Transforming Suicide Prevention Research: A National Action Plan



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About Suicide Prevention Australia

Suicide Prevention Australia Limited (SPA) is the national body for the suicide prevention sector. SPA is a not for profit organisation representing a broad-based membership of organisations and individuals with a commitment to suicide prevention. SPA works to prevent suicide by supporting its members to build a stronger suicide prevention sector; developing collaborative partnerships to raise awareness and undertake public education; and advocating for a better research policy and funding environment.

Vision

A world without suicide

Mission

Suicide Prevention Australia delivers national leadership for the meaningful reduction of suicide in Australia.

Our Commitment

Suicide Prevention Australia remembers those we have lost to suicide and acknowledges the suffering suicide brings when it touches our lives. We are brought together by experience and unified by hope.

Suicide Prevention Australia acknowledges the traditional owners of country throughout Australia, and their continuing connections to land, sea and community. We pay our respects to them and their cultures, and to elders both past and present.

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Contents

Acknowledgements	04
Foreword	06
Executive summary	07
Section 1: the case for a national research action plan	10
Outline	11
Background	11
Sources of information	12
Adopting the public health model	14
The global picture	15
A national strategy: snapshot of australia's performance	16
Section 2: the suicide prevention research & care continuum	20
Status of suicide research in Australia	21
Barriers to advancing suicide prevention research	24
Barriers to data collection	25
Section 3: prevention has to start somewhere: our 10 year challenge	27
What do we need to get there?	28
Key actions to drive suicide prevention research in Australia and directions for research	31
Section 4: putting the suicide prevention research plan into action	40
Principles for funding suicide prevention research	41
A call to action	43
Implementing the national research action plan for suicide prevention	44
Section 5: appendices & references	45
Appendices	46
List of figures, tables & boxes	50
References	50

Foreword

Understanding the importance of partnerships

Suicide can be prevented.

Research is the foundation for all programmes and activities directed to achieving suicide prevention but research for research's sake is not the answer. It is the knowledge gained from research which is informed by those with lived experience, translated into practice and delivered in line with community needs that will achieve the outcome of preventing suicide. As a start, the National Coalition for Suicide Prevention has set a 10- year goal of halving the number of suicides in Australia - of course in time our ambition is to achieve zero suicides. Establishing the pathway to move research findings into policy and practice, in a timely manner, is integral to achieving this ambitious and aspirational goal.

Research conducted in isolation will merely continue the status quo. Currently the major funding agencies in Australia are not integrated with service providers and do not actively engage those with lived experience in the design, delivery and promotion of research. This National Research Action Plan, the first of its kind, focuses on bringing about changes to the research environment that can facilitate long-term sustainable change.

Fundamental to successfully changing the research environment is the need to build partnerships at all levels and across sectors – public. private and community. Such partnerships are crucial to supporting a national and international approach to reducing the impact of suicide on Australian families and, indeed, families around the globe. Reduction of the suicide burden is feasible if partnerships are formed that take a coordinated and collaborative approach to planning, funding, implementing and monitoring suicide prevention research.

The success of this Suicide Prevention Research Action Plan for reducing the impact of suicide on Australian families will be facilitated by creating an environment that encompasses three factors:

Fostering Collaboration

Working together with those with lived experience, researchers, service providers, policy makers and communities to promote and support research into the prevention of suicide.

Enhancing Capacity

Supporting new approaches, retaining the best talent in Australia and building strong leadership for the future.

Increasing Knowledge

Fostering a passion for innovation, understanding and communication about all aspects of suicide prevention research.

Murray Bleach Chairman





Towards a national research action plan

This National Research Action Plan seeks to facilitate a research environment that is embedded in service delivery and fosters the active involvement of those with lived experience. It provides the foundations required to deliver a transformational approach to decreasing suicide by 50% in 10 years.

Much publicly funded research is determined by individual investigators or research collectives and may not necessarily align to the suicide prevention needs of service providers, policy makers and community leaders. To address this, Suicide Prevention Australia convened a series of workshops to develop this Plan which can provide a framework and priorities for future suicide prevention research. The aim of developing such a Plan is to map gaps in current knowledge and marry these to the strengths of our research capability, ensuring that scarce research dollars are strategically targeted.

This National Research Action Plan seeks to deliver a blueprint for suicide prevention research that is relevant to the Australian context. It aims to:

- increase knowledge about the prevention of suicide and how to safely and appropriately support individuals and families affected;
- inform and influence the Australian suicide prevention agenda;
- deliver greater targetting and efficiency in research funding;
- sustain a skilled, collaborative and well supported research community focused on suicide prevention; and
- generate high quality research to inform National and State based suicide prevention policies.

This Plan is written for a broad range of leaders who have a role in bringing about change in their communities. These leaders may be in research and evaluation, or hold federal, state or local programme or policy roles. They may be state, regional or Aboriginal and Torres Strait Islander capacity builders, people with lived experience, community providers or volunteers, consumers or family members. They may be part of systems or sectors that have an impact on Australians, including mental and physical, public, maternal, child or ageing health care, justice, education, workplace, welfare, housing, transportation or community development.

In short, there is a role for leaders from all aspects of life in fostering quality suicide prevention research. The Plan lays out eight actions for research that, if formally coordinated, fully funded and implemented, will transform the nature of suicide research and evaluation in Australia.



Suicide Prevention Australia (SPA) will continue to champion a nationally coordinated approach to the funding and delivery of suicide prevention research by actively facilitating the implementation of the Plan. It will support the recommendations outlined in the National Research Action Plan through existing and new partnerships in research and funding. It will actively encourage those interested to become part of a national and international network that will share learning experiences in pursuit of more effective research strategies and funding solutions.

• SPA will facilitate the National Suicide Research Alliance which will be responsible for the dissemination, implementation, evaluation and the ongoing review of the Plan.

- All members of the suicide prevention research community are invited to become familiar with the Plan and to consider how best to collaborate to achieve improved outcomes in the shorter and longer terms and, ultimately, a world without suicide.
- Suicide prevention research funders across Australia, including those in the public, private and non-government sectors, are urged to adopt a collaborative approach to mobilise support for suicide prevention research through implementation of the Plan across the suicide continuum.
- Private sector industries, including pharmaceutical and biotechnology companies, informatics and software developers and equipment manufacturers are encouraged to participate in new collaborative opportunities.
- SPA will continue to work towards the application of existing research knowledge to policy and practice areas as they relate to suicide prevention and to engage with researchers, policy makers, academics and funders to shape future research aligned with policy development.

Section 1:

Suicide prevention: the case for a national research action plan



Outline of this document

This document includes four main sections that provide:

- The background to the Plan, the case for a National Research Action Plan and a summary overview of suicide as a global issue and in Australia
- Examines the current status of suicide prevention research in Australia and discusses barriers to its progress
- Key strategic actions for suicide prevention research and evaluation that take advantage of the strengths of our present research system and minimise its current weaknesses
- 4. Volume Two explores the status of research across the suicide research continuum through a series of invited essays that explore the current status of suicide prevention research, gaps in research and visions for the future

Background

The Plan was facilitated by Suicide Prevention Australia (SPA) to determine how we might best proceed in Australia to accelerate much-needed research and evaluation into the prevention and management of suicide. This was within the context that, despite some excellence in suicide prevention, research is often in isolation and not always well evaluated, thus highlighting the lack of a rigorous evidence base for suicide prevention activities.

Figure 1 shows the pathway undertaken by SPA to ensure a consultative and engaging process to deliver a transformative Plan that will change the way suicide prevention research is conducted in Australia.



Figure 1. The process facilitated by Suicide Prevention Australia to develop a National Suicide Prevention Research Action Plan

Sources of information

A number of recent and important documents have been utilised in the preparation of this Plan, in particular the following:

World Health Organization: Preventing Suicide: A global imperative¹

In 2014 the World Health Organization (WHO) released this report on suicide prevention efforts worldwide, showing a significant increase across the globe by Governments that are committed to an agenda of decreasing suicide rates. The report:

- Summarises current knowledge regarding the epidemiology of suicide, presenting the most recent data from countries across the world;
- Discusses major risk and protective factors for suicide, paying particular attention to those which are modifiable;
- Presents the evidence for key interventions that show promise in reducing suicidal acts;
- Describes the overarching national suicide prevention strategies that have been introduced in a number of countries, highlighting their common features; and
- Collates this information and makes recommendations about the future direction of suicide prevention activities in different countries and cultures.

Report of the National Review of Mental Health Programmes and Services²

The National Review of Mental Health Programmes and Services (the Review) provides 25 recommendations across nine strategic directions which guide a detailed implementation framework to form a strong, achievable plan for Australia's mental health system over the next decade.

Importantly, the Review contends that suicide prevention is much broader than mental health: it is a complex interaction of social, economic, personal and situational variables that may lead to a person's suicide, which may or may not include mental illness. The Review concludes that suicide prevention is not the same thing as the prevention and treatment of mental illness.

The standard of mental health research in Australia is acknowledged as excellent, but the sector is small in global terms and tends to be driven by investigator priorities (and funding agencies) rather than strategy. The Review suggests that for the work of Australian researchers to have a noticeable impact on mental health programmes and service reform, it must be strategically prioritised to identify those things which work – including models of care, prevention, early intervention, and recovery pathways – aligned with policy

and practice challenges, and efficiently translated into practice³.

