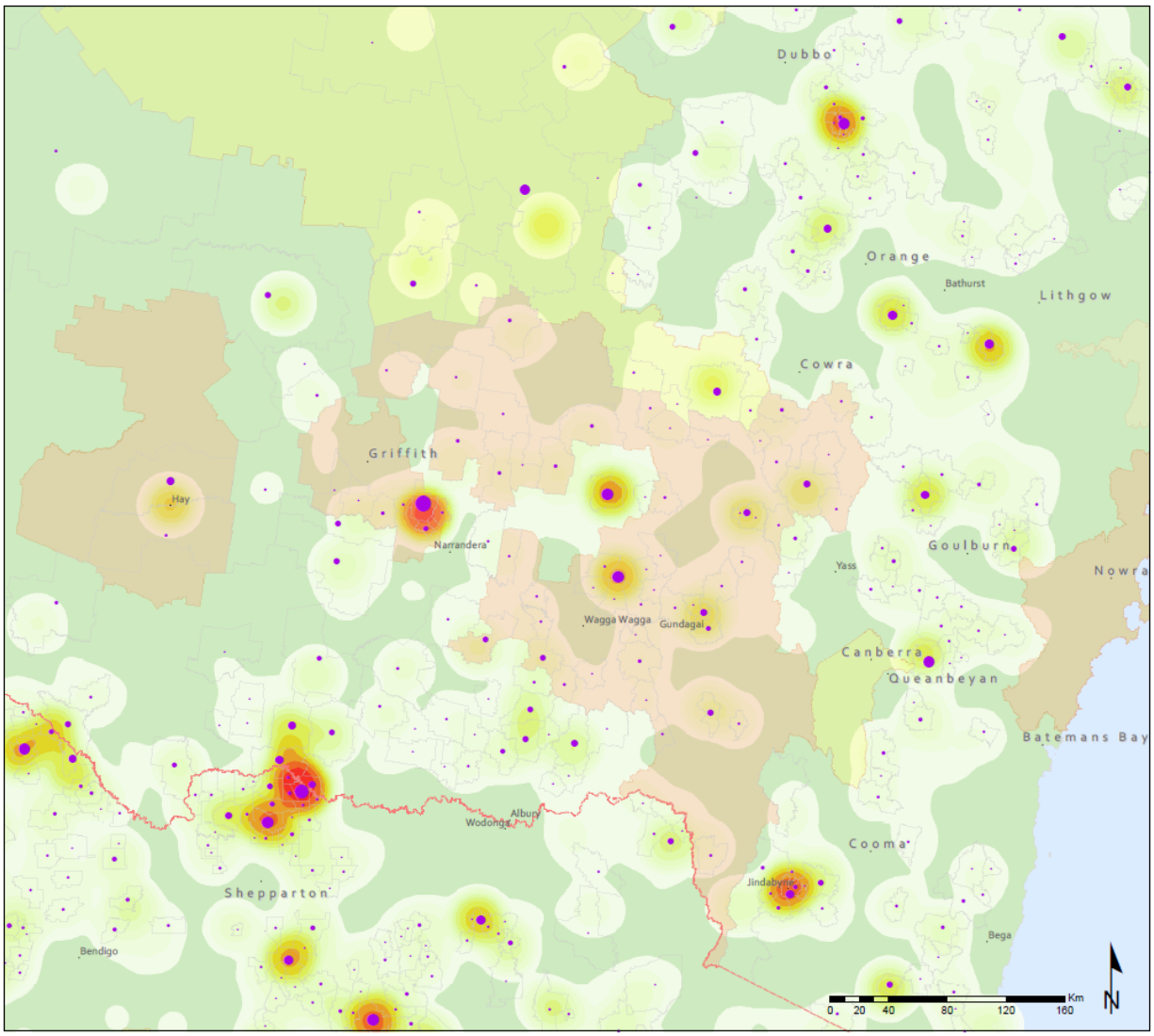
The challenges of delivering mental health services in the regions

Consultation with trial coordinators engaged in Black Dog supported suicide prevention trials highlighted a range of key challenges in the delivery of mental health services in rural and remote locations. Many trial coordinators spoke about the issues for practitioners and clients with distance and cost of travel and that these visits can take an entire day which means lost wages for the client and only seeing one client per day for the practitioner. **Figure 11** further demonstrates the use of BDISP, in this instance, it can be used to highlight the access to services in parts of rural NSW and Victoria.

Attracting suitably qualified and experienced workers also poses an issue to the delivery of mental health services particularly those with an understanding of the social and cultural needs of the area. These mental health positions also lack the necessary professional supervision which contributes to a higher turnaround and potential burnout.