The Commission has recommended a major overhaul of the mental health system using a Systems Approach to shift the focus of the system from crisis and acute care to community-based services, primary health care, prevention and early intervention, as well as to better focus services on supporting individuals and families. It proposes actions to prevent suicide through local community partnerships which co-create solutions using collaborative and integrated approaches. It also proposes specific actions to improve the social and emotional wellbeing of Aboriginal and Torres Strait Islander people and the mental health and wellbeing of people living in regional, rural and remote Australia.

One World Connected: An assessment of Australia's progress in suicide prevention⁴

The National Coalition for Suicide Prevention, facilitated by SPA, released a formal response paper to the WHO report. The response examines the report findings in relation to Australia and suicide prevention, and explores what we are doing well and what we need to do differently.

- ² National Mental Health Commission, 2014. (NMHCR)
- ³ NMHCR 2014 p 117
- ⁴ National Coalition for Suicide Prevention.

¹ World Health Organization, 2014.

A Prioritised Research Agenda for Suicide Prevention: An action plan to save lives⁵

Released by the US Research Prioritised Task Force, this document provides a comprehensive agenda for suicide prevention research, developed through a lengthy consultative process. The agenda explored six questions to identify the state of science, pathways for progress, and specific objectives and recommendations for research activities, both the short and long term.

Living is for Everyone: Research and Evidence in Suicide Prevention⁶

Research and Evidence in Suicide Prevention sets the context for suicide prevention activities, summarising current research, evidence and statistics relating to suicide and suicide prevention in Australia. Originally released in 2006, it was updated in 2008 and provides a reference framework relevant today.

⁵ National Action Alliance for Suicide Prevention: Research Prioritisation Task Force. (2014).

⁶ Living Is For Everyone (LIFE) Framework (2007)

Adopting the public health model

This Research Action Plan reflects the public health model for suicide prevention (Figure 2) favoured by the World Health Organization⁷. By definition, public health aims to provide the maximum benefit for the largest number of people. Programmes for the primary prevention of suicide based on the public health framework are designed to expose a broad segment of a population to evidence-based prevention interventions and to reduce and prevent suicidal behaviours at a population-level.

The approach to suicide prevention consists of four steps:

Step 2

Step 1

To define the problem through the routine systematic collection of information about the magnitude, scope, characteristics and consequences of suicide To establish why suicidal behaviour occurs and who it affects, using research to determine the causes and correlates of suicide, the factors that increase or decrease the risk for suicide, and the factors that could be modified through interventions

Step 3

To find out what works to prevent suicidal behaviours, and for whom, by designing, implementing and evaluating interventions. Importantly, research and evaluation will also identify existing evidence-based interventions for which there is a case for ensuring their rapid implementation

Step 4

To implement effective and promising interventions in a wide range of settings including research and evaluation, scaleup and adaption of interventions, and revisiting possible approaches to surveillance. The effects of these interventions on risk factors and the target outcomes should be monitored and their impact and cost-effectiveness evaluated. An effective approach requires a comprehensive and coordinated effort across all the systems and sectors that influence communities and their environments

Similarly, implementation should adapt to local contexts—taking local needs and strengths into consideration when implementing the framework. Considering local needs and strengths means that communities or groups implementing the conceptual framework consider local priorities, values, assets, and concerns when making choices about what language/terminology will be used, what values will ground the approach, the desired goals/impacts, what data will be gathered and analysed, what array of interventions will be implemented to provide a comprehensive range, and what outcomes and determinants will be evaluated. Data that is crucial in one community may be less relevant in another; interventions that are effective in one setting may not be as successful in another; and factors that ensure success for one group may not be as beneficial for another⁸.

⁷ WHO 2014

⁸ Miles, J., et al. (2010).



Figure 2. The public health model

The global picture

Global epidemiology of suicide and attempts

The WHO Report estimated that 804,000 suicide deaths occurred worldwide in 2012, representing an annual global age-standardised suicide rate of 11.4 per 100,000 population (15.0 for males and 8.0 for females)⁹.

Although 75.5% of all global suicides occur in low-and middle-income countries¹⁰, the age-standardised rate of suicide is somewhat higher in high-income countries (11.2 versus 12.7 per 100,000 population). (Appendix1).

In richer countries, three times as many men as women die through suicide, but in low- and middle-income countries the male-to-female ratio is much lower at 1.5 men to each woman. Globally, suicides account for 50% of all violent deaths in men and 71% in women. With regard to age, suicide rates are highest in persons aged 70 years or over for both men and women in almost all regions of the world, though in some countries, suicide rates are highest among the young. Globally, suicide is the second leading cause of death in 15–29-year-olds. Hanging, firearms and the ingestion of pesticide are among the most common methods of suicide globally, but many other methods are used with the choice of method often varying according to population group¹¹.

For every suicide, there are many more suicide attempts every year. Significantly, a prior suicide attempt is the single most important risk factor for suicide in the general population. For effective suicide prevention, there needs to be an improvement in the availability and quality of data on suicide and attempted suicide from registration, surveys and hospital-based systems¹².

⁹ WHO 2014

¹⁰ WHO 2014

- ¹¹ WHO 2014
- ¹² WHO 2014

Suicide in Australia

In recent years, the reported rates of suicide in Australia have declined from the historically high peak of almost 15 per 100,000 in 1997¹³ deaths to about 10.9 per 100,000 in 2013¹⁴. However, it is clear from analysis of global trends that suicide rates are highly volatile and reactive to international events such as economic crises. particularly with their effect on unemployment. For every 1% increase in unemployment, a 0.79% increase in suicide rates under 65 years has been observed. Suicide rates are also unacceptably high in specific identifiable groups in the population. In Australia, for example, suicide rates are four times higher for Aboriginal and Torres Strait Islander than other youth. The rates for Aboriginal and Torres Strait Islander women aged 15-19 years are 5.9 times higher than their non-Aboriginal and Torres Strait Islander peers. In addition to suicide deaths, suicide attempts (more common in the young, especially women) indicate risk for future suicide, and carry significant costs in healthcare burden and productivity losses¹⁵.

A further challenge with current data is the difficulty in both timeliness and accuracy. It is well recognised that the cause of death may not be listed as suicide when there is not clear evidence of intent or religious or cultural concerns expressed by the family influence the final determination of the cause of death. The National Committee for Standardised Reporting of Suicide, also convened by SPA, is working with States and Territories to improve the accuracy and timeliness of reporting.

There are no widely accepted, reliable estimates of the financial cost of suicide nationally. However, according to a 2009 report using published data sets from the Australian Bureau of Statistics (ABS) and the Australian Institute of Health and Welfare (AIHW), a 'plausible figure' of \$17.5 billion was estimated for the annual economic cost of suicide and suicidal behaviour on the Australian community¹⁶.

More worrying is that, so far, public health interventions to prevent suicide in Australia have been largely ineffective. The Australian Government spent \$127.1 million on suicide prevention activities between 2006 and 2012, yet there is evidence that these suicide prevention activities may not have been responsible for changes in suicide rates¹⁷.

A National Strategy: a snapshot of Australia's performance

The WHO Report¹⁸ called on member nations to design. deliver and evaluate a national strategy for the prevention of suicide. In response to the report, the National Coalition for Suicide Prevention assessed Australia's performance across the twelve strategic actions recommended by WHO to prevent suicide and identified a number that require action if we are to reduce suicide in Australia by 50% in 10 years. These are summarised below using the traffic light system to identify where Australia is performing well; where we are heading in the right direction but have work to do; and where serious discussion and action is required.

This Plan builds on that initial commentary to include proposed research outcomes that would be delivered if, as part of developing a national strategy, there was also a commitment to invest in a fully funded and coordinated suicide research action Plan¹⁹.

- ¹⁶ ConNectica Consulting, 2009
- ¹⁷ Christensen et al 2013
- ¹⁸ WHO 2014

¹⁹ Draft proposed outcomes from a series of research stakeholder workshop consultations undertaken by Suicide Prevention Australia (SPA) in 2014. Workshop reports are available on request.

¹³ ABS 1999

¹⁴ ABS 2015

¹⁵ Christenson et al 2013

Reference key



Area of activity	Performance	Actions required	Proposed research and evaluation outcomes
Media		Promote implementation of media guidelines to support responsible reporting of suicide in print, broadcasting and social media.	Evidence on safe and unsafe public communication and media reporting of suicide.
Training and education		Maintain comprehensive training programmes for identified gatekeepers (e.g. health workers, educators, police). Improve the competencies of mental health and primary care providers in the recognition and treatment of vulnerable persons.	Evidence-based standards of the quality of the design and delivery of training and education processes; service delivery and clinical outcomes; knowledge of efficacy of various forms of education and training programmes.
Access to service		Promote increased access to comprehensive services for those vulnerable to suicidal behaviours. Remove barriers to care.	Knowledge about enablers and barriers to accessing services (especially mental health services) and on the effectiveness of promotion campaigns/techniques.
			Evidence translated into policy and practice.
Treatment		Improve the quality of clinical care and evidence- based clinical interventions, especially for individuals who present to hospital following a suicide attempt.	Knowledge of clinical and behavioral responses to suicidal behaviour – evidence on safe and unsafe responses at the time of initial engagement.
		Improve research and evaluation of effective interventions.	Knowledge of clinical interventions and integrated models of care – evidence of clinical standards
			Evidence translated into policy and practice.
Crisis intervention		Ensure that communities have the capacity to respond to crises with appropriate interventions and that individuals in a crisis situation have access to emergency mental health care, including	Evidence about help seeking behaviour associated with crisis; evidence on 'risk assessment' and techniques for identification of suicidal persons Evidence translated into policy
		through telephone helplines or the internet	Evidence translated into policy and practice.