Opportunity lies in the development of local mental health workforces in rural and remote areas, creating culturally safe organisations that people living in rural and remote areas can feel welcome in, for example through training.

How can Black Dog further assist?
We are currently redeveloping our clinics within the institute to address the 60% of those who do not seek help from mental health practitioners. Our reformed clinics will provide best possible care via digital means to those in rural and remote areas. Details of these plans are available on request and also expanded below in the section on technology.



Access To Services - Underserviced Populations: Mental Health Resources

Populated Regions that are potentially underserviced. As defined by being greater than 25km from a resource.

Based on business listings like yellow pages, Web Health Services directories and Govt sources, we have curated 72,000 Health Resources in the following categories:

- Medical – includes GP's Clinics, Hospitals – 52,666
- Psychiatrists – 2,304
- Mental Health Services- 16,746 (includes Psychologists, counselling services, etc.)
- Pharmacies – 6,292

Using data from the Australian Bureau of Statistics and PSMA, data detailing Australian Population locations and usual resident populations, we have analysed the population densities where people live further than 25km and 50km from the various health resources.

This map shows various aspects of Mental Health Resources - Underserviced Populations (25km)
- Region based populations representing suburbs whose residents are on average more than 25km from a MH resource: purple dots Size depicts population size.
- Residential population kernel density (heat map) showing region independent underserviced population densities.

Underserviced Pop'n Densitiy

low
–

---------- Pop'n
---------- Density
---------- Score

–
high

Author: GRAPHC - ANU
Date: 9/05/2018

Legend

StateBorders

Underserviced Pop'n - Suburbs

100
500
1,000
5,000
10,000

LifeSpan Sites

Lifespan Commonwealth
Lifespan NSW
Sydney

Figure 11: Map showing areas were underservicing (further than 25 kms from a resource). Red indicates high underservicing.

Attitudes towards mental health services

When considering attitudes towards mental health services in rural and remote areas of Australia it is important to recognise that there will be diversity amongst the population. Consultation with the National Suicide Prevention Trial sites has consistently revealed that Aboriginal and Torres Strait Islander people, and those who identify as LGBTQI, are often reluctant to seek help for fear of not being understood or facing stigma. Reluctance to engage with practitioners due to a lack of understanding of their unique experiences has also been raised in the context of veterans.

Low levels of cultural competence and poor standards of inclusive practice discourage many rural and remote residents from accessing professional mental health care and seek alternatives. In many cases this burden falls upon elders or natural helpers in Aboriginal and Torres Strait Islander communities, and peers within the LGBTQI and veteran communities. While there are obvious benefits of engaging someone who understands the situation, community helpers are rarely qualified or supported to undertake this sensitive responsibility, and risk burn-out and vicarious trauma from continued exposure to crisis and grief.

Aboriginal Medical Services (AMS), where they exist in rural and remote locations, are often the primary connection residents will have with a range of health care services. The outreach model of visiting communities (rather than requiring individuals to attend a town or regional centre) make them appealing to both Indigenous and non-Indigenous residents of many rural and remote areas. The cultural competence embedded in these services increases the likelihood of help-seeking and earlier detection of mental ill-health within Aboriginal and Torres Strait Islander populations.

While we do not know whether stigma and help-seeking manifests differently in rural and remote areas we do know that these are common barriers to help-seeking irrespective of location. These barriers may be exacerbated in areas with poor access to services such as rural and remote areas and it is possible that high stigma, limited mental health literacy and high self-reliance may interact with low access to services to further reduce help-seeking behaviour in rural areas.

How can Black Dog further assist?

We are currently undertaking work as part of LifeSpan to develop implementation resources that incorporate cultural governance and inclusion as well as adaptations, to increase the applicability of evidence-based strategies in suicide prevention across the population. These materials, developed in partnership with key knowledge holders such as the Poche Institute and the LGBTI Alliance, and tested in community, will drive improvements in services that could improve attitudes towards them and increase help seeking.

Opportunities that technology presents for improved service delivery

The Black Dog Institute is a leader in e-Mental health research, having built a considerable body of evidence through over 30 studies across the past 11 years investigating the development of interventions to lower depression, lower suicide risk and promote wellbeing. It is known that about two-thirds of people with a mental illness do not seek help. Despite increased investment and strong evidence showing that prevention and intervention saves lives, factors like geography, stigma and social circumstances make it hard for people to get help.

e-Mental health represents programs that target common mental health problems delivered through online and mobile interactive websites, apps and computers, as well as telephone and online crisis support lines. Mobile phones can also be used to collect individual data on risk factors, and thus offer for the first time the potential to collect individual data, detect mental health symptoms, and develop personalised, tailored programs delivered universally.