Area of activity	Performance	Actions required	Proposed research and evaluation outcomes
Postvention		Improve response to and caring for those affected by suicide and suicide attempts. Provide supportive and rehabilitative services to persons affected by suicide attempts.	Knowledge of innovative and diverse heath/community care models of postvention, plus evidence of service and programme standards. Evidence translated into policy and practice.
Awareness and stigma reduction		Establish public information campaigns to support understanding that suicides are preventable. Increase public and professional access to information about all aspects of preventing suicidal behaviour. Promote use of mental health services, and services for the prevention of substance abuse and suicide. Reduce discrimination against people using these services.	Knowledge of community attitudes towards suicide and suicide prevention; knowledge of prevalence and forms of stigma in all Australian communities. Effective community education programmes in place. Evidence translated into policy and practice.

Section 2:

The suicide prevention research and care continuum



The status of suicide research in Australia

The Suicide Prevention Continuum: The Challenges Research Faces in its Complexity

Research refers to a wide spectrum of work carried out by academics, clinicians, governments and people with a lived experience of suicide including mental illness, across a wide range of disciplinary and methodological areas. The spectrum covers everything from basic science (laboratory) research into the biological causes of suicide (including mental illness) clinical research into potential preventions, interventions, early diagnosis, treatments (including drug interventions), investigation of potential and existing models of system design and service delivery, and social sciencebased approaches to the lived experience of suicide, mental illness and of interventions and services²⁰.

Although the research evidence is accumulating about the effectiveness of various components of a suicide prevention response, current knowledge of what works in suicide prevention is quite limited and fragmented. Equally there is scant understanding of the breadth and depth of suicide research and whether there is any formal alignment with the continuum of suicide prevention programmes. Although most suicide prevention programmes, practices and policies are

amenable to evaluation research, they often do not contain scientific approaches to measuring and assessing outcomes or identify what component or 'change agent' made a difference. Similarly, there is limited understanding about the degree to which new knowledge is systematically transferred, if at all, into policy and prevention interventions.

Component programmes with clear evidence of effectiveness include: reducing access to lethal means of suicide, responsible reporting by the media, gatekeeper training in schools and in the military, training of General Practitioners, improving public awareness, and high quality treatment for those with mental illnesses and those who have made suicide attempts²¹.

As multi-determined and multifactorial in nature. suicidal behaviours challenge simple research models of etiology and pathogenesis. Much more is also known about the general epidemiology of suicide and potential risk factors. Although the literature is replete with studies that identify various correlates, little is known about changeable risk factors that carry substantial variance and might represent actionable intervention targets, and far less is known about effective strategies for preventing attempts and deaths²².

This complexity of the causes of suicide, in addition to the multiple methodological difficulties of evaluating interventions for statistically rare events such as suicide, means it is hard to develop the scientific evidence for interventions for suicide ideation, attempts or completions.

For example randomised control trials (RCTs) are considered the gold standard to determine what works. By themselves, however, RCTs of effectiveness in suicide prevention are not sufficient. First, because suicide death is rare compared to cases of depression, drug use, and many other mental health issues. RCTs focusing on suicide must be many times larger than other mental health trials, thus vastly increasing the expense and/or length of a trial. Second, RCTs can only answer a limited number of questions. Therefore, a comprehensive research agenda needs to include other types of research as well. These include cohort studies or quasi-experimental designs where investigators look at changes over time and use statistical methods to account for natural variation.

Also, like other areas of science, suicide prevention research relies on many other methods and approaches from the biomedical, psychosocial, and economic fields. These include, but are not limited to, epidemiology, genome wide association studies, psychological autopsy studies, brain imaging, neuropsychological assessment, qualitative analyses, toxicology, pharmacology, services research, programme evaluation and surveillance²³.

²⁰ NMHCR 2014

²¹ Christensen et al. 2013

²² Silverman et al. 2014

²³ National Action Alliance for Suicide Prevention 2014

There is a growing awareness within the research community and amongst the diverse service providers and those with lived experience that a systemic approach is an appropriate choice for comprehensively reducing suicide risk. Evidence is mounting that the best suicide prevention response may be gained from a multi-level, multifactorial, systems-based approach. This approach requires "top down" leadership, design and implementation, along with well-trained healthcare staff, an informed community, and deployment of all relevant evidence-based components of a suicide prevention response. While vast efforts have been made to reduce suicide rates in mental health services patients, these activities have failed to substantially reduce population suicide rates. Suicide prevention must be addressed comprehensively by embedding evidenced-based systematic prevention programmes simultaneously and seamlessly within both healthcare systems and within communities. Taken together, these changes reflect a revolution in policy and practice²⁴.

Volume Two of this Plan provides a more detailed exploration of research across the continuum of suicide prevention. A series of essays authored by research leaders in Australia provides insights into:

- 1. current research knowledge;
- 2. strengths of Australia's capability in the area; and
- 3. directions for future research.

The essays, while not exhaustive of the research continuum, explore the wide ranging disciplines in suicidology from community engagement and mental health promotion to technology, treatment and health services research. One essay, speaks to the importance of including people with lived experience as active participants in the design, delivery, reporting and translation of findings into practice.

These essays, together with latest scoping studies of what gaps exist in the literature and the need for better practice informed by lived experience, will provide the first step in guiding priorities in the distribution of grants from the Suicide Prevention Research Fund identified as Action Two in Section Three of the Plan.

Current Status of Research Funding

There has been very little investment in suicide prevention research for the size of the problem: funding for research from traditional sources such as the National Medical and Health Research Centre (NHMRC) has been consistently low over the past 13 years illustrated in Figure 3²⁵.

An Australian report²⁶ established that suicide and self-harm research funding per disability-adjusted life year for suicide had not increased between 2001 and 2009, receiving the lowest level of investment compared to any other mental health category (Figure 4).

The bulk of Australia's National Suicide Prevention Strategy funding emphasis continues to be on epidemiological studies at the expense of intervention studies²⁷. Since 1999, for example, a snapshot of the research grants funded through the NHMRC project scheme between 1999 and 2012 (Table 1) indicate the majority of grants²⁸ were directed to public health, with few health service research grants . Between 2002 and 2015 the Australian Research Council (ARC) funded eleven Linkage Grants and eight Discovery grants totalling just over \$4 million in relation to suicide²⁹.

²⁴ Christensen, H. 2013

²⁵ Econtext Economics and Allied Consulting. Strategic Priorities for Mental Health Research Final Report. 2014

- ²⁷ Silverman MM et al 2014
- ²⁸ NHMRC 2014
- ^{28a} Christensen et al, 2011
- ²⁹ ARC 2015 Personnel communication

²⁶ Christensen 2011



Figure 3 NHMRC funding in selected research areas, 2000-2014





Table 1 NHMRC research grants for suicide/mental health by research area 1999-2012 30

TOTAL	36 (100%)
Clinical medicine and science	5 (14%)
Health services research	7 (19.5%)
Basic science	3 (8.3%)
Public health	21 (58.3%)
NHMRC research area	Numbers funded (%)

³⁰ NMHCR 2014

Barriers to advancing suicide prevention research

The Report of the National Review of Mental Health Programmes and Services (henceforth the Review) revealed a number of significant problems with suicide and mental health research³¹.

- There is no national mechanism for prioritisation and oversight of suicide and mental health research to ensure it is aligned with policy priorities and the challenges faced by frontline practitioners.
- There is a major disconnection between the research sector and the mental health services and supports sector. Researchers have little input in relation to the needs of the population and of practitioners and a clear pathway for the translation of research into practice is lacking.
- Career progression for researchers is driven by peer regard and does not recognise and prioritise the impact of research on services and programmes.
- The lack of nationally consistent tools and infrastructure for collecting data about efficacy and costeffectiveness significantly hampers research into what suicide and mental health and associated interventions work and for whom.

 There is no mechanism to systematically involve people with lived experience, frontline practitioners and informal supporters in prioritisation and conduct of evaluations and research, and in research translation.

The Review also nominated two key risks of continuing with the status quo in suicide and mental health research:

- Commonwealth investment is not prioritised towards research which has the greatest potential to improve the experiences and outcomes of people with lived experience, their families and support people; and
- Commonwealth investment in and planning of programmes and services is insufficiently informed by the findings of evaluations and research.

The system of prioritising and distributing funding for suicide research in Australia needs to mature further into a nationally coordinated plan that increases:

- the connectedness of research with the broader suicide and mental health systems; and
- the ability of the broader mental health system, including the community, to leverage local and international research³².

Australian funding for suicide research is administered by several government agencies (particularly the NHMRC), beyondblue and philanthropic organisations. The NHMRC has its own system for assessing grant applications and has few formal links with other agencies.

But this is as far as coordination of funding goes; after the reviewing process is complete, each agency makes its funding decisions independently. The result is a collection of funded grants that add up to no more than the sum of their individual parts. In the absence of a long-term plan for suicide prevention research, strategy is set annually simply by default and amounts to no more than the grants that happen to be successful in a given year.

Although a couple of large-scale research programmes relevant to suicide and mental health have been funded in Australia. there is no single long term. large scale research effort dedicated to suicide prevention research. This may be in large part because the funding agencies have not created effective granting mechanisms to accommodate internationally competitive long-term projects in this area and there are some methodological issues to overcome.

In Australia, such projects are generally funded in a piecemeal fashion from an overlapping patchwork of grants. The funding organisations make little effort to coordinate with, or even inform, each other about their funding decisions or the duration and extent of their financial support. Both the principal investigators of the large scale-projects and the funding organisations are condemned to a revolving mill of grant applications.

³¹ NMHCR 2014 p 37

³² NMHCR 2014 p 36

Administration of the projects turns into a financial juggling act and the smaller funding agencies increasingly feel they are victims of cost-shifting rather than partners in a national enterprise.

Elements that can be applied to the Australian research environment with major longterm benefits include:

- Forging ties and setting common goals among multiple funding agencies, both private and public;
- Establishing systems to identify and support largescale multi-year projects of national and international significance;
- Establishing better systems of communication between research groups' shared databases;
- Cataloguing the course and velocity of research, addressing suicide across the entire spectrum, including prevention, early intervention, treatment, fundamental biology investigation including genomic and neuroepigenetic investigation and quality of life; and
- Coordinated dissemination of research outcomes to community practitioners as well as other researchers.

The aims of the actions recommended in Section 3 are to take better advantage of the strengths of our present system and to minimise its current weaknesses. As the direction of research is hugely

influenced by research policy and the investigator-driven model, our first priority has been to address the challenging issue of a national strategy for research funding. In addition to prioritising the scientific, medical and social challenges of suicide, it is vital that we set our national system of funding suicide research to ensure that Australia is effective in its goal of halving the number of suicides and suicide attempts, along with the subsequent positive impact on our community.

Barriers to data collection³³

The causes of suicide are complex and, as noted earlier. suicide prevention and intervention research is particularly challenging because it focuses on a relatively rare behaviour for which the underlying mechanisms are not clearly identified. There are also concerns about the methodologic rigour of the studies. as it is difficult to recruit and retain enough participants to have an adequately powered study. In addition, there are obvious ethical constraints on the types of research methods available³⁴. Partly because of these difficulties, many suicide prevention programmes target more distal causes / vulnerabilities such as depression or drug abuse. For these programmes, outcomes

are often not reductions in suicidal behaviours but changes in 'proxy measures' such as decreased hopelessness or increased help-seeking.

It is well-recognised that individual mental health problems are not the only causes of suicide. Recent reports from the USA and Greece show that rates of suicide are increasing, and this has been attributed to the global economic downturn. Other potentially important risk factors include rurality. Aboriginal and Torres Strait Islander heritage, refugee status, Lesbian, Gay, Bisexual, Transgender, Intersex (LGTBI) experience, drug and alcohol use, age, physical illness, disability, and exposure to sexual abuse and to violence. Other contextual factors include access to lethal means of suicide, the media reporting climate, cultural and spiritual views of suicide, and potential influences of "hot spots".

The base rate of suicide completions is low, reducing the power of analyses, and thus making conclusions imprecise, particularly for some types of programmes. It is estimated, for example, that interventions for high-risk individuals require 45,000 people to be exposed in order to show reductions. While this is an impossible target. evaluations of population-wide interventions such as means restriction require exposure by 13 million, which is achievable using nationally collected data. This may explain, in part, why

NHMRC Centre of Research Excellence in Suicide Prevention, Black Dog Institute, the University of New South Wales.

³³ An extract from the Christensen, H., Beautrais, A., Shand, S., O'Neil, D., Petrie, P., Buckle, H., 2014 Literature Review for the Development of the Report Card for the Mental Health Commission.

we have such little evidence of effective programmes for high risk individuals, and why our current best evidence is for means restriction programmes.

We also know that many people at risk of suicide do not access health services. In community surveys up to 60% of suicide attempt survivors state that they have not "...been a patient of any mental health service or professional..." prior to their attempt. Mental health treatment may be difficult to access for these groups, and may be perceived as irrelevant, stigmatising or unwanted. Their help-seeking strategies may be poor. In addition, many of those who attempt suicide fail to engage with aftercare services. Despite serious risks of further suicidal behaviour, those who present to emergency departments with self-harm are notoriously difficult to engage in outpatient care, and many drop out, further increasing their risks of negative outcomes. Most suicidal people remain "under the radar".

Box 1. Data gaps³⁵

A review of suicide-related data collections nationally reveals that we do not know any of the following on a national level:

- accurate numbers of deaths by suicide or suicide attempts, and numbers of people presenting to emergency departments with suicidal thinking, plans or attempts;
- types of support accessed by, or offered to, people with suicidal thinking or behaviours;
- types of support which people find helpful in preventing suicidal thinking or behaviour, or in the aftermath of an attempt;
- outcomes of specific initiatives to prevent or address suicidal behaviour; and
- Aboriginal and Torres Strait Islander use of suicide prevention services available to the general population.

It is important to ensure that there are common data definitions, data collection methods and data analysis across all states and territories including a common data system at the coronial level.

³⁵ NMHCR 2014 Vol 2

Section 3:

Prevention has to start somewhere: Our 10 year challenge



What do we need to do to get there?

In the workshops convened to inform the development of the Plan, participants agreed that applying what we already know, based on evidence, should be the first area of focus for research activity and that greater effectiveness will be achieved if research is embedded in service delivery. This is also strongly supported in the Review, which identified the need to strengthen the research and evaluation system to translate evidence into practice. This approach will support the Review's preferred person-centred approach to

community care with systems and resources as enablers³⁶.

As such, this National Research Action Plan is not an attempt to design a range of individual research questions that, if answered, will achieve our national goal of halving suicides in 10 years. Rather, in line with the Review, its emphasis is on achieving systemic change through continuous collaboration across the research and funding environment. It seeks to facilitate a research environment that is embedded in service delivery and evaluation while fostering the active involvement of those with lived experience. Ideally, all

groups should come together to make strategic decisions on funding ahead of the design, delivery and measurement of research.

This section describes eight actions required to build a planned, collaborative and supportive research environment. It also includes directions for prioritising research activity.



Figure 5. Suicide prevention research: a virtuous cycle*

³⁶ NMHCR 2014 p44

Implementation of the Review Recommendations for Change

The Review made a number of recommendations to support systems change. It adopted a logic-planning model (Box 2) to give effect to the Review's recommendations for changes across the suicide prevention and mental health environments. Implementation is planned over the course of ten years so that directions for research including priorities and targets can be agreed, system performance driven and monitored and agreed outcomes measured and reviewed to ensure the effort is sustained.

Box 2. Implementation Logic Model ³⁷

Years 1-2 Priority and target setting

Work with stakeholders to identify short term, medium term and generation change goals.

Rebalance investment approaches and identify and remove regulatory or 'red tape' impediments to change.

Set targets with stakeholders and identify or establish measurement approaches.

Years 3-5 Drive and monitor priorities

Measure progress on goals annually and report publically.

Establish intergovernmental and inter-sectoral mechanims for dealing with blockage and drive reform.

Review priorities for continued relevance and urgency.

Reinvest effeciencies back into the system.

Years 6-10 Embedding outcomes

Measure progress on goals annually and report publically.

Review overall progress and establish 'Where to from here' - with a focus on generational change goals.

Embed outcomes and learning across relevant systems and sectors.

Establish 'watchdog' mechanisms to prevent system regression.

Research is an integral component to the model and the Review includes clear directions for research (detailed in Boxes 3 and 4).

Box 3. Directions for research for years 3-4

Years 3-5: Set the foundation for long term change

Policy priority: Establish suicide prevention and mental health outcomes National Minimum Data Set.

Implementation steps:

• Develop a single national data set which serves the needs of researchers, policy makers and service providers for quality improvement, accountability and evaluation purposes. This should be developed in consultation with consumers and caregivers and piloted extensively with services.

Policy priority: Make it easier for policy makers and people working in frontline services to access and use research evidence and evidence of good or promising practice.

Implementation steps:

• Establish a 'what works' and 'best buys' internet portal, including Australian and international evidence about the efficacy, effectiveness and cost-effectiveness of mental health models of care and interventions.

Policy priority: Create 'hard' incentive structures to encourage research focused on service and consumer priorities.

Implementation steps:

- Establish a panel of frontline professionals, people with a lived experience and supporters to provide advice on grant applications (once scientific and ethical validity have been established).
- Establish funds to encourage 'new' researchers with innovative ideas rather than funding research based exclusively on track record and publications.
- Build research activity into continuing professional development requirements for frontline practitioners and ensure this time is funded.

Box 4. Directions for research for years 5-10³⁹

Years 5–10: A vision for change

Policy priority: Strategic prioritisation of research activity is embedded in the everyday operating principles of research funding bodies, universities and service providers.

Implementation steps:

- Success for researchers to be measured in terms of policy and practice impact rather than exclusively peer regard and numbers of publications.
- All government-funded projects incorporate time and funding for continuous cycles of summative and formative evaluations.