The Institute has found that e-Mental health services are an effective and complementary sector to traditional face-to-face mental health services. By providing accessible and anonymous prevention and treatment, the internet can play an important role in overcoming obstacles for seeking help. We have also learned that apps and online services must be designed to be integrated into the settings in which they will be used.

Back Dog Institute's eMental Health programs include the following, some of which will be expanded below:

- StepCare – for use in general practice
- myCompass – for use in general practice, workplaces and direct to consumers
- SHUTi – direct to the consumer for insomnia
- Snapshot – a screening tool for workplaces available through the app store
- BITEBACK – positive psychology for young people
- online self-tests for depression, bipolar and anxiety
- Headgear – an app for workplaces
- Headcoach – workforce training
- iBobbly – an app that lowers distress in indigenous young people

StepCare

Black Dog's aim is to have mental health viewed and managed in the same way that physical health is, through regular universal screening, monitoring and reviewing. StepCare is a new service offered by Black Dog which integrates into the primary health care setting, supporting GPs to provide timely, cost-efficient early intervention and treatment for Australians with anxiety or depression. The StepCare Service:

- Identifies adults with anxiety, depression and/or at-risk behaviours;
- Recommends evidence-based stepped prevention, early intervention and treatment;
- Links patients to a mental health care solution tailored to the severity of their symptoms; and
- Monitors symptoms and treatment adherence providing feedback to both patient and GP.

Patients are invited to complete a brief screening questionnaire on a mobile tablet in their GP's waiting room, irrespective of the reason for their appointment. Immediate feedback is given to the patient. At the same time, evidence-based stepped care recommendations in line with

symptom severity are sent to the GP's clinical desktop system's dashboard, via secure messaging integrated with practice software. Sample verbal scripts are provided in the results report to assist the GP in discussing results and agree with the patient on appropriate intervention(s).

The StepCare Service is now being implemented and evaluated in 8 sites in 6 Primary Health Networks across Queensland, NSW, Victoria and ACT. Rural and remote sites are Murray, Murrumbidgee, Hunter, New England, and Illawarra Shoalhaven.

An infographic demonstrating the services is in **Figure 12**.

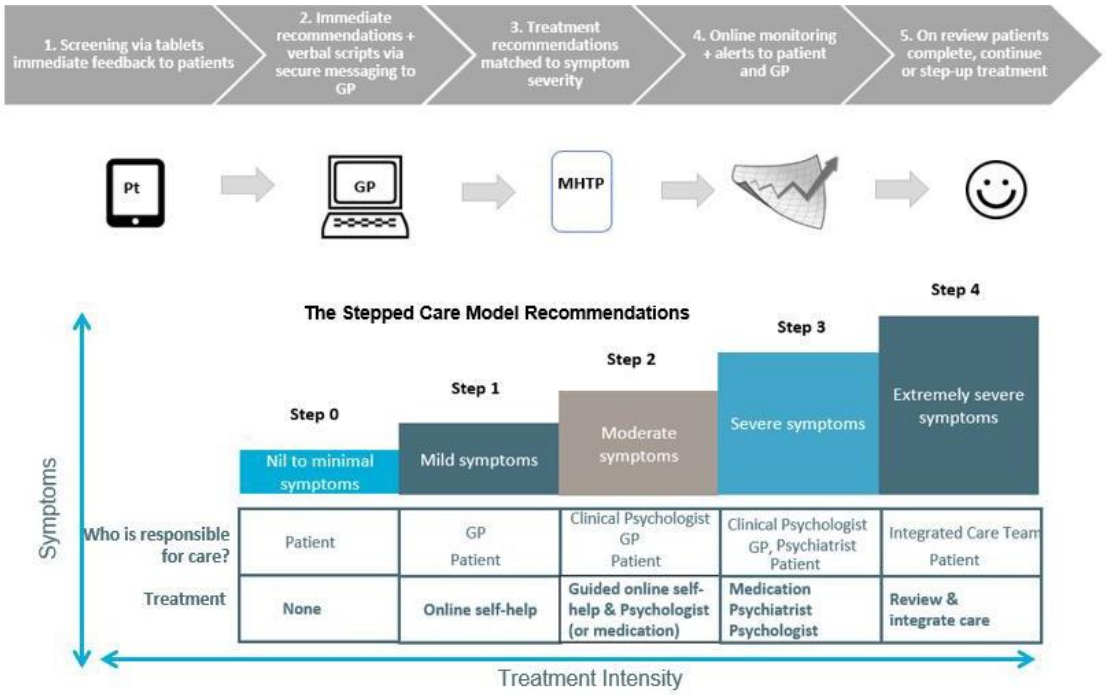


Figure 12: StepCare Model

The lack of availability of specialised mental health care, particularly in more remote areas, is a concern that can be addressed through the StepCare Service. Patients with mild / moderate symptoms are recommended online self-help (with referral pathways in the StepCare platform to Black Dog's myCompass or Macquarie University's Mindspot). The limited supply of specialist health professionals and services in remote areas means that access to a digital mental health solution for identification and treatment of people with mild / moderate symptoms and access to Black Dog's Clinical Services has a positive effect, with patient comments as follows:

- *"That there is a service in a very remote part of NSW to depend on."*
- *"That it was there for me and to know that people are interested in helping those with problems, low moods, etc."*
- *"I didn't have to go anywhere."*

StepCare also has the capacity to connect people with support where they may not have otherwise sought it. Preliminary StepCare data found that of the 357 patients who screened positive for symptoms of anxiety or depression, 124 (35%) had never previously attended a GP appointment for their mental health and were not presenting for mental health issues at the appointment when screening occurred.

Telehealth Services
Black Dog Institute provides telehealth services in both Psychiatry and Psychology to rural and regional centres across Australia. Referrals are accepted to our tertiary assessment Depression Clinics for Adults and Adolescents and to our Psychology Clinic which can provide ongoing care (up to 8 treatment sessions per year) under the new Medicare item 288.

Adolescents in rural and regional NSW with functionally impairing high prevalence disorders are less likely to receive appropriate and effective treatment than their urban peers; moreover, they are also less likely to receive appropriate and effective care than young rural people with acute low prevalence mental illness (such as psychosis). To address this, funding is also being sought by the Black Dog Institute to develop an innovative multidisciplinary telehealth clinic for rural youth with complex or difficult-to-treat presentations of high prevalence disorders.

Transcranial Direct Current Stimulation (tDCS)
Transcranial Direct Current Stimulation (tDCS) is a novel treatment for depression which has relevance to rural and remote populations and has been piloted at the Black Dog Institute. In its current form it has been investigated for the treatment of depression for just over a decade. It has an excellent safety profile with no major known side effects. Importantly, it is well tolerated and highly acceptable and liked by patients. The short-term efficacy in clinical trials to date have shown a small to moderate effect size and unlike other treatment does not require anaesthetic, induction of a seizure or risk of cognitive or memory impairment.

A unique advantage of tDCS is that the equipment is small, portable, inexpensive and relatively easy to use. The tDCS research team at the Black Dog Institute have been at the forefront of developing a home-based, remotely clinically-supervised form of tDCS. The equipment and integrated system are specially designed such that the stimulation is programmed at the centre, the machine is “locked” with a series of codes that are released at different stages which must be supplied by the clinical/research team. The unique advantage of tDCS is that the home-based system allows ongoing use in the longer term. By comparison, Electroconvulsive Therapy (ECT) and Transcranial Magnetic Stimulation (TMS) are effective treatments but must be administered by a clinician at the treatment centre. This means that treatment is expensive, difficult to access for those in remote or rural areas and time consuming for patients who must travel to the treatment centre for acute treatments and any ongoing maintenance treatments. Costs and inconvenience pose major barriers to ongoing maintenance treatment.

<u>How can Black Dog further assist?</u>
We would be pleased to expand on the opportunities that technology presents for improved service delivery, including the programs we deliver which have not been explored in detail in this submission.

Recommendations

Black Dog Institute is actively working to improve the lives of those at risk of depression, anxiety and suicide living in rural and remote Australia. This submission has outlined our knowledge, experience and activity with respect to the Inquiry's terms of reference.

In addition to the ways we have identified that we can provide further assistance, our overarching recommendations to this inquiry are:

1. Expansion of eMental health services in rural and remote Australia, at scale, and developed in conjunction with local communities. Currently, only two of our services are supported by the Commonwealth Government (MyCompass and BiteBack). The other services are supported either by short term philanthropy and competitive grant funding, much of which does not allow sustainable delivery of these services into the future. Given the risk of suicide in indigenous groups, and the acceptance of the iBobbly app by local communities, we would like to see support for further rollout of the iBobbly app in particular;
2. The use of workplaces, community organisations and schools as the mechanisms to drive the prevention of mental health disorders in country areas;
3. Expansion of educational and mental health literacy programs through organisations and communities, to improve knowledge and harness skills of local people;
4. A focussed and targeted approach to the individual delivery of mental health programs to young people and their families, incorporating evidence-based programs for anxiety, depression, suicide risk, eating disorders, and conduct disorders. These programs are evidenced based, acceptable and not systematically used in schools across Australia;
5. Expansion and support for the BDISP at Black Dog; and
6. Funding for the roll out of the Lifespan across Australia.

We would welcome the opportunity to expand on these recommendations or anything else included in this submission as appropriate.