³⁸ NMHCR 2014

³⁹ NMHCR 2014

Key actions to drive suicide prevention research in Australia

Action 1

Establish an alliance of funders, researchers, policy makers, service providers and those with lived experience

Committed leadership is essential to improve the research environment and decisions on funding. This can be achieved by establishing a formal alliance of service providers, policy makers, funders, researchers, people with lived experience, and representatives of priority groups such as Aboriginal and Torres Strait Islander peoples and LGBTI, to implement strategic funding of suicide prevention research in Australia. The alliance membership should work with service providers, and those with lived experience to design a national research strategy that accommodates the particular needs of priority groups. It should co-ordinate, streamline, review, prioritise, and broker all suicide prevention research and evaluation than individual sponsoring agencies can support on their own – in particular large-scale, multi-year projects.

Researchers and research teams need opportunities to collaborate and the ability to come together with those with lived experience and services providers to explore research needs

- Facilitate collaborative research relationships able to deliver national research priorities that are aligned with national policy priorities, address the challenges faced by frontline practitioners and respond to the needs of people with lived experience
- Shift the balance of funding to strategic priorities in suicide prevention rather than the current situation which is primarily investigator-driven
- Create sustainable funding streams supported by a planned investment strategy
- Centralise an on-line database of all research and evaluation grants, and their eventual outcomes, awarded by agencies that fund suicide prevention research activities
- Monitor and report on the totality of suicide prevention research in Australia, including measures of progress against agreed milestones and provide a blueprint for the next two years
- Enhance transparency through delivering biennial reports to the alliance of funders
- Invest in a national surveillance system to monitor suicide and suicide attempts at a national level, including disaggregation and ensure the data is reliable and publicly available.
- Focus on priority groups including Aboriginal and Torres Strait Islander peoples, LGBTI.

Establish a suicide prevention research fund

The Australian alliance of suicide prevention research organisations should create a fund to support several large-scale long-term projects of national and international importance. The fund needs to be independent of any one research institution

This concept draws on the experience of other health areas, notably breast cancer, cardiovascular disease and diabetes, which have been able to demonstrate the power of a research action plan and the capacity to change the way research is done in Australia.

Suicide is a relatively rare event and will require a unified approach to mount large-scale research projects of national and international significance. To date the lack of a plan has hampered efforts around which funders, researchers across the suicide continuum and the interested public can coalesce.

Directions for Research

- Establish a panel of people with a lived experience and frontline professionals to provide advice on grant applications (once scientific and ethical validity have been established). Establish a panel of people with a lived experience and frontline professionals to provide advice on grant applications (once scientific and ethical validity have been established). This should include representation for Aboriginal and Torres Strait Islander peoples who historically have been disadvantaged in such processes and to ensure a level playing field for grant applicants.
- Sustain and create long-term, large-scale projects that are national in scope and character, take advantage of Australian strengths, are internationally competitive, address questions relevant to prevention of suicide and have the ability to generate many add-on or downstream research and evaluation projects
- Implement a programme to fund research and evaluation projects addressing truly novel ideas and models that, even if considered high risk, have the potential to produce important new insights or approaches that could change the course of suicide research.
- Proactively support priority groups, such as Aboriginal and Torres Strait Islander peoples and LGBTI, to access funds to address their particular research needs

Box 5. Example of a national fund: the brookings institution

In 2007, The Brookings Institution, an American non-partisan think tank, issued an influential brief proposing a national Prevention and Wellness Fund. Since then, funds and trusts based on similar principles have been formed in states and communities across the country, most notably in Massachusetts and North Carolina. The Massachusetts Prevention and Wellness Trust Fund is currently the nation's largest and has a strong commitment to community prevention efforts. It is financed through a small fee on health insurers and acute care hospitals, and has been funded for \$60 million since 2012. The North Carolina Health and Wellness Trust invested one quarter of the state's Tobacco Master Settlement Agreement funds estimated to be \$4.6 billion over 25 years—in tobacco cessation and community prevention programmes⁴⁰.

⁴⁰ The Prevention Institute. 2015

Create a national evaluation framework

The Australian alliance of suicide prevention research organisations should facilitate the creation of a national suicide evaluation framework.

Australian expertise in evaluation is highly regarded internationally, but is not generally harnessed in the development of evaluation methods for suicide prevention. Impact measurement is a growing field that is highly relevant to effectiveness and outcomes evaluation for suicide prevention – a strategic link with impact measurement experts should be fostered in Australia.

Evaluation of services, interventions and programmes is necessary to broaden the knowledge and evidence based beyond epidemiological data or clinical measures to discover more about what works and why – and where investments by governments, private entities and community parties should be prioritised. This knowledge should be used to inform strategy and policy as well as improve service and programme effectiveness.

Evaluation of suicide prevention strategies and programmes is fraught with complexity and challenge. However, some approaches to evaluation will support better conduct and use of evaluation in suicide prevention. In particular, the creation of an evaluation framework at a national level, including outcomes statements and measures, will enable alignment of evaluation activities at the programme and services level.

- Determine how to improve the adoption, fidelity of implementation, and sustainability of effective suicide prevention programmes. Attention needs to be directed towards efficient ways of providing relevant training in monitoring and evaluation methods for various types of providers (from community members, people with lived experience to specialists)
- Set outcome measures nationally that relate to strategy and priority
- Produce and disseminate a guide on what evaluation methods work for what purpose
- Design an internet based portal that is managed and/or sustained by expert evaluation persons, able to provide user-friendly advice via content and an interactive educational level platform
- Develop new models for clinical trials, mixed methods research, intervention evaluation and evidence-based guidelines
- Specific evaluation framework elements for Aboriginal and Torres Strait Islander peoples and other priority groups that reflect cultural or other differences.

Increase access to research enablers

Collaborative research requires access to high quality, accurate and timely data including linkage with patient medical information. Current data on suicides in Australia is neither accurate nor timely, inhibiting the ability to respond rapidly to potential crisis "hot spots". In response to this challenge, the National Committee for Standardised Reporting on Suicide is progressing work to achieve uniform coronial legislation, standardised police forms and minimum data sets for both suicides and attempts. This important national development work is a well-timed step in the right direction to gain uniformity, particularly as Australian states and territories move to establish a suicide registry.

Another enabler is the collection and use of biological specimens which have become increasingly important as interest grows in neuroscience and its role in suicide prevention. It is easier to collect specimens in Australia than in other countries, and this is an important fact that needs to be respected and protected. It will be best achieved by high quality research, which is coordinated nationally and welcomes widespread public scrutiny.

- Establish guidelines for collection of standardised registry data for research purposes and support its storage within the NCIS
- Put systems in place to enable access to national, state and regional data on suicide
- Put systems in place to enable access to national, state and regional data on suicide attempts
- Establish mechanisms to facilitate collection of patient information and associated bio-specimens
- Maintain a national bank of comprehensively annotated suicide relevant neurological biospecimens
- Wherever possible, disaggregate data for priority groups, so they are identified in data collections. For Aboriginal and Torres Strait Islander peoples, community level disaggregation should be supported so communities at risk can be identified.

Expand research and evaluation training

A number of barriers to research are currently embedded into service delivery:

- Lack of evaluation skills and/or training for health service providers
- Lack of funding provided in service contracts to support adequate research and evaluation
- Service providers are often time poor.

Addressing this, for both researchers and service providers, will take time and additional training resources.

As indicated in the Review, opportunities to recruit researchers into service provider locations could assist in the training and development of both groups. This would see research embedded into practice as well as enabling service providers and those who use the services to co-design research projects that support routine and continuous evaluation of services provided. This will contribute to the evidence base required for good policy making and ensure improved practice.

Training is also dependent on providing systems to facilitate both collection and access to data as listed in Action 4.

- Ensure research and evaluation is built into education and training programmes in suicide prevention and mental health. For example, improve education and training of people working in suicide, mental health and associated fields to deploy evidence-based treatments.
- Require evidence-based approaches on mental health and wellbeing to be adopted in the training and continuing professional development of teachers and early childhood workers.
- Expand the number of fellowships to encourage trainee researchers to consider a career in suicide prevention research and evaluation.
- Facilitate national and international research collaborations by making short-term scholarship available to assist with travel and living costs.
- Proactively ensuring priority group representatives have access to training.

Facilitate moving research into practice

Irrespective of the content base of research, it is a common cry that there is a disconnect between researchers and policy makers when translating research knowledge into practice. Applying research findings to guide and shape the policy agenda and inform clinical and community care is a difficult task. In practice, academic research typically has less influence on policy than the evidence produced. What little influence academic research does have is far more complex than a linear model of research-informing-policy-leading-to-change-on-the-ground.

How research can influence policy and care remains critical to contemporary researchers and their funders. Attempts to answer this question often rest on understanding the roles, interactions and incentives between the many different stakeholders in the research to policy process. Research, especially technical research, is often presented in language that is incomprehensible to many policy makers. It therefore needs to be translated into practical and engaging recommendations that communicate uncertainties and relate strongly to a policy maker's decision-making environment. Improving timely and appropriate transfer of research outcomes into health policy and practice (aligned with strategic funding priorities) is critical to achieving the goal of halving suicide in 10 years. Additionally the current nature of research funding, on a grant-by-grant basis with success and measured by publication output, favours investigator-driven rather than research informed by the needs of people with lived experience, supporters and the wider suicide prevention and mental health systems.

To support the translation of findings into practice, the Alliance could establish an Australian Suicide Prevention Portal (ASPP). The portal would be a national resource centre for the suicide prevention sector and provide the infrastructure for identifying, enabling and communicating information about best practice.

People with lived experience want access to information on findings from research in a timely and accessible way. All research funded through the alliance would be published in this one-stop-shop for information about research as well as suicide prevention activities, practice, tools, resources, and services.

- Establish a clearing house to facilitate translation of research into practical outcomes, including development of new models to improve implementation and to accelerate production of evidence-based guidelines
- Establish a National Better Practice Register of quality programmes and interventions founded on up-to-date evidence
- Establish new scholarships to develop leadership in research and evaluation, funded across the spectrum of research and interventions
- Proactively ensure that research on suicide prevention among priority groups who can be marginalised, such as Aboriginal and Torres Strait Islander peoples and LGBTI, translates into practice.
Box 6. Example: US national best practice registry

National Best Practice Registry http://www.sprc.org/bpr

The US federally funded Suicide Prevention Resource Centre provides technical assistance, training, and materials to increase the knowledge and expertise of suicide prevention practitioners and other professionals serving people at risk of suicide. It promotes collaboration among a variety of organisations that play a role in developing the field of suicide prevention and is the site of the national Best Practices Registry (BPR).

The purpose of the BPR is to identify, review, and disseminate information about best practices that address specific objectives of the National Strategy for Suicide Prevention.

BPR Structure

The BPR is organised into three sections, each covering different types of best practices. In essence, the BPR is three registries in one.

Section I: Evidence-Based Programmes lists interventions that have undergone evaluation and demonstrated positive outcomes.

Section II: Expert and Consensus Statements lists statements that summarise the current knowledge in the suicide prevention field and provide best practice recommendations to guide programme and policy development.

Section III: Adherence to Standards lists suicide prevention programmes and practices whose content has been reviewed for accuracy, likelihood of meeting objectives, and adherence to programme design standards. Inclusion in this section means only that the programme content meets the stated criteria. It does not mean that the practice has undergone evaluation and demonstrated positive outcomes. (Such programmes are listed in Section I)

BPR listings include only materials submitted and reviewed according to designated criteria and do not represent a comprehensive inventory of all suicide prevention initiatives.

BPR Guiding Assumptions

The design of the BPR is guided by the following assumptions:

- Suicide prevention efforts can be improved by incorporating new knowledge as the field advances.
- When possible, suicide prevention practices should undergo rigorous process and outcome evaluation, and these findings should be broadly disseminated.
- In addition to evaluated interventions, the suicide prevention field also can benefit from the dissemination of programmes and practices whose content has been reviewed for accuracy, safety and adherence to programme design standards.
- The BPR will facilitate the translation of research to practice by disseminating information about both evaluated suicide interventions and suicide prevention practices that have met accuracy, safety and programme design standards.
- Successful dissemination will be facilitated when practice developers, evaluators, and SPRC/AFSP staff members work collaboratively.
- In general, suicide prevention practitioners will achieve greater results by creating comprehensive approaches involving multiple layers of coordinated components.

The BPR is funded by the Substance Abuse and Mental Health Services Administration (SAMHSA).

Action 7

Facilitate continuous communication

As noted in the WHO Global Burden of Suicide Report, Australia was recognised as a world leader in the safe and responsible media reporting of suicide, specifically due to the National Mindframe Initiative. Despite this, those with lived experience remain very concerned at continued stigmatising attitudes and behaviours exhibited within health systems and the general community. Understanding how to effectively address these issues is a key area of research interest for researchers and people with lived experience.

Adopting Action 5, so researchers are co-located with service providers, may contribute to greater understanding of the research requirements needed to change community attitudes and stigmatising behaviour.

Directions for Research

- Advocate for biennial surveys with the general community, those who have attempted suicide, those bereaved by suicide and among priority groups such as Aboriginal and Torres Strait Islander peoples and LGBTI to measure attitudes towards and assess the prevalence and forms of stigma in Australian communities
- Develop a more coherent and connected community of suicide researchers and evaluators by promoting a biennial national meeting designed to bring together researchers across the continuum for presentation and discussion of projects and findings and by facilitating other means to enhance communication and exchange ideas
- Increase the exchange of information about all aspects of suicide prevention research including resources and potential partnerships across the spectrum of researchers
- Create multi-disciplinary approaches to understand and harness media influence (e.g. social, entertainment and gaming sectors) and community values on individual means preferences and behaviours.
- Support priority groups such as Aboriginal and Torres Strait Islander peoples and LGBTI to develop their own systems for exchanging information.

Action 8

Agree national ethics guidelines

Ethically sound research involving people with suicidal behaviours requires scrupulous procedures relating to informed consent, assessment of risk and access to competent support and assistance for the researcher and participants. It requires both measures to protect participants and consideration of ethics as an ongoing negotiated process.

People with lived experience have expressed concern about ethics committees failing to approve what they believe in some circumstances is important suicide prevention research. They conclude this issue may have an impact on the time it takes to do quality research including the recruitment of participants⁴¹. While acknowledging clear ethical guidelines and good practice are essential, people with lived experience suggest that ethics committees also need a more positive outlook when applying them to ensure necessary and desirable research goes ahead⁴². There is also general agreement that some aspects of the national ethical guidelines and the perceived degree of inflexibility of ethics committees could be amended to reflect current thinking.

In contrast, researchers have suggested that some ethics committees have concerns about potential harm to participants or the researcher, researcher competency, maintaining confidentiality, providing support to participants, responding sensitively to the needs of family and suicide research studies that centre on accessing the population. For example, determining the competency of suicidal people to consent to involvement in research and the consent process itself are ethically problematic; a researcher might handle sensitive situations inappropriately; and use of interview tools and questionnaires without suitable training or supervision was deemed problematic⁴³.

Additionally, people with lived experience have expressed concern about the time it takes for research findings to become accessible to the broader community.

Directions for Research

• Establish a mechanism to build a consensus on the most important principles to consider in regard to the ethics process for ethical suicide research

An example of recommendations for ethical suicide prevention research synthesised from the research findings of Lakeman and FitzGerald is given at Appendix 2.

- Facilitate a forum to discuss how research findings could be made more accessible to the broader community within the context of the need for researchers to publish in peer reviewed journals
- Promote ethical guidelines for undertaking research in Aboriginal and Torres Strait Islander communities affected by suicide, and Participatory Action Research in those communities.

⁴¹ Suicide Prevention Australia 2014

⁴² Ibid

⁴³ Lakeman et al. 2009



Putting the Suicide Prevention Research Plan into Action



Principles for funding suicide prevention research

This final section deals with feedback provided through the workshop held with funders and the processes required to move this Plan into implementation phase.

A principles-based approach can assist in determining suicide prevention research, funding priorities and directions and policy decisions. The importance of establishing principles is for decision makers to agree to a set of desirable features which help assess whether a new policy or investment proposal is aligned to desired directions and whether an existing policy, programme or service is on track to achieve the best results from the mental health system⁴⁴. In particular, the principles should serve to focus the system on what matters— the needs of people, their families, communities and the overall health and wellbeing of the Australian population. Importantly, the Review recommends that research strategies include the participation of people with lived experience, their families and other support people in all Commonwealth-funded and indeed all research and evaluations activities funded through other sources.

The following nine principles for funding suicide prevention research are both aspirational and practical. They recognise a desirable approach to funding the best research and evaluation to reduce suicidal behaviours, but do so within the context of the total environment and the system within which suicide prevention and mental health programmes and services are provided⁴⁵.

Principles for funding suicide prevention research

- 1. Hear the voice of Lived Experience
- 2. Ethical
- 3. Convergent research
- 4. Provide value for money
- 5. Translation for community benefit
- 6. Meaningful
- 7. Long-term thinking
- 8. Potential for collaboration and leverage
- 9. Reporting

⁴⁴ NMHCR 2014

⁴⁵ Principles for funding suicide prevention research were identified by participants across the National Research Action Plan consultative workshops facilitated by Suicide Prevention Australia in 2014-2015.

Hear the voice of lived experience

Research must be of value to participants and their community and include in partnership the voice of those with lived experience across all aspects of the research trajectory.

Ethical

Research activities should firstly do no harm. Research must demonstrate respect to study participants and their community and operate according to accepted ethical standards and practice.

Convergent research

Researchers should build on, adapt and apply what is known from existing research nationally and internationally across identified population groups.

Provide value for money

Incorporate multidisciplinary research and service models, cross-sectoral protocols, collaborative arrangements and resources where possible. Balance the research continuum from basic to applied research that is complementary and not unnecessarily duplicative including prevention, early intervention, intervention and postvention.

Translation for community benefit

Prioritise research aligned to the theory of change and demonstrates potential to translate for community benefit:

• Knowledge – tests theory of change

- Research informs against theory of change
- Evaluation measures against the desired outcomes.

Targeted and participatory research can lead to significant impact across the community and marginalised and stigmatised members of the community in particular. The potential outcomes of research and evaluation protocols therefore need to be clearly articulated and include an approach to dissemination and translation into practice and where appropriate, to inform further research.

Meaningful

- Utilise a 'better practice register' to enable recognition of gaps, priorities and potential impact before agreeing to fund research.
- Funders make decisions about what to fund, based on priorities, and call for applications specific to need or priority.
- Funders actively facilitate knowledge brokering.
- Funders will challenge the status quo and question: Why should the research be funded? Who will be the beneficiaries? What outcome can be expected? Is it sustainable?
- Recognise that the impact of some promising research in this area is not always easily measured in a customary and "timely" manner; it is an acknowledgement of the significance of varied life behaviours across the life trajectory.

• Research that shows an intervention doesn't work should be published in the same way as research with a positive outcome.

Long-term thinking

Encourage intervention programmes and projects that expand existing knowledge or that take a new approach to solving current problems, especially those that can be evaluated and have potential for expansion and further development.

Potential for collaboration and leverage

Utilise the collective impact model to build enduring collaborations to leverage increased investment involving diverse funders. This should include skills and experience not just research funds.

Reporting

Make reporting requirements commensurate with the financial investment and outcomes expected: "Bigger is not always better".

A call to action

The WHO Report emphasised the importance of global leadership, unity and collaboration as critical elements in advancing the global effort to reduce the impact of suicide throughout all countries. Five priority actions have been agreed as a roadmap to contribute to the global priority:

- National Suicide Prevention Research Action Plan
- Investment and research funding for suicide prevention, treatment and postvention
- Investments in public health infrastructure and education
- Reducing stigma for suicide
- Translation of research findings into policy and practice

Suicide Prevention Australia is committed to ensuring this Plan recognises the need to integrate the identified components to ensure its effective implementation. Importantly, lessons learned from other areas of health (for example cancer) can provide valuable learnings about developing and implementing a National Suicide Prevention Research Action Plan.

Figure 6. Components to ensure effective implementation of the action plan

Implementation should be underpinned by existing knowledge about implementation science, including defining the role of each stakeholder group with strategies, goals, action steps and a timeline to ensure the Plan moves forward and that progress is accurately assessed. Distribution of a National Suicide Prevention Research Action Plan should include an educational component, supported by a wellknown spokesperson and those with lived experience to widely inform people about the Plan and to advocate for its success. As lessons are learned from around the world about effective interventions, strategies and policies, ideas should be shared and brought to the forefront so that other countries might benefit as well.

Implementing the National Research Action Plan for Suicide Prevention

Suicide Prevention Australia will champion a nationally coordinated approach to funding and delivery of suicide prevention research by actively facilitating the implementation of the Plan. It will support the recommendations outlined in the suicide prevention National **Research Action Plan through** existing and new partnerships in research and funding. It will actively encourage those interested to become part of a national and international network that will share learning experiences in pursuit of more effective research strategies and funding solutions (Figure 6).

This document represents the possibility of a paradigm shift in the way suicide prevention research is funded and conducted. It is not intended to provide prescriptive priorities; it is envisioned as a dynamic plan that responds to new information and data about research activity throughout the globe. Therefore:

- SPA will establish a National Suicide Research Alliance that will take charge of the Plan and be responsible for its dissemination, implementation, evaluation and ongoing review
- All members of the suicide prevention research community are invited to become familiar with the

Plan and to consider how best to collaborate to achieve improved outcomes in the short and long term

- Suicide prevention research funders across Australia are urged to adopt a collaborative approach to mobilise support for suicide prevention research through implementation of the Plan across the suicide continuum
- Private sector industries, including pharmaceutical and biotechnology companies, informatics and software developers and equipment manufacturers, are encouraged to participate in new collaborative opportunities
- SPA will continue to work towards the application of existing research knowledge to policy and practice areas as they relate to suicide prevention and to engage with researchers, policy makers, academics and funders to shape future research aligned with policy development.

Monitoring Progress and Updating

To maintain its relevance and effectiveness, the Plan will be kept current with the support of the national and international research communities. Emerging discoveries, new knowledge and activities in the suicide and health research environments will be tracked. while trends in suicide research funding will be reported regularly. In this way, the National Research Action Plan promises to have a profound impact on current and future efforts to prevent suicide and its impact on society.





Appendix 1

The global picture

Global epidemiology of suicide and attempts

An estimated 804,000 suicide deaths occurred worldwide in 2012, representing an annual global age-standardised suicide rate of 11.4 per 100,000 population (15.0 for males and 8.0 for females).

The age-standardised rate of suicide is somewhat higher in high-income countries than in low- and middle-income countries (LMICs) (12.7 versus 11.2 per 100,000 population). However, given the much larger proportion of the global population that resides in LMICs, 75.5% of all global suicides occur in these countries (Figure 1). Among LMICs in the six WHO regions, there is an almost three-fold range in the agestandardised suicide rate, from a low of 6.1 per 100,000 in the Region of the Americas to a high of 17.7 per 100,000 in the South-East Asia Region. One consequence of the different suicide rates in WHO regions is that in 2012 the South-East Asia Region accounted for 26% of the global population but 39% of global suicides.

However, since suicide is a sensitive issue, and even illegal in some countries, it is very likely that it is under-reported. In countries with good vital registration data, suicide may



often be misclassified as an accident or another cause of death. Registering a suicide is a complicated procedure involving several different authorities, often including law enforcement. And in countries without reliable registration of deaths, many suicides simply die uncounted.

In richer countries, three times as many men than women die of suicide but. in low- and middle-income countries. the male-to-female ratio is much lower (1.5 men to each woman). Globally, suicides account for 50% of all violent deaths in men and 71% in women. With regard to age, suicide rates are highest in persons aged 70 years and over for both men and women in almost all regions of the world. In some countries. suicide rates are highest among the young, and globally suicide is the second leading cause

of death in 15–29-year-olds. Hanging, firearms and the ingestion of pesticide are among the most common methods of suicide globally, but many other methods are used, with the choice of method often varying according to population group.

For every suicide there are many more people who attempt suicide every year. Significantly, a prior suicide attempt is the single most important risk factor for suicide in the general population. For both suicides and suicide attempts, improved availability and quality of data from vital registration, hospitalbased systems and surveys are required for effective suicide prevention. Restricting access to the means of suicide is a key element of suicide prevention efforts. However, means restriction policies (such as limiting access to pesticides and firearms or

Figure 1. Global suicides by age and income level of country, 2012

⁴⁶ WHO 2014. See the WHO report for a more comprehensive

picture. http://www.who.int/mental_health/suicide-prevention/en/

putting barriers on bridges) require an understanding of the method preferences of different groups in society and depend on cooperation and collaboration between multiple sectors⁴⁶.

Suicide in Australia

Australian epidemiology of suicide and suicide attempts

There were 2.522 deaths from suicide in Australia in 2013, resulting in a ranking as the 14th leading cause of all deaths.47 About three-quarters (74.7%) of people who died by suicide were male, making suicide the 10th leading cause of death for males⁴⁸ (see Figure 2). Deaths due to suicide occurred at a rate of 10.9 per 100,000 population in 2013.

The overall suicide rate has remained relatively steady since 2003 however, as pointed out in the WHO Report⁴⁹, the suicide rate among females has been increasing while the suicide rate among males has been decreasing (see Figure 3).

Suicide rates vary across sexes and age groups. With the exception of males aged over 85, the highest rates of suicide occur among males in their middle years (i.e. 30-59, see Figure 4).

While suicide accounts for a relatively small proportion (1.7%) of all deaths in Australia, it accounts for a greater proportion of deaths from all causes within specific age groups (see Figure 5). For example, in 2013, over a quarter of deaths of males in the 15-19, 20-24 and 25-29 vear age groups were due to suicide (34.8%, 31.0% and 27.0%, respectively). Similarly for females, suicide deaths comprised a higher proportion of total deaths in younger age groups compared with older age groups (26.1% of deaths of 15-19 year olds and 26.3% of deaths of 20-24 year olds). Suicide is mostly preventable yet it is now the leading cause of death for both Australian males and females aged 15-44 years⁵⁰.

The numbers and rates of suicide varv across Australian States and Territories. The highest suicide rates occur in the Northern Territory followed by

Figure 2. Number of suicide deaths, 2004-2013



52 AIHW 2014

Tasmania and Western Australia (see Table 1).

The most common method of suicide in Australia is hanging, with strangulation and suffocation accounting for about 55% of suicides in 2013. Methods vary between the sexes⁵¹ (see Figure 6).

Variance across populations

Regional and remote Australians

About 30% of the Australian population live in regional and remote areas: 18% in inner regional areas, 9% in outer regional areas, 1.4% in remote areas and 0.9% in very remote areas. Overall, Australians living in regional and remote areas tend to have shorter lives and higher rates of disease and injury than people living in major cities⁵². Those groups most vulnerable to suicide appear to be males, youth, farmers and Aboriginal and Torres Strait Islander peoples. Data from the **Queensland Suicide Register** showed that, between 2005 and 2007, male suicide rates in remote areas were significantly higher than male suicide rates in non-remote areas. While the gap is widest between metropolitan and remote suicide rates and the rates highest among rural males, regional suicide rates are still higher and metropolitan rates and the rural female suicide rate is higher than the urban female suicide rate.

⁴⁹ WHO 2014

⁵⁰ ABS 2015



Figure 3. Suicide rates by sex (all ages) 2004-2013







Figure 5. Suicide as a proportion of all deaths by age groups, 2013

Aboriginal and Torres Strait Islander Australians

In 2013, suicide was the fifth leading cause of death for Aboriginal and Torres Strait Islander Australians. Of 138 deaths reported as being due to suicide, 99 of were male and 39 of were female. The agestandardised death rate for suicide was twice as high in both Aboriginal and Torres Strait Islander males and females than non-Aboriginal and Torres Strait Islander males and females (rate ratios of 2.1 and 2.4 respectively) ⁵³ (see Figure 7).

Lesbian, gay, bisexual, transgender and intersex (LGBTI) experience

The lifetime prevalence of attempted suicide amongst Australians identifying as homosexual or bisexual is two and seven times higher than heterosexual identified Australians respectively, while 50% of transgender Australians have attempted suicide at least once in their lives⁵⁴. There is a lack of Australian data on suicide in intersex people but there is growing international evidence indicating that intersex people also experience disproportionately high rates of suicidal ideation and attempts (see Figure 8).

Suicide attempts

Limited data is available on the extent of suicide attempts and suicidal ideation in Australia. It is estimated that 370,000 Australians think about ending their life every year, 91,000 make a plan to suicide, and 65,000 suicide attempts occur each and every year.

53 AIHW 2014

- ⁵⁴ Couch et al. 2007.
- 55 ABS 2007

Table 1	No. of deaths 2013	Standardised Death rate 2009-2013	Rate Ratio 2009-2013
NSW	696	9.1	0.8
VIC	488	9.4	0.9
QLD	663	13.3	1.2
SA	199	11.9	1.1
WA	332	13.4	1.2
TAS	74	14.0	1.3
NT	33	17.6	1.6
ACT	37	9.1	0.8
Australia	2522	10.9	1.0

Suicide bereavement

Conservative estimates suggest that for every death by suicide another six people are severely affected by intense grief and that this intense grief can continue for many years. Based on these conservative figures, in 2012 approximately 15,200 individuals were bereaved by suicide. In reality, the number is likely to be much higher⁵⁵.

Figure 7. Suicide rates for Aboriginal and Torres Strait Islander people compared with non-Aboriginal and Torres Strait Islander people 2011-2010







Appendix 2

Ethics committee members' recommendations for ethical research involving people who are suicidal⁵⁶

- Consult with the ethics committee, experienced researchers, support agencies, and potential participants.
- Provide a sound justification for undertaking the research, sampling and recruitment procedures, and the methodology / methods chosen.
- Ensure support is available to participants. Liaise with support services and ensure they have the skills and capacity to respond if needed. Provide potential participants with details of support agencies and how to access them.
- Establish procedures to assess suicide risk and to respond to people who may be an imminent suicide risk. Ensure that potential participants are aware of these procedures.
- Provide full information to participants about the consequences of their participation and the boundaries of confidentiality. Provide time for people to consider information provided and revisit consent frequently.
- Ensure the research is supervised, carried out by people who are experienced and competent in dealing with people in distress, and that both researcher

and participants have opportunities for debriefing.

 Acknowledge the vulnerability of participants and respond with care.

List of figures

Figure 1. The process facilitated by Suicide Prevention Australia to develop a National Suicide Prevention Research Action Plan

Figure 2. The Public Health Model

Figure 3. NHMRC funding of mental health research, minor categories

Figure 4. Evidence for suicide prevention is low

Figure 5. Suicide Prevention Research: A virtuous cycle

Figure 6. Components to ensure effective implementation of the Action Plan

List of tables

Table 1 NHMRC Research grants for suicide/mental health by research area 1999-2012

List of boxes

Box 1. Data Gaps

Box 2. Implementation Logic Model

Box 3. Directions for research for years 3-4

Box 4. Directions for research for years 5-10

Box 5. Prevention and wellness

funds – The Brookings Institution Box 6. A US National Best Practice Registry

References

ABS 1999. Causes of Death, Cat. no. 3303.0. In: ABS (ed.). Canberra.

Australian Healthcare

Associates. Evaluation of Suicide Prevention Activities: Final Report. Melbourne: AHA, 2014. http://www.health. gov.au/internet/publications/ publishing.nsf/Content/suicideprevention-activities-evaluation

Australian Bureau of Statistics

(2015). Causes of Death, Australia, 2013. Catalogue No. 3303.0. Belconnen, ACT: Commonwealth of Australia. http://www.abs.gov.au/ ausstats/abs

Australian Bureau of Statistics (2007). National Survey of Mental Health and Wellbeing. ABS Cat. No. 4326.0. Belconnen, ACT: Commonwealth of Australia. http://www.abs.gov. au/ausstats/abs

Australian Institute of Health and Welfare 2014. Australia's health 2014. Australia's health series no. 14.Cat. no. AUS 178. Canberra: AIHW. http:// www.aihw.gov.au/workarea/ downloadasset

Christensen, H., Batterham, P. J., Hickie, I. B., McGorry, P. D., Mitchell, P. B., & Kulkarni,

⁵⁶ Lakeman et al. 2009

J. (2011). Funding for mental health research: the gap remains. Medical Journal of Australia, 195(11-12), 681-684.

Christensen, H., Beautrais, A., Shand, S., O'Neil, D., Petrie, P., Buckle, H., 2013 Literature Review for the Development of the Report Card for the Mental Health Commission. NHMRC Centre of Research Excellence in Suicide Prevention, Black

Dog Institute, the University of New South Wales http://www. mentalhealthcommission.gov. au/our-2013-report-card.aspx

ConNectica Consulting. (2009).

The Estimation of the Economic Cost of Suicide to Australia Retrieved 26 June 2014, from file:///D:/Users/z3452933/ Downloads/The+Estimation+of+ the+Economic+Cost+of+Suicide+ to+Australia+280210.pdf

Couch, M., Pitts, M., Mulcare, H., Croy, S., Mitchell, A. and Patel, S. (2007). tranZnation: A report on the health and wellbeing of transgender people in Australia and New Zealand. Monograph Series Number 65. The Australian Research Centre in Sex, Health and Society, La Trobe University: Melbourne.

Econtext Economics and Allied Consulting. Strategic Priorities for Mental Health Research Final Report. Prepared for the National Mental Health Commission (NMHC). 21 September 2014.

Lakeman, R., FitzGerald, M., The Ethics of Suicide Research -The Views of Ethics Committee Members. Crisis 2009; Vol. 30(1):13–19 DOI 10.1027/0227-5910.30.1.13

Living Is For Everyone (LIFE) Framework (2007) © Commonwealth of Australia 2008 Online ISBN: 1-74186-297-3, Publications Number: P3 -2060. www.livingisforeveryone. com.au/Research-and-evidencein-suicide-prevention.htm

Miles, J., Espiritu, R.C., Horen, N., Sebian, J., & Waetzig, E. (2010). A Public Health Approach to Children's Mental Health: A Conceptual Framework. Washington, DC: Georgetown University Center for Child and Human Development, National Technical Assistance Center for Children's Mental Health.

Mishara, B.L.; Chagnon, F., Daigle, M., Balan, B., Raymond, S, Marcoux, I, Bardon, C., Campbell, J.K. & Berman, A. (2007a). Comparing models of helper behavior to actual practice in telephone crisis intervention: A silent monitoring study of calls to the US 1-800-SUICIDE network. Suicide and Life-Threatening Behavior, 37 (3), 291-307.

Molock SD, JM Heekin, SG Matlin, CL Barksdale, E Gray, CL Booth The Baby or the Bath water?: Lessons Learned from the National Action Alliance for Suicide Prevention Research Prioritization Task Force Literature Review Am J Prev Med 2014;47(3S2):S115–S121.

National Action Alliance for Suicide Prevention: Research Prioritization Task Force. (2014). A prioritized research agenda for suicide prevention: An action plan to save lives. Rockville, MD: National Institute of Mental Health and the Research Prioritization Task Force.

National Coalition for Suicide Prevention. Response to World Health Organization Report: Preventing suicide: A global imperative'. Making the connection: An assessment of Australia's progress in suicide prevention. Suicide Prevention Australia. September 2014, Sydney.

National Mental Health Commission, 2012: A

Contributing Life, the 2012 National Report Card on Mental Health and Suicide Prevention. Sydney: NMHC.

National Mental Health Commission, 2014: The National Review of Mental Health Programmes and Services. Sydney: NMHC.

Silverman, MM. JE Pirkis, JL Pearson, JT Sherrill. Reflections on Expert Recommendations for U.S: Research Priorities in Suicide Prevention. American Journal of Preventive Medicine. VOLUME 47 (3S2) www. ajpmonline.org SEPTEMBER 2014.

Suicide Prevention Australia. National Research Action Plan Workshop. Report from the People with Lived Experience workshop held Tuesday 16th September 2014. Sydney.

The Australian Research Centre in Sex, Health & Society, La Trobe University, Melbourne. National Coalition for Suicide Prevention. Response to World Health Organisation Report: Preventing suicide: A global imperative'. Making the connection: An assessment of Australia's progress in suicide prevention. Suicide Prevention Australia. September 2014, Sydney.

The Prevention Institute.

Sustainable Investments in Health: Prevention & Wellness Funds. A Primer On Their Structure, Function & Potential. 2015

World Health Organization

2014. Preventing suicide: a global imperative. WHO Press, World Health Organization, Geneva, Switzerland. http://apps.who.int

